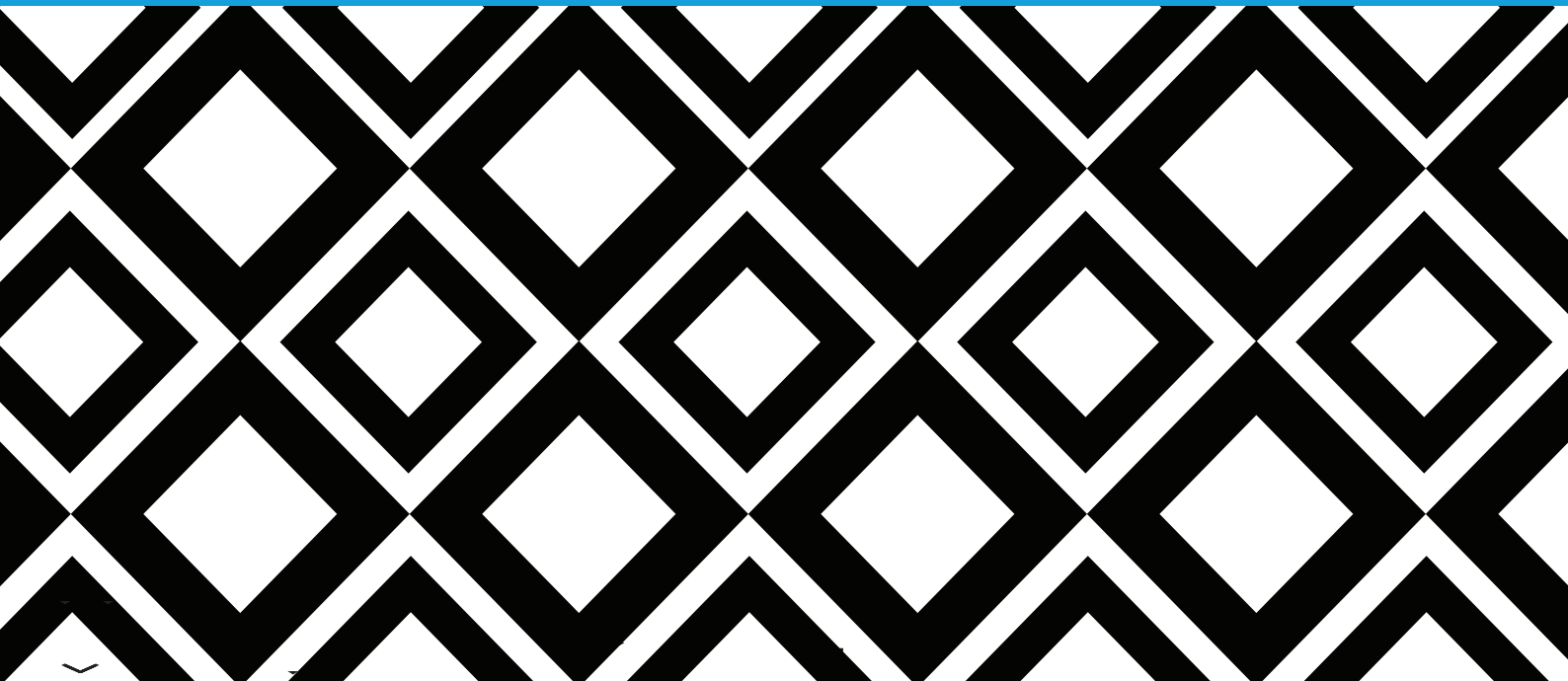




Rwanda



Demographic and
Health Survey

2019-20

Republic of Rwanda



Rwanda Demographic and Health Survey 2019-20

Final Report

National Institute of Statistics of Rwanda
Kigali, Rwanda

Ministry of Health
Kigali, Rwanda

The DHS Program
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FOREWORD

The Government of Rwanda conducted the 2019-20 Rwanda Demographic and Health Survey (RDHS) to collect up-to-date information for monitoring progress on healthcare programs and policies in Rwanda, including the First National Strategy for Transformation (NST1 2017-2024) and the Sustainable Development Goals (SDGs).

The 2019-20 RDHS is a follow-up to the previous five RDHS surveys. Each survey provides data on background characteristics of the respondents, and demographic and health indicators. The target groups in these surveys were women aged 15-49 and men aged 15-59 who were randomly selected from households across the country. Information about children aged 5 and under also was collected, including the height and weight of the children.

The 2019-20 RDHS was implemented by the National Institute of Statistics of Rwanda (NISR) in partnership with the Ministry of Health (MOH). The Rwanda Biomedical Center (RBC), and in particular the HIV, Malaria, and National Reference Laboratory (NRL) Divisions, collaborated on several aspects of the survey, especially the biomarkers. ICF International provided technical assistance in implementation of the survey.

Funding for the 2019-20 RDHS was provided by the Government of Rwanda, the United States Agency for International Development (USAID), the One United Nations (ONE UN), the U.S. Centers for Disease Control and Prevention (CDC), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), Enabel, and the United Nations Entity for Gender Equality and the Empowerment of Women (UN WOMEN).

Results of the 2019-20 RDHS has shown significant improvement for some indicators and slight decrease in others. This report is therefore an important tool that addresses health concerns, informs policy makers, other stakeholders of priority areas for intervention, and future planning, and resource allocation process.

It provides only a snapshot, however, and it is our sincere hope that researchers will deepen our understanding of the topics covered in the survey by undertaking further analysis of the RDHS datasets. Last but not least, we urge all stakeholders, both individuals and organizations, to play an active role in using this valuable information to contribute to a better quality of life for the Rwandan population.



Dr. NGAMIJE M. Daniel
Minister of Health

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First, we sincerely acknowledge the men and women who generously agreed to respond to all questions they were asked. The response rate was high.

We also present our sincere thanks to the Ministry of Local Government and to the local government authorities for their assistance and contributions to the smooth implementation of the survey.

We would like to express our sincere appreciation to the Ministry of Health for close collaboration with the National Institute of Statistics of Rwanda (NISR) during preparation and implementation of the survey. The orientation and directives given by the steering committee members are appreciated.

We also express our gratitude to many international organizations for their vital financial assistance. Contributions from the United States Agency for International Development (USAID), the One United Nations (ONE UN), the Centers for Disease Control and Prevention (CDC), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), Enabel, and the United Nations Entity for Gender Equality and the Empowerment of Women (UNWOMEN) were of immense importance to the effective accomplishment of the survey.

We express our profound gratitude to the team from ICF International, and in particular to Dr. Rathavuth Hong and his colleagues. Their technical assistance contributed to the success of the survey.

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We appreciate the valuable support provided by administrative and financial departments of the NISR. Their interventions allowed this RDHS to be carried out smoothly and under good conditions.

Thank you,



MURANGWA Yusuf,
Director General of NISR



READING AND UNDERSTANDING TABLES FROM THE 2019-20 RWANDA DEMOGRAPHIC AND HEALTH SURVEY (RDHS)

The 2019-20 Rwanda DHS final report is based on approximately 200 tables of data. For quick reference, they are located at the end of each chapter and can be accessed through links in the pertinent text (electronic version). Additionally, this more reader-friendly version features about 90 figures that clearly highlight trends, subnational patterns, and background characteristics. Large colorful maps display breakdowns by province in Rwanda. The text has been simplified to highlight key points in bullets and to clearly identify indicator definitions in boxes.

While the text and figures featured in each chapter highlight some of the most important findings from the tables, not every finding can be discussed or displayed graphically. For this reason, RDHS data users should be comfortable reading and interpreting tables.

The following pages provide an introduction to the organization of RDHS tables, the presentation of background characteristics, and a brief overview of denominators. In addition, this section provides some exercises for users as they practice their new skills in interpreting RDHS tables.

Patterns by demographic characteristics

- The under-5 mortality rate is lower in City of Kigali and West (31 and 44 deaths per 1,000 live births, respectively) than in the other three provinces (56-57 deaths per 1,000 live births) (Figure 8.2).
- Under-5 mortality declines with increasing mother's education, from 62 deaths per 1,000 live births among children whose mothers have no education to 17 deaths per 1,000 live births among children whose mothers have more than a secondary education (Figure 8.3).
- Under-5 mortality also decreases with increasing household wealth, from 72 deaths per 1,000 live births in the lowest wealth quintile to 30 deaths per 1,000 live births in the highest quintile.

8.2 BIODEMOGRAPHIC RISK FACTORS

The demographic characteristics of both mothers and children have been found to play an important role in the survival of children. Tables 8.2 and 8.3 present childhood mortality rates by demographic characteristics (sex of the child, residence, mother's age at birth, birth order, previous birth interval, and infant's size at birth).

Patterns by demographic characteristics

- Overall, boys are slightly more likely than girls to die in childhood. For example, the under-5 mortality rate among boys is 47 deaths per 1,000 live births, as compared with 43 deaths per 1,000 live births among girls (Table 8.2).
- The under-5 mortality rate is higher in rural areas (48 deaths per 1,000 live births) than in urban areas (35 deaths per 1,000 live births).
- During the 10-year period preceding the survey, under-5 mortality was higher among children of mothers who were less than age 20 and age 40-49 at the time of the birth (69 and 89 deaths per 1,000 live births, respectively) than among children of mothers who were age 20-29 and age 30-39 (47 deaths per 1,000 live births in each group) (Table 8.3).

Figure 8.2 Under-5 mortality by province
Deaths per 1,000 live births

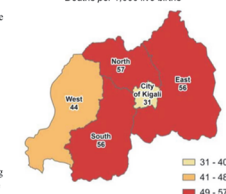
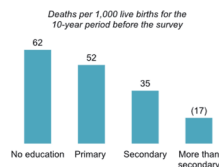


Figure 8.3 Under-5 mortality by mother's education
Deaths per 1,000 live births for the 10-year period before the survey



Example 1: Exposure to Mass Media: Women

A Question Asked of All Survey Respondents

Table 3.4.1 Exposure to mass media: Women 1						
Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Rwanda DHS 2019-20						
Background characteristic	2 Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	11.8	22.1	66.7	3.1	28.5	3,258
20-24	10.1	22.5	69.0	4.6	27.7	2,414
25-29	10.0	21.2	63.6	5.7	33.6	2,073
30-34	7.9	17.9	58.7	4.3	38.5	2,118
35-39	5.7	15.8	56.4	3.1	40.4	2,072
40-44	5.5	18.7	59.0	2.8	38.3	1,488
45-49	5.3	14.7	54.2	1.7	42.8	1,211
Residence						
Urban	16.1	51.1	77.3	11.0	16.0	2,909
Rural	6.8	11.8	58.5	1.9	39.0	11,725
Province						
City of Kigali	15.5	53.0	76.4	11.0	15.2	2,166
South	7.4	12.1	56.5	2.6	41.0	3,065
West	5.2	14.7	56.3	1.5	41.1	3,174
North	8.4	9.5	57.6	2.3	40.3	2,226
East	8.7	16.8	66.1	3.2	31.3	4,003
Education						
No education	0.2	5.6	36.2	0.0	62.2	1,377
Primary	4.2	12.4	57.0	0.7	40.0	8,529
Secondary	15.0	30.9	78.1	6.6	18.0	4,086
More than secondary	45.3	73.2	86.1	33.8	4.7	642
Wealth quintile						
Lowest	2.7	2.3	26.0	0.1	71.9	2,741
Second	4.5	2.7	49.4	0.2	48.9	2,756
Middle	6.0	4.3	66.5	0.6	32.0	2,757
Fourth	8.2	13.3	78.0	1.6	19.5	2,966
Highest	19.2	64.9	84.6	13.9	7.6	3,414
Total	4 8.6	19.6	62.2	3.7	34.4	14,634

Step 1: Read the title and subtitle, highlighted in orange in the table above. They tell you the topic and the specific population group being described. In this case, the table is about women age 15-49 and their exposure to different types of media. All eligible female respondents age 15-49 were asked these questions.

Step 2: Scan the column headings—highlighted in green in Example 1. They describe how the information is categorized. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three types of media, while the fifth column shows women who do not access any of the three types of media on a weekly basis. The last column lists the number of women age 15-49 interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in Example 1. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women's exposure to media by age, urban-rural residence, province, level of education, and wealth quintile. Most of the tables in the RDHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in pink. These percentages represent the totals of all women age 15-49 and their weekly access to different types of media. In this case, 8.6%* of women age 15-49 read a newspaper at least once a week, 19.6% watch television at least weekly, and 62.2% listen to the radio on a weekly basis.

Step 5: To find out what percentage of women in City of Kigali access all three media at least weekly, draw two imaginary lines, as shown on the table. This shows that 11.0% of women in City of Kigali access all three media once a week.

By looking at patterns by background characteristics, we can see how exposure to mass media varies across Rwanda. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help program planners and policymakers determine how to most effectively reach their target populations.

*For the purpose of this document, data are presented exactly as they appear in the table, including decimal places. However, the text in the remainder of this report rounds data to the nearest whole percentage point.

Practice: Use the table in Example 1 to answer the following questions:

- What percentage of women in Rwanda do not access any of the three media at least once a week?
- Which age group has the highest percentage of women who watch television at least once a week?
- Compare women in urban areas to women in rural areas—which group has a higher percentage of women who read a newspaper at least once a week?
- What are the lowest and highest percentages (range) of women who access all three media at least once a week by province?
- Is there a clear relationship in exposure to newspapers on a weekly basis by educational level?
- Is there a clear relationship in exposure to television on a weekly basis by wealth quintile?

Answers:

a) 34.4% of women in Rwanda do not access any of the three media at least once a week.

b) Weekly television access is highest among women age 20-24 (22.5%).

c) Weekly newspaper reading is higher among women in urban areas (16.1%) than women in rural areas (6.8%).

d) Women's access to all three media ranges from a low of 1.5% in West to a high of 11.0% in City of Kigali.

e) Women's weekly exposure to newspapers increases with increasing education, from 0.2% among women with no education to 45.3% among those with more than a secondary education.

f) Women's weekly exposure to television increases with increasing household wealth, from 2.3% among women living in the poorest households to 64.9% among those living in the wealthiest households.

Example 2: Prevalence and Treatment of Symptoms of ARI

A Question Asked of a Subgroup of Survey Respondents

Table 10.5 Prevalence and treatment of symptoms of ARI					
Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Rwanda DHS 2019-20					
Background characteristic	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
	Percentage with symptoms of ARI ¹	Number of children	Percentage for whom advice or treatment was sought ²	Percentage for whom treatment was sought same or next day	Number of children
Age in months					
<6	2.4	791	*	*	19
6-11	2.4	836	*	*	20
12-23	2.3	1,633	(79.1)	(39.4)	37
24-35	1.4	1,631	*	*	23
36-47	1.3	1,594	*	*	21
48-59	1.0	1,535	*	*	16
Sex					
Male	1.8	4,046	66.7	29.4	74
Female	1.6	3,974	79.7	36.3	62
Mother's smoking status					
Smokes cigarettes/tobacco	(5.1)	37	*	*	2
Does not smoke	1.7	7,983	72.3	32.4	135
Cooking fuel					
Electricity or gas	0.3	238	*	*	1
Charcoal	1.2	1,466	*	*	18
Wood/straw ³	1.9	6,308	73.8	31.0	118
Residence					
Urban	1.0	1,411	*	*	14
Rural	1.9	6,608	71.1	27.1	123
Province					
City of Kigali	1.2	1,133	*	*	13
South	1.2	1,610	*	*	19
West	2.6	1,940	67.2	40.3	51
North	1.6	1,214	*	*	19
East	1.6	2,123	(82.2)	(20.5)	34
Mother's education					
No education	2.1	913	*	*	19
Primary	1.9	5,197	69.0	26.4	99
Secondary	1.0	1,555	*	*	16
More than secondary	0.9	354	*	*	3
Wealth quintile					
Lowest	2.1	1,866	(66.8)	(35.7)	40
Second	2.5	1,542	(63.8)	(29.2)	38
Middle	1.9	1,560	*	*	30
Fourth	0.9	1,560	*	*	13
Highest	1.0	1,491	*	*	15
Total	1.7	8,020	72.7	32.5	137

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

² Excludes advice or treatment from a traditional practitioner

³ Includes grass, shrubs, and crop residues

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under age 5 (a) and children under age 5 with symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey (b).

Step 2: Identify the two panels. First, identify the columns that refer to all children under age 5 (a), and then isolate the columns that refer only to children under age 5 with symptoms of ARI in the 2 weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under age 5 had symptoms of ARI in the 2 weeks before the survey? It's 1.7%. Now look at the second panel. How many children under age 5 are

there who had symptoms of ARI in the 2 weeks before the survey? It's 137 children, or 1.7% of the 8,020 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only 1.7% of children under age 5 had symptoms of ARI in the 2 weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children under age 5 with symptoms of ARI in the 2 weeks before the survey in East had treatment or advice sought? It's 82.2%. This percentage is in parentheses because there are between 25 and 49 children (unweighted) in this category. Readers should use this number with caution—it may not be reliable.
- What percentage of children under age 5 with symptoms of ARI in the 2 weeks before the survey in City of Kigali had treatment or advice sought? There is no number in this cell—only an asterisk. This is because fewer than 25 children under age 5 had recent symptoms of ARI in City of Kigali. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks in a table, you can proceed with confidence that enough cases were included in all categories that the data are reliable.

SUSTAINABLE DEVELOPMENT GOAL INDICATORS

Sustainable Development Goal Indicators—Rwanda DHS 2019-20

Indicator	Sex		Total	DHS table number
	Male	Female		
2. Zero hunger				
2.2.1 Prevalence of stunting among children under 5 years of age	37.0	29.2	33.1	11.1
2.2.2 Prevalence of malnutrition among children under 5 years of age	6.7	6.8	6.7	na
a) Prevalence of wasting among children under 5 years of age	0.9	1.4	1.1	11.1
b) Prevalence of overweight among children under 5 years of age	5.8	5.4	5.6	11.1
3. Good health and well-being				
3.1.1 Maternal mortality ratio ¹	na	na	203	14.5
3.1.2 Proportion of births attended by skilled health personnel	na	na	94.2	9.6
3.2.1 Under-five mortality rate ²	47	43	45	8.2
3.2.2 Neonatal mortality rate ²	21	17	19	8.2
3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	na	73.7	na	7.13.1
3.7.2 Adolescent birth rates per 1,000 women				
a) Girls aged 10-14 years ³	na	0 ³	na	5.1
b) Women aged 15-19 years ⁴	na	32 ⁴	na	5.1
3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older ⁵	7.0	0.9	3.9 ^a	3.10.1, 3.10.2
3.b.1 Proportion of the target population covered by all vaccines included in their national program				
a) Coverage of DPT containing vaccine (3rd dose) ⁶	98.7	99.3	99.0	10.3
b) Coverage of measles containing vaccine (2nd dose) ⁷	93.1	94.5	93.8	10.3
c) Coverage of pneumococcal conjugate vaccine (last dose in schedule) ⁸	98.5	99.2	98.8	10.3
5. Gender equality				
5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months ^{9,10}	na	30.0	na	16.9.1
a) Physical violence	na	19.7	na	16.9.1
b) Sexual violence	na	10.3	na	16.9.1
c) Psychological violence	na	23.6	na	16.9.1
5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18				
a) Before age 15	na	0.3	na	4.3
b) Before age 18	na	5.5	na	4.3
5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care ¹¹	na	63.1	na	na
5.b.1 Proportion of individuals who own a mobile telephone ¹²	61.6	47.9	54.8 ^a	15.7.1, 15.7.2
	Residence			
	Urban	Rural	Total	DHS table number
7. Affordable clean energy				
7.1.1 Proportion of population with access to electricity	86.4	38.4	46.6	2.3
7.1.2 Proportion of population with primary reliance on clean fuels and technology ¹³	16.3	1.0	3.6	2.3
	Sex			
	Male	Female	Total	DHS table number
8. Decent work and economic growth				
8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider ¹⁴	36.4	21.3	28.8 ^a	15.7.1, 15.7.2
16. Peace, justice, and strong institutions				
16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority	85.8	85.4	85.6 ^a	2.10
17. Partnerships for the goals				
17.8.1 Proportion of individuals using the Internet ¹⁵	23.0	12.3	17.6 ^a	3.5.1, 3.5.2

na = Not applicable

¹ Expressed in terms of maternal deaths per 100,000 live births in the 5-year period preceding the survey

² Expressed in terms of deaths per 1,000 live births for the 5-year period preceding the survey

³ Equivalent to the age-specific fertility rate for girls age 10-14 for the 3-year period preceding the survey, expressed in terms of births per 1,000 girls age 10-14

⁴ Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19

⁵ Data are not age-standardized and are available for women and men age 15-49 only.

⁶ The percentage of children age 12-23 months who received three doses of pentavalent (DPT-HepB-Hib)

⁷ The percentage of children age 24-35 months who received two doses of measles and rubella

⁸ The percentage of children age 12-23 months who received three doses of pneumococcal conjugate vaccine

⁹ Data are available for women age 15-49 who have ever been in union only.

¹⁰ In the DHS, psychological violence is termed emotional violence.

¹¹ Data are available for currently married women who are not pregnant only.

¹² Data are available for women and men age 15-49 only.

¹³ Measured as the percentage of the population using clean fuel for cooking

¹⁴ Data are available for women and men age 15-49 who have and use an account at a bank or other financial institution; information on use of a mobile-money-service provider is not available.

¹⁵ Data are available for women and men age 15-49 who have used the internet in the past 12 months.

^a The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females.

RWANDA



The 2019-20 Rwanda Demographic and Health Survey (RDHS) is the sixth Demographic and Health Survey (DHS) conducted in Rwanda, following those implemented in 1992, 2000, 2005, 2010, and 2014-15. The National Institute of Statistics of Rwanda (NISR), in collaboration with the Ministry of Health (MOH), implemented the survey. Data collection took place from November 9, 2019, to July 20, 2020. The data collection was interrupted for more than 2 months from March 21 to June 7, 2020, due to the nationwide lockdown for the coronavirus disease (COVID-19) pandemic. Funding for the 2019-20 RDHS was provided by the government of Rwanda, the United States Agency for International Development (USAID), the One United Nations (ONE UN), the Centers for Disease Control and Prevention (CDC), the United Nations Children Fund (UNICEF), the United Nations Population Fund (UNFPA), the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), and Enabel. ICF provided technical assistance through The DHS Program, which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programs.

1.1 SURVEY OBJECTIVES

The primary objective of the 2019-20 RDHS is to provide up-to-date estimates of basic demographic and health indicators. Specifically, the 2019-20 RDHS:

- collected data on fertility levels and preferences; contraceptive use; maternal and child health; infant, child, and neonatal mortality levels; maternal mortality; gender; nutrition; awareness about HIV/AIDS; self-reported sexually transmitted infections (STIs); and other health issues relevant to the achievement of the Sustainable Development Goals (SDGs)
- obtained information on the availability of, access to, and use of mosquito nets as part of the National Malaria Control Program
- gathered information on other health issues such as injections, tobacco use, and health insurance
- collected data on women's empowerment and domestic violence
- tested household salt for iodine levels
- obtained data on child feeding practices, including breastfeeding, and conducted anthropometric measurements to assess the nutritional status of children under age 5 and women age 15-49
- conducted anemia testing of women age 15-49 and children age 6-59 months
- conducted malaria testing of women age 15-49 and children age 6-59 months
- conducted HIV testing of women age 15-49 and men age 15-59
- conducted micronutrient testing of women age 15-49 and children age 6-59 months

The information collected through the 2019-20 RDHS is intended to assist policymakers and program managers in evaluating and designing programs and strategies for improving the health of the country's population.

1.2 SAMPLE DESIGN

The sampling frame used for the 2019-20 RDHS is the fourth Rwanda Population and Housing Census (RPHC), which was conducted in 2012 by the National Institute of Statistics of Rwanda (NISR). The sampling frame is a complete list of enumeration areas (EAs) covering the whole country provided by the National Institute of Statistics, the implementing agency for the RDHS. An EA is a natural village or part of a village created for the 2012 RPHC; these areas served as the counting units for the census.

The 2019-20 RDHS followed a two-stage sample design and was intended to allow estimates of key indicators at the national level as well as for urban and rural areas, five provinces, and each of Rwanda's 30 districts for some limited indicators. The first stage involved selecting sample points (clusters) consisting of EAs delineated for the 2012 RPHC. A total of 500 clusters were selected, 112 in urban areas and 388 in rural areas.

The second stage involved systematic sampling of households. A household listing operation was undertaken in all selected EAs from June to August 2019, and households to be included in the survey were randomly selected from these lists. Twenty-six households were selected from each sample point, for a total sample size of 13,000 households. Because of the approximately equal sample sizes in each district, the sample is not self-weighting at the national level, and weighting factors have been added to the data file so that the results will be proportional at the national level.

All women age 15-49 who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible to be interviewed. In half of the households, all men age 15-59 who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible to be interviewed. In the subsample of households selected for the male survey, height and weight measurements, anemia testing, and malaria testing were performed among eligible women who consented to being tested and children less than age 5 with the parent's or guardian's consent. In the same subsample, blood samples were collected for testing of HIV from eligible women and men who consented. The domestic violence module for men was implemented in one-half of the households selected for the male survey (25% of the entire sample), and the domestic violence module for women was implemented in the other one-half of households selected for that survey (25% of the entire sample). In one-half of subsample households not selected for the male survey (25% of the entire sample), venous blood samples were collected for micronutrient testing among children age 0-5 and women age 15-49. In this micronutrient subsample, height and weight measurements, anemia testing, and malaria testing (rapid test only) for children and women were also performed.

1.3 QUESTIONNAIRES

Five questionnaires were used for the 2019-20 RDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, the Biomarker Questionnaires, and the Fieldworker Questionnaire. These questionnaires, based on The DHS Program's standard Demographic and Health Survey (DHS-7) questionnaires, were adapted to reflect the population and health issues relevant to Rwanda. Comments were solicited from various stakeholders representing government ministries and agencies, nongovernmental organizations, and development partners. The survey protocol was reviewed and approved by the Rwanda National Ethics Committee (RNEC) and the ICF Institutional Review Board. After all questionnaires were finalized in English, they were translated into Kinyarwanda. The 2019-20 RDHS used computer-assisted personal interviewing (CAPI) for data collection.

The Household Questionnaire listed all members of and visitors to selected households. Basic demographic information was collected on each person listed, including age, sex, marital status, education, and relationship to the head of the household. For children under age 18, survival status of parents was determined. Data on age, sex, and marital status of household members were used to identify women and men who were eligible for individual interviews. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of drinking water; type of toilet facilities; materials used for flooring, external walls, and roofing; ownership of various durable goods; and ownership of mosquito nets. In addition, a disability module was added into this questionnaire.

The Woman's Questionnaire was used to collect information from all eligible women age 15-49. These women were asked questions on the following topics:

- Background characteristics (including age, education, and media exposure)
- Birth history and child mortality
- Knowledge, use, and source of family planning methods
- Antenatal, delivery, and postnatal care
- Vaccinations and childhood illnesses
- Breastfeeding and infant feeding practices
- Women's minimum dietary diversity
- Marriage and sexual activity
- Fertility preferences (including desire for more children and ideal number of children)
- Women's work and husbands' background characteristics
- Knowledge, awareness, and behavior regarding HIV/AIDS and other sexually transmitted infections (STIs)
- Knowledge, attitudes, and behavior related to other health issues (e.g., smoking)
- Early childhood development
- Adult and maternal mortality
- Domestic violence

The Man's Questionnaire was administered to all men age 15-59 in the subsample of households selected for the men's survey. The Man's Questionnaire collected much of the same information as the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health.

The first Biomarker Questionnaire was used to record the results of anthropometry measurements and other biomarkers (anemia, malaria, and HIV) for women, men, and children. This questionnaire was administered only to the subsamples selected for the men's survey.

The second Biomarker Questionnaire was used to record the results of anthropometry measurements and other biomarkers (anemia, malaria, and micronutrient) for women and children. This questionnaire was administered only to the subsamples of seven households per cluster.

The Fieldworker Questionnaire recorded background information from the interviewers that will serve as a tool in conducting analyses of data quality. Each interviewer completed the self-administered questionnaire after the final selection of interviewers and before the fieldworkers entered the field. No personal identifiers were attached to the 2019-20 RDHS fieldworkers' data file.

The interviewers used tablet computers for data collection. The tablet computers were equipped with Bluetooth® technology to enable remote electronic transfer of files, such as assignments from the team supervisor to the interviewers, individual questionnaires to survey team members, and completed questionnaires from interviewers to team supervisors. The computer-assisted personal interviewing (CAPI) data collection system employed in the 2019-20 RDHS was developed by The DHS Program with the mobile version of CSPro.

1.4 ANTHROPOMETRY, ANEMIA, MALARIA, HIV, AND MICRONUTRIENT TESTING

In the half of the households selected for the male survey, the 2019-20 RDHS implemented anthropometry measurements, anemia testing, and malaria testing for children and women and HIV testing for adults.

1.4.1 Anthropometry

Height and weight measurements were recorded for children age 0-5 and women age 15-49. The 2019-20 RDHS included quality assurance procedures to improve anthropometry data quality. These procedures, undertaken in real time during data collection, included re-measurement of all children with data outside of pre-specified flagged values on a subsequent day and re-measurement of the height and weight of a random selection of children (10%) on a subsequent day.

1.4.2 Anemia Testing

Blood specimens for hemoglobin measurement were collected from women age 15-49 and from all children age 6 months to age 5 for whom consent was obtained from their parents or the adult responsible for the children. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick in the case of children age 6-11 months) and collected in a microcuvette. Hemoglobin analysis was carried out on-site using a battery-operated portable HemoCue 201+ analyzer. Results were provided verbally and in writing. Parents of children with a hemoglobin level under 7 g/dl were instructed to take the child to a health facility for follow-up care. Likewise, nonpregnant women and pregnant women were referred for follow-up care if their hemoglobin levels were below 7 g/dl and 9 g/dl, respectively.

1.4.3 Malaria Testing

Malaria diagnostic tests, including a rapid diagnostic test (RDT) and a test using thick and thin blood smears, were conducted for eligible women and children in the 2019-20 RDHS. For the RDT, a drop of blood was obtained via a prick at the end of the finger, usually at the same time as anemia testing. Results from the RDTs were recorded on the Biomarker Questionnaire and entered into the computer tablet the same day. The RDT results were used to diagnose malaria and guide treatment of parasitemic children during the survey. Parents or guardians of children with a positive RDT were provided with written results, and children were offered a full course of treatment according to the standard procedures in Rwanda if they did not have a severe case of malaria (diagnosed through symptoms or the presence of severe anemia), were not currently on treatment, and had not completed a full course of artemisinin-based combination therapy (ACT) during the preceding 2 weeks. Women with a positive RDT were referred to the nearest health center for treatment. An informed consent form was read to eligible women or the parents of or adults responsible for children or unmarried young adults age 15-17. The anemia brochure also contained information on malaria and was given to all households in which malaria testing was conducted.

Thin and thick blood smears were also collected from participants who agreed to malaria testing. These blood smears were dried and packed carefully in the field, assigned barcode labels corresponding to the Biomarker Questionnaire, and then transported to a malaria laboratory at the district/province level, where they were stained. Microscopic examination to determine malaria infection was carried out at the National Reference Laboratory (NRL). The laboratory malaria testing was not complete at the time this report was prepared.

1.4.4 HIV Testing

In the subsample selected for the men's survey, women and men interviewed on the individual questionnaire were eligible for HIV testing. The survey featured a parallel system for HIV testing. RDTs were performed in the household according to a national HIV testing algorithm for respondents who wished to be informed of their status, while dried blood spot (DBS) specimens were collected and transported to a central lab for anonymized testing. HIV prevalence for the survey will be based on the laboratory test results.

The Rwanda HIV rapid testing algorithm applies two tests in sequence: First Alere Combo (Alere HIV Combo/Alere HIV-1/2 Ag/Ab Combo) followed by HIV Stat Pak (ChemBio | HIV 1/2 STAT-PAK® Assay). Individuals with a non-reactive result on the first test are reported as HIV-negative. Individuals with a reactive first test result undergo subsequent testing with STAT-PAK. Those with a reactive result on both screening tests are classified as HIV-positive for the purposes of the survey but are referred to a nearby health facility for verification testing, and subsequent enrollment into care, as required by the national testing algorithm. Individuals with a reactive first test result followed by a non-reactive second test result are classified as indeterminate and referred for retesting in 4 weeks as per the national guidelines.

Dedicated nurse counselors who provided pre- and post-test counseling conducted HIV rapid testing. Pretest counseling included an explanation of HIV infection and transmission, the meaning of test results, risks associated with sexual behaviors, and how to prevent and treat HIV and other sexually transmitted infections. Post-test counseling messages were tailored to participants' HIV results and risk profiles.

The testing and delivery of results at home were done after creating conditions that would guarantee the confidentiality of the respondents. All participants with HIV-seropositive or indeterminate results were referred to the nearest health facility for further care and treatment.

For HIV testing using DBS samples, at the time of collection of the blood sample, a unique and random barcoded identification number was assigned to each participant who consented to testing. Sheets of peel-off labels with unique barcodes were pre-printed for use in the field. Matching barcode labels were affixed to the Biomarker Questionnaire, a fresh filter paper card, and a blood sample transmittal sheet.

Approximately every 2 weeks, or more frequently, all DBS samples and transmittal sheets from the same clusters were picked up from teams in the field by central office supervisors and transported to the National Reference Laboratory (NRL) for processing and registration. Each specimen was then assigned a unique serial laboratory number during the registration process at the lab before being stored in a freezer for preservation. The DBS laboratory testing was scheduled to be conducted at the NRL from the fourth quarter of 2020 to the first quarter of 2021.

Interviewers collected finger-prick DBS specimens for laboratory testing of HIV from women age 15-49 and men age 15-59 who consented to be tested. The protocol for DBS collection and analysis was based on the anonymous linked protocol developed for The DHS Program. This protocol allows for merging of HIV test results with the data on background characteristics and other information collected in the individual questionnaires after removal of all information that could potentially identify an individual.

Interviewers explained the procedure, the confidentiality of the data, and the RDT test results would be made available to the respondent. If consent was given for HIV testing, five blood spots from the finger prick were collected on a filter paper card to which a barcode label unique to the respondent was affixed. A duplicate label was attached to the Biomarker Data Collection Form. A third copy of the same barcode was affixed to the DBS Transmittal Sheet to track the blood samples from the field to the laboratory.

Blood samples were dried overnight and packaged for storage the following morning. Samples were periodically collected from the field and transported to the National Reference Laboratory in City of Kigali. Upon arrival at the NRL, each blood sample was logged into the CSPro HIV Test Tracking System database and stored at -20°C until tested.

1.4.5 Micronutrient Testing

In about one-half of the households not selected for the men's survey (7 households out of 13), the 2019-20 RDHS implemented micronutrient testing for children and women. This included anthropometry measurements, anemia testing, malaria RDTs, and laboratory testing for various micronutrient markers. Approximately 7 ml of blood and 5 ml of urine (women only) were collected from consenting participants. Although the anthropometry measurements were the same in the micronutrient households as in the households selected for the men's survey (described above), point-of-care anemia and malaria testing used venous blood collection methods, and the malaria testing did not include thick and thin smears. Below are descriptions of anemia and malaria testing specific to the micronutrient households and laboratory testing for various micronutrient markers.

Anemia Testing

Blood specimens for hemoglobin measurement were collected from women age 15-49 and from children age 6 months to age 5 for whom consent was obtained from their parents or the adult responsible for the children. Venous blood samples were collected in a Purple Top vacutainer. Hemoglobin analysis was carried out on-site using a battery-operated portable HemoCue 201+ analyzer. Procedures regarding results and referrals were the same as described for the men's survey (above).

Malaria Testing

Malaria rapid diagnostic tests were conducted for eligible women and children. For the RDT for malaria, a drop of whole blood was obtained from a venous collection that had been transferred to a Purple Top vacutainer. Procedures regarding results, treatment, and referrals were the same as described for the men's survey.

Laboratory Testing for Micronutrient Biomarkers and Inflammatory Proteins

In the micronutrient subsample, women age 15-49 who were interviewed with the individual questionnaire were eligible for urine collection and venous blood collection, and children age 6 months to age 5 for whom consent was obtained from their parents or the adult responsible for the children participated in venous blood collection. Urine and venous blood were collected according to universal precautions for biospecimen collection and transported in refrigerated cooler boxes with gel packs to satellite clinics equipped with -17°C freezers. The cold chain operated such that time of specimen collection to processing did not exceed 24 hours and time from collection to storage at -80°C did not exceed 7 days. Urine, collected from women, will be assessed for iodine concentrations by the Rwanda Biomedical Center (RBC) to determine the median urinary iodine concentrations for pregnant and nonpregnant women of reproductive age. Venous blood was processed in the field to create three aliquots of serum and a plasma aliquot, and, among women, whole blood lysate samples were prepared so that red blood cell folate could be assessed. Serum retinol, serum ferritin, soluble transferrin receptor, C-reactive protein (CRP), and alpha-1-acid glycoprotein (AGP) will be measured among all women and children with a sufficient volume of serum available for measurement. The RBC is responsible for assessment of retinol using high-performance liquid chromatography methods, and the VitMin laboratory in Germany is responsible for assessment of ferritin, soluble transferrin receptor, CRP, and AGP using an in-house sandwich ELISA (enzyme-linked immunosorbent assay) method. Serum will be stored at -80°C for future assessment of vitamin B12 among women and children. Serum and whole blood lysate samples will be stored at -80°C for future assessment of folate (serum and red blood cell) among women. Plasma samples will be stored as backup samples.

Laboratory Testing for Iodine in Salt

The seven households per cluster eligible for the micronutrient subsample were asked to provide a 50-g sample of salt from their households, and they were provided replacement salt. The individual household salt samples were stored in airtight (hard plastic) primary packaging with secondary packaging (paper or plastic bag) to prevent cross-contamination. Household salt samples will be tested for the presence or absence of iodine using a rapid test kit. Samples that are positive for iodine will be tested using quantitative titration with sodium thiosulfate methods to determine the concentration of iodine.

1.5 PRETEST

A pretest was conducted from July 29 through August 14, 2019, when 25 candidates (15 women and 10 men) participated in questionnaire training. Additionally, 10 biomarker health technicians participated in biomarker training conducted separately in parallel. The training sessions were conducted in English and Kinyarwanda during the 2 weeks. The training included discussions of the different sections and modules of the questionnaires, mock interviews, role-play, group work, presentations, and in-class practice sessions. Training was conducted by trainers from the NISR and MOH, with technical assistance from ICF International. UNICEF provided training on the early childhood development module. Classroom instruction was provided during the first 3 weeks, and pretest field practice took place over 5 days in three rural villages and two urban villages. Following field practice, a debriefing session was held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the exercise.

The CAPI training was conducted by ICF staff with assistance from two NISR data processing coordinators who focused on the technical components of the CAPI data collection system. The training focused on key components of the survey, interview techniques and procedures for completing the RDHS questionnaires, and administration of interviews using the CAPI system.

The biomarker training included orientation on collecting height and weight data; testing for anemia, malaria, and HIV; venous blood drawing and processing for micronutrient tests; and standardization procedures for anthropometry. The participants worked in groups using various training techniques, including interactive question-and-answer sessions, case studies, and role-plays. Before starting the fieldwork, the participants were given ample opportunities to practice the questionnaires and to practice collection of biomarkers among women and children.

The fieldwork for the pretest was carried out in the Muhanga district and in the clusters that were not selected for the survey sample. Each team carried out the pretest in an urban and a rural location, completing five clusters in total. The participants administered the questionnaires in the field, provided feedback on the content and language of the questionnaires, tested the CAPI software program, commented on the biomarker procedure, and learned various training techniques. Following the fieldwork, a debriefing session was held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the exercise.

1.6 TRAINING OF FIELD STAFF

The main training for the 2019-20 Rwanda DHS started on September 30 and ended on November 1, 2019. A total of 160 participants from all over the country were invited to take part in the training. They were chosen based on merit. Eighty-five participants were selected to be interviewers and team leaders, and 51 were selected to be health technicians. The training sessions were held in the main auditorium of the NISR's training center and were conducted by NISR trainers with support from ICF. Training on biomarkers was provided by trainers from the NRL, with support from ICF and the CDC.

Participants were evaluated through in-class exercises, quizzes, and observations made during field practice. By the end of the main training, 17 teams were formed, with each team consisting of 17 team leaders, 17 male interviewers, 51 female interviewers, and 51 health technicians. The team leaders received additional training on how to identify the selected households and different subsamples, data quality control procedures, and fieldwork coordination.

A variety of different learning tools were used in the training. Plenary lectures were held on the technical aspects of biomarker collection, and other tools included video and hands-on demonstrations of the biomarker collection process, instructions on how to fill out the questionnaire and transmittal sheets, and instructions on data quality procedures. In addition, break-out sessions were held daily during which trainees had the opportunity for hands-on practice with both adults and children. A total of three anthropometry standardization exercises were carried out in a community health center. Following the standardization exercises, the results of the exercises were presented. General observations on accuracy (difference between the reference value and the participant's value) and precision (difference between the first and second readings) were discussed.

The field coordinators were trained on the use of the Biomarker Checklist. Also implemented were random re-measurements for quality assurance and re-visitation of households for re-measurements in flagged cases involving children whose Z-score values were less than -3 or greater than 3. A 3-day field practice was conducted. The nurses and laboratory scientists later joined the main team for refresher training before moving on to data collection.

1.7 FIELDWORK

Data collection was carried out by 17 field teams. Each team was provided a four-wheel-drive truck with a driver. All blood smears and DBS specimens were transferred to the NISR office every 3-4 days by 10 supervisors from the NISR and NRL who also coordinated and supervised fieldwork activities. Venous blood specimens were processed in the field laboratories set up in the district hospitals, and serum aliquots were stored in mobile freezers (-20°C) before being transferred to the regional laboratories and then the NRL. ICF and the CDC provided technical assistance during the entire data collection period.

The fieldwork for the 2019-20 RDHS was carried out under close supervision starting on November 9, 2019, in the clusters in the 17 districts in the North, West, and East provinces. The teams were closely monitored by the field coordinators for quality control. After completion of the fieldwork in these 17 districts, the teams were dispatched to the final 13 districts. However, in the wake of the COVID-19 pandemic, the fieldwork was suspended from April to June 2020. Data collection resumed on June 4 and was completed on July 20, 2020.

Fieldwork monitoring was an integral part of the 2019-20 RDHS, and several rounds of monitoring were carried out by the survey coordinators and supervisors of NISR, RBC and ICF. The coordinators were provided with guidelines for overseeing the fieldwork. Weekly field check tables were generated from the completed interviews sent to the central office to monitor fieldwork progress, and feedback was regularly sent out to the teams.

1.8 DATA PROCESSING

The processing of the 2019-20 RDHS data began almost as soon as the fieldwork started. As data collection was completed in each cluster, all electronic data files were transferred via the Internet File Streaming System (IFSS) to the NISR central office in City of Kigali. These data files were registered and checked for inconsistencies, incompleteness, and outliers. The field teams were alerted to any inconsistencies and errors. Secondary editing, carried out in the central office, involved resolving inconsistencies and coding the open-ended questions. The NISR data processor coordinated the exercise at the central office. The biomarker paper questionnaires were compared with electronic data files to check for any inconsistencies in data entry. Data entry and editing were carried out using the CSPro software package. The concurrent processing of the data offered a distinct advantage because it maximized the likelihood of the data being error-free and accurate. Timely generation of field check tables allowed for effective monitoring. The secondary editing of the data was completed in the second week of September 2020.

Throughout this report, numbers in the tables reflect weighted numbers. Percentages based on 25 to 49 unweighted cases are shown in parentheses, and percentages based on fewer than 25 unweighted cases are suppressed and replaced with an asterisk, to caution readers when interpreting data that a percentage based on fewer than 50 cases may not be statistically reliable.

1.9 RESPONSE RATES

Table 1.1 shows response rates for the 2019-20 RDHS. A total of 13,005 households were selected for the sample, of which 12,951 were occupied. All but two occupied households (12,949) were successfully interviewed, yielding a response rate of 100.0%. In the interviewed households, 14,675 women age 15-49 were identified for individual interviews; interviews were completed with 14,634 women, yielding a response rate of 99.7%. In the subsample selected for the male survey, 6,503 households were selected, of which 6,472 were occupied. All but one occupied household (6,471) were successfully interviewed, yielding a response rate of 100.0%. In this subsample, 6,544 men age 15-59 were identified and 6,513 were successfully interviewed, yielding a response rate of 99.5%. In the subsample selected for the micronutrient survey, 3,501 households were selected, of which 3,492 were occupied. All but one of the occupied households (3,491) were successfully interviewed, yielding a response rate of 100.0%.

LIST OF TABLES

- **Table 1.1 Results of the household and individual interviews**

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Rwanda DHS 2019-20

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	2,913	10,092	13,005
Households occupied	2,892	10,059	12,951
Households interviewed	2,892	10,057	12,949
Household response rate ¹	100.0	100.0	100.0
Interviews with women age 15-49			
Number of eligible women	3,564	11,111	14,675
Number of eligible women interviewed	3,551	11,083	14,634
Eligible women response rate ²	99.6	99.7	99.7
Household interviews in men's subsample			
Households selected	1,456	5,047	6,503
Households occupied	1,441	5,031	6,472
Households interviewed	1,441	5,030	6,471
Household response rate in subsample ¹	100.0	100.0	100.0
Interviews with men age 15-59			
Number of eligible men	1,514	5,030	6,544
Number of eligible men interviewed	1,504	5,009	6,513
Eligible men response rate ²	99.3	99.6	99.5
Household interviews in micronutrient subsample			
Households selected	784	2,717	3,501
Households occupied	784	2,708	3,492
Households interviewed	784	2,707	3,491
Household response rate in subsample ¹	100.0	100.0	100.0

¹ Households interviewed/households occupied

² Respondents interviewed/eligible respondents

Key Findings

- **Drinking water:** In Rwanda, 80% of households have access to an improved water source.
- **Sanitation:** 72% of households have access to improved sanitation.
- **Electricity:** 46% of households have electricity (86% in urban areas and 37% in rural areas).
- **Household population and composition:** The Rwandan population is relatively young; 42% of the population is age 0-14, while only 4% is age 65 or older.

Information on the socioeconomic characteristics of the household population in the 2019-20 RDHS provides a context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on sources of drinking water, sanitation, exposure to smoke inside the home, wealth, handwashing, household population and composition, educational attainment, school attendance, birth registration, and family living arrangements.

2.1 DRINKING WATER SOURCES AND TREATMENT

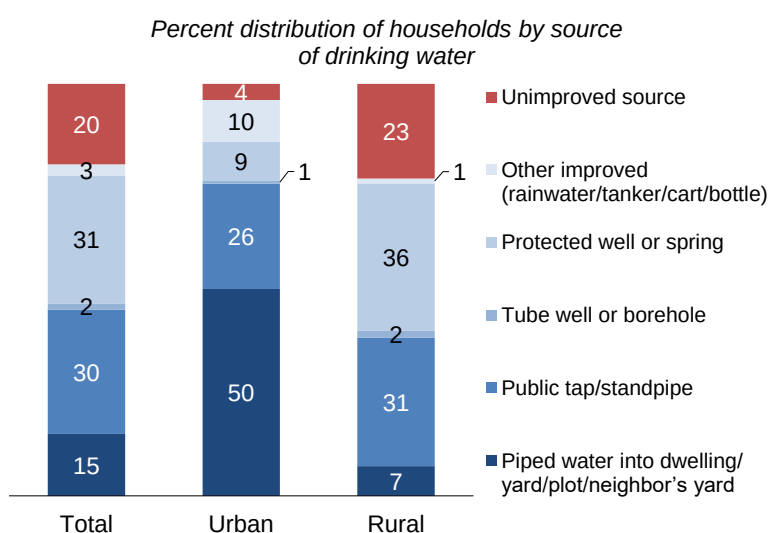
Improved sources of drinking water

Include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells, and bottled water.

Sample: Households

In Rwanda, 80% of households have access to an improved water source, with urban households having much better access (96%) than rural households (77%) (Table 2.1.1 and Figure 2.1). The most common sources of drinking water in urban households are water piped into the household's dwelling, yard, plot, or neighbor yard (50%) and public taps or standpipes (26%). Rural households obtain their drinking water mainly from protected wells or springs (36%) and public taps or standpipes (31%). The higher the wealth quintile, the lower the percentage of the population with an unimproved source of drinking water (Table 2.1.2).

Figure 2.1 Household drinking water by residence



Fetching drinking water is an additional chore that can be a great burden to household members, depending on the time spent doing so. Eleven percent of urban households and 41% of rural households report having to travel more than 30 minutes (round trip) to obtain drinking water (**Table 2.1.1**).

Trends: The percentage of households using an improved source of drinking water has increased slightly since 2014-15, from 73% to 80%.

Basic drinking water service

Drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less.

Sample: De jure population

Limited drinking water service

Drinking water from an improved source, and round-trip collection time is more than 30 minutes.

Sample: De jure population

Table 2.1.2 shows that 55% of the population has basic drinking water service, while 25% has limited drinking water service. Access to basic drinking water service varies widely by province, from a high of 82% in City of Kigali to a low of 43% in the East province. Access to basic drinking water service increases with increasing wealth, from 38% among those in the lowest wealth quintile to 85% among those in the highest quintile.

Table 2.1.3 shows that only 35% of households use an appropriate water treatment method (52% in urban areas and 32% in rural areas). Appropriate treatment methods include boiling, bleaching, filtering, and solar disinfecting.

2.2 SANITATION

Improved toilet facility

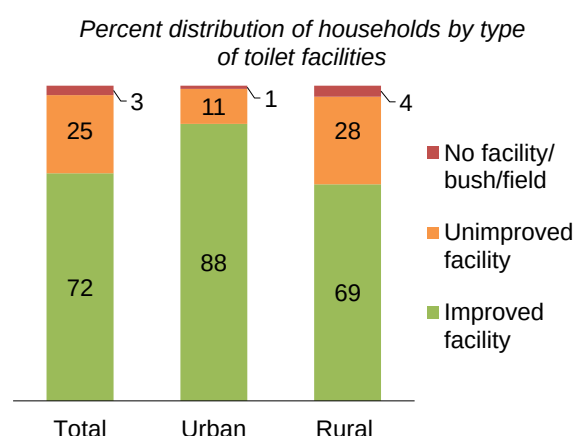
Includes flush/pour flush toilets that flush water and waste to a piped sewer system, septic tank, pit latrine, or unknown destination; ventilated improved pit (VIP) latrines; pit latrines with slabs; or composting toilets.

Sample: Households

Table 2.2.1 and **Figure 2.2** provide an overview of the types of sanitation facilities used in the surveyed households at the time of data collection. Nearly three quarters (72%) of households have access to an improved sanitation facility, although access to such facilities is higher in urban (88%) than rural (69%) areas; 25% of households use unimproved sanitation facilities. Nearly two-thirds (64%) of households use a pit latrine with a slab (an improved facility), and 23% use a pit latrine without a slab or an open pit.

Nearly all households in Rwanda with a toilet/latrine facility use a facility that is not in their dwelling but is either in the yard/plot of the dwelling (60%) or elsewhere (37%).

Figure 2.2 Household toilet facilities by residence



Trends: The percentage of households with an improved sanitation facility increased from 71% in 2014-15 to 72% in 2019-20.

Basic sanitation service

Use of improved facilities that are not shared with other households.

Sample: De jure population

Limited sanitation service

Use of improved facilities shared by two or more households.

Sample: De jure population

In Rwanda, 12% of the household population has limited sanitation service and 61% has basic sanitation service. By residence, 51% of the population in urban areas has basic sanitation service, as compared with 63% of the rural population (**Table 2.2.1**). The percentage of the household population with basic sanitation service ranges from 51% in City of Kigali to 67% in East Province (**Table 2.2.2**). On average, 3% of the population engages in open defecation, and this proportion is highest among those in the lowest wealth quintile (9%).

2.3 EXPOSURE TO SMOKE INSIDE THE HOME

Exposure to smoke inside the home, from either cooking with solid fuels or smoking tobacco, has potentially harmful health effects. In Rwanda, 22% of households cook inside the house and 95% use solid fuel for cooking; only 5% of households use clean fuel for cooking. Tobacco is smoked in the home daily in 11% of households (**Table 2.3**).

Other Housing Characteristics

The 2019-20 RDHS also collected data on access to electricity, flooring materials, and the number of rooms used for sleeping. Slightly less than half of households in Rwanda have access to electricity (46%), and access is more common in urban (86%) than in rural (37%) households. The flooring materials most commonly used are earth or sand (65%) and cement (31%). However, use of these materials varies widely by residence; for example, 68% of urban households use cement, as compared with 22% of rural households (**Table 2.3**).

2.4 HOUSEHOLD WEALTH

2.4.1 Household Durable Goods

Table 2.4 shows information on ownership of various household effects, means of transportation, agricultural land, and livestock/farm animals. Urban households are generally more likely to own various household effects; for example, 41% of urban households own television sets, compared with 8% of rural households. However, rural households are more likely to own agricultural land (67%) and farm animals (54%) than urban households (24% and 19%, respectively).

2.4.2 Wealth Index

Wealth index

Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by her or his score, and then dividing the distribution into five equal categories, each comprising 20% of the population.

Sample: Households

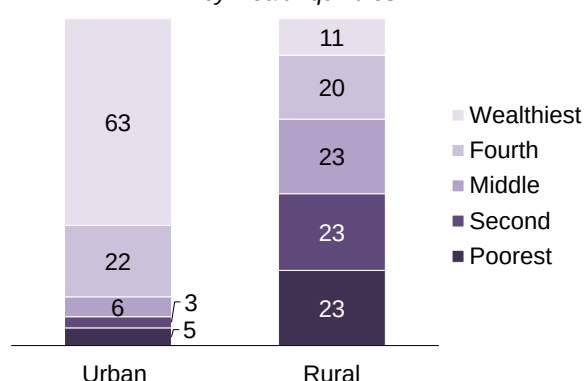
Table 2.5 presents wealth quintiles according to urban-rural residence and province. The table also includes the Gini coefficient, a measure of disparity in wealth. The Gini coefficient ranges from 0-1, with 0 implying an equal distribution of wealth and 1 implying a totally unequal distribution.

By province, South has the highest percentage of the population in the lowest wealth quintile (31%). Three in five people (60%) in City of Kigali are in the highest wealth quintile (**Table 2.5**).

Figure 2.3 shows that 63% of the population in urban areas is in the highest wealth quintile, as compared with 11% of the population in rural areas. Slightly less than half of the rural population is either in the lowest (23%) or second lowest (23%) wealth quintile.

Figure 2.3 Household wealth by residence

Percent distribution of de jure population by wealth quintiles



2.5 HANDWASHING

To obtain handwashing information, interviewers asked to see the place where members of the household most often wash their hands. A place for handwashing was observed for 84% of the household population; 12% of the population had a fixed place for handwashing (20% in urban areas and 10% in rural areas). However, only 41% of the population for whom a place for handwashing was observed had water available at the time of observation, and only 32% had soap or another cleansing agent available (**Table 2.6**).

2.6 HOUSEHOLD POPULATION AND COMPOSITION

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

How data are calculated

All tables are based on the de facto population unless otherwise specified.

The 2019-20 RDHS included a total of 55,479 de facto household members, of whom 25,862 were male and 29,618 were female.

Table 2.7 shows that 42% of the population is age 0-14, while 55% is age 15-64 and only 4% is age 65 and above.

Figure 2.4 shows the de facto household population by 5-year age groups according to sex. The broad base of the pyramid demonstrates that Rwanda's population is relatively young. This kind of distribution is characteristic of countries with high fertility and low life expectancy.

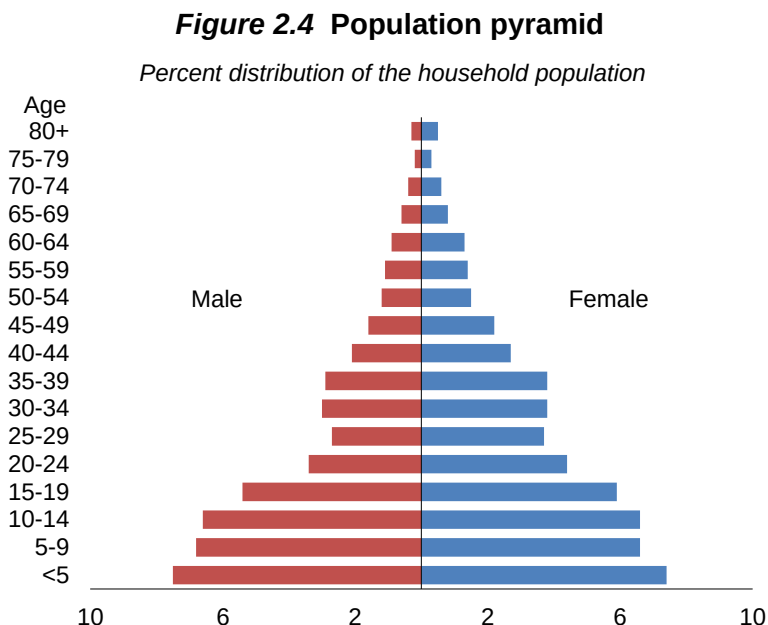


Table 2.8 shows that women head 32% of households in Rwanda. The average household size is 4.3 persons, and the difference between urban households (4.0 persons) and rural households (4.3 persons) is very small. Overall, 22% of households include children who are orphans or not living with either biological parent.

Trends: The age composition of the de facto population has remained relatively constant since 2014-15.

2.7 CHILDREN'S LIVING ARRANGEMENTS AND PARENTAL SURVIVAL

Orphan

A child with one or both parents who are dead.

Sample: Children under age 18

Ten percent of children under age 18 are not living with a biological parent, while 7% are orphans (i.e., one or both parents are dead). The percentage of children who are orphans or not living with a biological parent increases with age; among children age 15-17, 15% had lost one or both parents, and 20% were not living with a biological parent (**Table 2.9**).

Trends: The percentage of children under age 18 who do not live with a biological parent has decreased slightly since 2014-15, from 12% to 10%.

2.8 BIRTH REGISTRATION

Registered birth

Child has a birth certificate or child does not have a birth certificate, but his/her birth is registered with the civil authorities.

Sample: De jure children under age 5

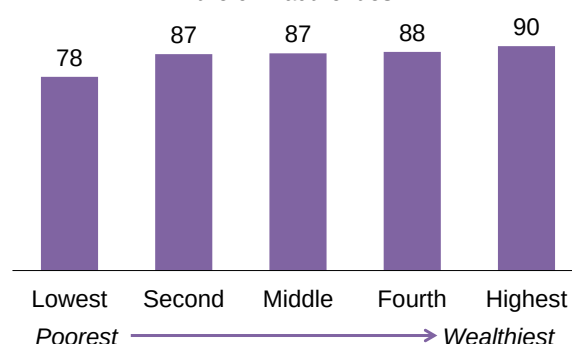
The global concern regarding the need to have all births registered by 2030 is evident in targets 16.9 and 17.19 of the SDGs. This is important given the need to protect all children because a child who is not registered is in danger of being shut out of society—denied the right to an official identity, a recognized name, and a nationality. In addition to preventing child exploitation, birth registration enables a child to receive medical treatment, go to school, inherit property, and find legal work. All of these situations rely on birth registration to prove identity and thus entitlement to basic rights.

Table 2.10 presents information on birth registration of children under age 5. At the time of the survey, 86% of children's births were registered with the civil authorities. The percentage of children whose births are registered is lower among those under age 2 (81%) than among those age 2-4 (89%). By province, the percentage of registered births is highest in North (91%) and lowest in City of Kigali (80%). **Figure 2.5** shows that the percentage of children whose births are registered varies by wealth quintile, from 78% in the lowest quintile to 90% in the highest quintile.

Trends: The percentage of children under age 5 whose births are registered with the civil authorities has increased over time, from 56% in 2014-15 to 86% in 2019-20.

Figure 2.5 Birth registration by household wealth

Percentage of de jure children under age 5 whose births are registered with the civil authorities



2.9 EDUCATION

2.9.1 Educational Attainment

Median educational attainment

Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.

Sample: De facto household population age 6 and older

Education is one of the most important aspects of social and economic development. Education improves capabilities and is strongly associated with various socioeconomic variables such as lifestyle, income, and fertility for both individuals and societies. The majority of Rwandans have either no formal education or only some primary education. Specifically, 65% of females and 66% of males age 6 and over have no education (15% and 11%, respectively) or only some primary education (50% and 55%, respectively) (**Tables 2.11.1** and **2.11.2**). The median number of years of completed education is 3.8 among women and 3.7 among men.

Trends: The percentage of females over age 6 with no education has declined slightly since 2014-15, from 19% to 15%; the percentage among males has also declined, from 13% to 11%. The median number of years of schooling has increased from 2.9 to 3.8 among women and from 3.0 to 3.7 among men.

Patterns by background characteristics

- Rural residents are twice as likely as urban residents to have no education. Sixteen percent of women and 12% of men in rural areas have no education, as compared with 7% of women and 6% of men in urban areas.
- Among both women and men, the median number of years of education increases with increasing wealth.

2.9.2 School Attendance

Net attendance ratio (NAR)

Percentage of the school-age population that attends primary or secondary school.

Sample: Children age 7-12 for primary school NAR and children age 13-18 for secondary school NAR

Gross attendance ratio (GAR)

The total number of children attending primary school divided by the official primary school-age population and the total number of children attending secondary school divided by the official secondary school-age population.

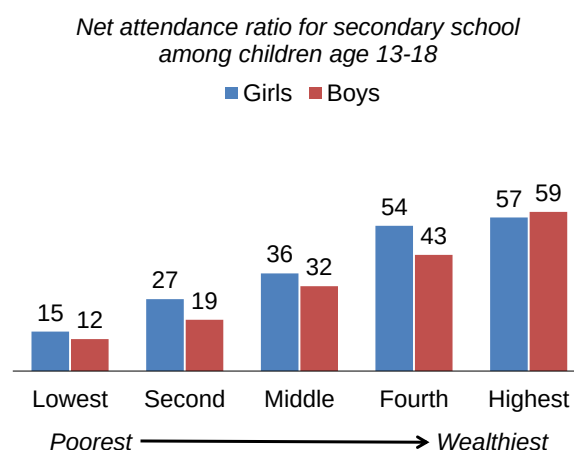
Sample: Children age 7-12 for primary school GAR and children age 13-18 for secondary school GAR

In Rwanda, the primary school net attendance ratio (NAR) for the population age 7-12 is 92% (92% for girls and 91% for boys). The secondary school NAR drops drastically to 37% (39% for girls and 34% for boys). The variation in the secondary school NAR by residence is large, with a difference of 20 percentage points between urban (54%) and rural (34%) areas (**Table 2.12**).

Figure 2.6 shows the secondary school NAR among children age 13-18 by wealth quintile. Fifty-seven percent of girls in the highest wealth quintile attend secondary school, as compared with 15% of those in the lowest wealth quintile. Boys follow a similar trajectory (59% in the highest quintile and 12% in the lowest quintile). In all wealth quintiles other than the highest quintile, the secondary school NAR is higher among girls.

The gross attendance ratio (GAR) is also presented in **Table 2.12**. A GAR value of more than 100% means that some students are not of the official school age. The GAR is slightly higher for boys than girls at the primary level (138% versus 137%) but is lower for boys at the secondary level (46% versus 51%).

Figure 2.6 Secondary school attendance by household wealth



Gender parity index (GPI)

The ratio of female to male students attending primary school and the ratio of female to male students attending secondary school. The index reflects the magnitude of the gender gap.

Sample: Primary school students and secondary school students

A GPI of 1 indicates parity or equality between male and female school participation ratios. A GPI lower than 1 indicates a gender disparity in favor of males, with a higher proportion of males than females attending the specified level of schooling. A GPI higher than 1 indicates a gender disparity in favor of females. In Rwanda, the NAR-based GPI is 1.01 for primary school and 1.16 for secondary school. The GAR-based GPI is 0.99 for primary school and 1.12 for secondary school.

Patterns by background characteristics

- NAR-based and GAR-based GPIs at the primary level vary only minimally by province (1.00 to 1.02 for NAR-based GPIs and 0.97 to 1.01 for GAR-based GPIs).
- NAR-based and GAR-based GPIs at the secondary level are highest in South province (1.35 and 1.30, respectively).
- There is no clear pattern between wealth and either NAR-based or GAR-based GPIs.

2.10 HOUSEHOLD BANK ACCOUNT AND HEALTH INSURANCE

Household bank account

Percentage of households with at least one member who has a bank account.

Sample: All interviewed households

Household health insurance

Percentage of households with at least one member who has health insurance coverage.

Sample: All interviewed households

Table 2.13 shows that 50% of Rwandan households have at least one member with a bank account. This proportion is higher among urban households (68%) than rural households (46%). The percentage of households in which at least one member has a bank account increases with increasing wealth, from 21% in the lowest wealth quintile to 89% in the highest wealth quintile.

Eighty-six percent of households have at least one member with health insurance coverage. This percentage increases with increasing wealth, from 73% in the lowest wealth quintile to 96% in the highest quintile.

LIST OF TABLES

For more information on household population and housing characteristics, see the following tables:

- **Table 2.1.1** Household drinking water
- **Table 2.1.2** Drinking water according to province and wealth
- **Table 2.1.3** Treatment of household drinking water
- **Table 2.2.1** Household sanitation facilities
- **Table 2.2.2** Sanitation facility according to province and wealth
- **Table 2.3** Household characteristics
- **Table 2.4** Household possessions
- **Table 2.5** Wealth quintiles
- **Table 2.6** Handwashing
- **Table 2.7** Household population by age, sex, and residence
- **Table 2.8** Household composition
- **Table 2.9** Children's living arrangements and orphanhood
- **Table 2.10** Birth registration of children under age 5
- **Table 2.11.1** Educational attainment of the female household population
- **Table 2.11.2** Educational attainment of the male household population
- **Table 2.12** School attendance ratios
- **Table 2.13** Household bank account and health insurance

Table 2.1.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water, percentage of households and de jure population with basic drinking water service, and percentage with limited drinking water service, according to residence, Rwanda DHS 2019-20

Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	95.8	77.0	80.4	95.1	76.4	79.6
Piped into dwelling/yard/plot	39.4	5.1	11.3	39.9	5.4	11.3
Piped to neighbor	10.7	2.1	3.7	8.8	2.0	3.1
Public tap/standpipe	25.5	31.2	30.1	25.7	30.8	29.9
Tube well or borehole	0.8	1.7	1.5	0.9	1.7	1.5
Protected dug well	0.7	3.0	2.5	0.7	2.8	2.4
Protected spring	8.7	32.8	28.4	8.9	32.6	28.5
Rainwater	0.0	0.6	0.5	0.0	0.5	0.5
Tanker truck/cart with small tank	0.2	0.1	0.1	0.2	0.1	0.1
Bottled water	9.9	0.5	2.2	9.9	0.6	2.2
Unimproved source	3.9	23.0	19.5	4.5	23.5	20.3
Unprotected dug well	0.4	1.7	1.5	0.5	1.7	1.5
Unprotected spring	1.6	13.1	11.0	1.8	13.0	11.1
Surface water	1.9	8.2	7.0	2.1	8.8	7.7
Other	0.3	0.1	0.1	0.4	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises ¹	59.8	8.6	17.9	58.5	8.9	17.3
30 minutes or less	28.8	50.6	46.6	28.5	49.5	45.9
More than 30 minutes	11.2	40.8	35.4	12.9	41.6	36.7
Don't know	0.2	0.1	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage with basic drinking water service ²	86.9	48.8	55.8	85.0	48.2	54.5
Percentage with limited drinking water service ³	8.9	28.1	24.6	10.1	28.2	25.1
Number of households/ population	2,355	10,594	12,949	9,441	45,928	55,369

¹ Includes water piped to a neighbor and those reporting a round-trip collection time of zero minutes

² Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.

³ Drinking water from an improved source, and round-trip collection time is more than 30 minutes or is unknown

Table 2.1.2 Drinking water according to province and wealth

Percent distribution of de jure population by drinking water source, percentage of de jure population with basic drinking water service, and percentage with limited drinking water service, according to province and wealth quintile, Rwanda DHS 2019-20

Background characteristic	Improved source of drinking water ¹	Unimproved source of drinking water ²	Total	Percentage with basic drinking water service ²	Percentage with limited drinking water service ³	Number of persons
Province						
City of Kigali	97.4	2.6	100.0	81.9	15.4	7,175
South	79.6	20.4	100.0	51.1	28.5	12,262
West	75.6	24.4	100.0	54.8	20.8	12,510
North	83.0	17.0	100.0	56.8	26.2	8,453
East	72.5	27.5	100.0	42.5	30.0	14,970
Wealth quintile						
Lowest	68.7	31.3	100.0	38.2	30.5	11,076
Second	72.2	27.8	100.0	41.9	30.4	11,074
Middle	78.2	21.8	100.0	47.5	30.7	11,072
Fourth	84.3	15.7	100.0	59.5	24.8	11,073
Highest	94.6	5.4	100.0	85.3	9.3	11,074
Total	79.6	20.4	100.0	54.5	25.1	55,369

¹ See Table 2.1.1 for definition of an improved source.

² See Table 2.1.1 for definition of an unimproved source.

³ Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.

⁴ Drinking water from an improved source, and round-trip collection time is more than 30 minutes or is unknown

Table 2.1.3 Treatment of household drinking water

Percentage of households and de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, Rwanda DHS 2019-20

Water treatment method	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Boil	49.3	29.7	33.3	50.7	29.6	33.2
Bleach/chlorine added	1.8	1.1	1.2	2.1	1.1	1.3
Strain through cloth	0.1	0.2	0.2	0.1	0.2	0.2
Ceramic, sand, or other filter	1.7	1.8	1.8	1.9	1.9	1.9
Solar disinfection	0.0	0.0	0.0	0.0	0.0	0.0
Let stand and settle	0.1	0.1	0.1	0.1	0.1	0.1
Bottled water	1.8	0.1	0.4	1.8	0.1	0.4
Other	0.2	0.0	0.0	0.2	0.0	0.0
No treatment	46.5	68.0	64.1	44.6	67.9	64.0
Percentage using an appropriate treatment method ¹	51.8	31.8	35.4	53.5	31.9	35.6
Number of households/ population	2,355	10,594	12,949	9,441	45,928	55,369

Note: Respondents may report multiple treatment methods, so the sum of treatment may exceed 100%.

¹ Appropriate water treatment methods are boiling, bleaching, filtering, and solar disinfecting.

Table 2.2.1 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, percentage of households and de jure population with basic sanitation service, and percentage with limited sanitation service, according to residence, Rwanda DHS 2019-20

Type and location of toilet/ latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Improved sanitation facility	87.9	68.7	72.2	87.7	69.7	72.8
Flush/pour flush to piped sewer system	5.2	0.4	1.3	6.0	0.5	1.4
Flush/pour flush to septic tank	4.3	0.3	1.0	4.7	0.3	1.0
Flush/pour flush to pit latrine	2.0	0.5	0.8	2.1	0.5	0.8
Flush/pour flush, don't know where	0.2	0.1	0.1	0.2	0.1	0.1
Ventilated improved pit (VIP) latrine	3.9	4.9	4.7	3.6	4.8	4.6
Pit latrine with slab	72.3	62.4	64.2	71.2	63.4	64.7
Composting toilet	0.1	0.1	0.1	0.1	0.1	0.1
Unimproved sanitation facility	11.1	27.8	24.8	11.3	27.4	24.7
Flush/pour flush not to sewer/septic tank/pit latrine	3.2	1.0	1.4	3.6	1.1	1.5
Pit latrine without slab/open pit	7.9	26.8	23.3	7.7	26.3	23.2
Open defecation (no facility/ bush/field)	1.0	3.5	3.0	1.0	2.9	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	2,355	10,594	12,949	9,441	45,928	55,369
Location of toilet facility						
In own dwelling	11.5	0.7	2.7	12.7	0.8	2.8
In own yard/plot	75.2	56.7	60.1	74.6	56.8	59.9
Elsewhere	13.3	42.6	37.1	12.7	42.4	37.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population with a toilet/latrine facility	2,331	10,227	12,558	9,351	44,601	53,952
Percentage with basic sanitation service ¹	44.1	60.0	57.1	51.3	62.7	60.7
Percentage with limited sanitation service ²	43.8	8.8	15.1	36.4	7.0	12.0
Number of households/population	2,355	10,594	12,949	9,441	45,928	55,369

¹ Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.

² Defined as use of improved facilities shared by 2 or more households

Table 2.2.2 Sanitation facility type according to province and wealth

Percent distribution of de jure population by type of sanitation, percentage of de jure population with basic sanitation service, and percentage with limited sanitation service, according to province and wealth quintile, Rwanda DHS 2019-20

Background characteristic	Type of sanitation			Total	Percentage with basic sanitation service ³	Percentage with limited sanitation service ⁴	Number of persons
	Improved sanitation facility ¹	Unimproved sanitation facility ²	Open defecation				
Province							
City of Kigali	92.4	7.0	0.7	100.0	50.5	41.8	7,175
South	64.6	32.2	3.3	100.0	58.2	6.4	12,262
West	74.6	22.9	2.5	100.0	65.1	9.5	12,510
North	60.5	36.9	2.5	100.0	55.2	5.3	8,453
East	75.5	21.6	2.9	100.0	67.2	8.2	14,970
Wealth quintile							
Lowest	44.1	47.5	8.5	100.0	36.6	7.5	11,076
Second	65.9	31.6	2.5	100.0	59.9	6.1	11,074
Middle	76.5	22.2	1.3	100.0	69.6	6.9	11,072
Fourth	84.8	14.8	0.5	100.0	67.1	17.7	11,073
Highest	92.5	7.4	0.1	100.0	70.5	22.0	11,074
Total	72.8	24.7	2.6	100.0	60.7	12.0	55,369

¹ See Table 2.2.1 for definition of an improved facility.

² See Table 2.2.1 for definition of an unimproved facility.

³ Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.

⁴ Defined as use of improved facilities shared by 2 or more households

Table 2.3 Household characteristics

Percent distribution of households and de jure population by housing characteristics, percentage using solid fuel for cooking, percentage using clean fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Rwanda DHS 2019-20

Housing characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Electricity						
Yes	86.4	36.7	45.7	86.4	38.4	46.6
No	13.6	63.3	54.3	13.6	61.6	53.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material						
Earth/sand	20.2	75.3	65.3	20.3	74.5	65.2
Dung	0.0	0.3	0.2	0.0	0.3	0.2
Bricks without cement	0.6	1.4	1.2	0.7	1.4	1.3
Parquet or polished wood	0.0	0.0	0.0	0.0	0.0	0.0
Vinyl or asphalt strips	0.0	0.0	0.0	0.0	0.0	0.0
Ceramic tiles/coastal brick	11.2	0.7	2.6	13.5	0.8	3.0
Cement	67.8	22.4	30.6	65.3	23.0	30.2
Carpet	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	29.4	17.2	19.4	17.2	11.1	12.1
Two	30.2	40.4	38.5	30.1	38.4	37.0
Three or more	40.3	42.5	42.1	52.7	50.5	50.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Place for cooking						
In the house	24.1	21.9	22.3	20.6	19.5	19.7
In a separate building	42.6	61.6	58.2	49.6	65.0	62.3
Outdoors	32.5	16.3	19.2	29.6	15.5	17.9
No food cooked in household	0.8	0.2	0.3	0.2	0.1	0.1
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel						
Electricity	0.5	0.1	0.2	0.5	0.1	0.2
LPG/natural gas/biogas	18.2	1.1	4.2	15.8	0.9	3.4
Kerosene	0.1	0.0	0.0	0.0	0.0	0.0
Charcoal	53.9	7.8	16.2	53.8	6.9	14.9
Wood	22.9	70.0	61.4	25.8	71.0	63.3
Straw/shrubs/grass	3.6	20.5	17.4	3.7	20.9	17.9
Agricultural crop	0.0	0.1	0.1	0.0	0.1	0.1
Animal dung	0.0	0.0	0.0	0.0	0.0	0.0
Briquette	0.0	0.0	0.0	0.0	0.0	0.0
Sawdust	0.1	0.0	0.0	0.1	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
No food cooked in household	0.8	0.2	0.3	0.2	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking ¹	80.3	98.5	95.2	83.3	98.9	96.2
Percentage using clean fuel for cooking ²	18.7	1.3	4.5	16.3	1.0	3.6
Frequency of smoking in the home						
Daily	7.2	11.6	10.8	6.9	11.7	10.9
Weekly	3.2	3.9	3.8	3.2	3.8	3.7
Monthly	0.7	0.8	0.8	0.7	0.8	0.8
Less than once a month	0.4	0.5	0.5	0.4	0.5	0.5
Never	88.5	83.2	84.2	88.9	83.2	84.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/ population	2,355	10,594	12,949	9,441	45,928	55,369

LPG = Liquefied petroleum gas

¹ Includes kerosene, charcoal, wood, straw/shrubs/grass, agricultural crop, animal dung, briquette, and sawdust

² Includes electricity, LPG/natural gas, and biogas

Table 2.4 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, by residence, Rwanda DHS 2019-20

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	59.1	36.2	40.4
Television	40.5	7.7	13.6
Mobile phone	90.4	66.7	71.0
Computer	17.5	1.7	4.6
Non-mobile phone	0.4	0.2	0.3
Refrigerator	10.4	0.6	2.4
Mattress	93.6	64.3	69.7
Bench/chairs	73.4	84.9	82.8
Bed	67.8	63.6	64.4
Table	75.5	64.5	66.5
Sofa	43.1	9.7	15.8
Traditional improved stove	20.5	25.8	24.8
Stove	8.6	0.7	2.1
Cupboard	32.3	7.3	11.9
Dining table	18.1	6.2	8.4
Iron machine	41.4	10.4	16.0
Laundry machine	0.8	0.1	0.2
Satellite dish	24.8	4.3	8.0
Camera	1.7	0.2	0.5
Means of transport			
Bicycle	9.7	14.9	13.9
Animal-drawn cart	0.2	0.0	0.1
Motorcycle/scooter	3.6	1.9	2.2
Car/truck	7.1	0.6	1.8
Boat with a motor	0.1	0.0	0.0
Boat without a motor	0.2	0.1	0.2
Ownership of agricultural land	23.5	67.4	59.4
Ownership of farm animals ¹	18.9	53.7	47.3
Number	2,355	10,594	12,949

¹ Cows, bulls, goats, sheep, pigs, rabbits, horses, donkeys, mules, chickens, or other poultry

Table 2.5 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and province, Rwanda DHS 2019-20

Residence/ province	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	5.4	3.4	6.1	21.8	63.2	100.0	9,441	0.19
Rural	23.0	23.4	22.8	19.6	11.1	100.0	45,928	0.32
Province								
City of Kigali	2.5	5.1	7.8	24.7	60.0	100.0	7,175	0.21
South	31.1	21.7	18.2	17.3	11.7	100.0	12,262	0.28
West	22.0	22.7	21.9	18.7	14.7	100.0	12,510	0.26
North	19.9	25.4	24.2	17.4	13.2	100.0	8,453	0.25
East	17.7	20.5	23.4	22.5	15.9	100.0	14,970	0.30
Total	20.0	20.0	20.0	20.0	20.0	100.0	55,369	0.29

Table 2.6 Handwashing

Percentage of the de jure population for whom the place most often used for washing hands was observed, by whether the location was fixed or mobile; total percentage of the de jure population for whom the place for handwashing was observed; among the de jure population for whom the place for handwashing was observed, percentage with water available, percentage with soap available, and percentage with a cleansing agent other than soap available; percentage of the de jure population with a basic handwashing facility; and percentage with a limited handwashing facility, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of de jure population for whom place for washing hands was observed:				Place for handwashing observed and:			Number of persons for whom place for handwashing was observed	Percentage of the de jure population with a basic handwashing facility ³	Percentage of the de jure population with a limited handwashing facility ⁴	Number of persons for whom a place for handwashing was observed or with no place for handwashing in the dwelling, yard, or plot
	Place for handwashing was a fixed place	Place for handwashing was mobile	Total	Number of persons	Water available	Soap available ¹	Cleansing agent other than soap available ²				
Residence											
Urban	20.4	68.8	89.1	9,441	48.4	42.9	0.2	8,415	36.8	52.9	9,380
Rural	10.2	72.7	82.9	45,928	39.2	29.5	0.0	38,056	22.7	60.6	45,679
Province											
City of Kigali	17.8	70.1	87.8	7,175	46.2	42.7	0.2	6,302	36.0	52.5	7,122
South	11.2	75.2	86.4	12,262	33.4	26.2	0.1	10,590	21.2	65.5	12,221
West	6.7	71.8	78.5	12,510	26.7	19.7	0.0	9,821	12.8	66.1	12,455
North	11.7	67.6	79.2	8,453	47.1	33.0	0.0	6,698	24.5	55.8	8,346
East	14.2	73.1	87.2	14,970	51.7	40.0	0.0	13,060	33.8	53.8	14,914
Wealth quintile											
Lowest	4.3	74.7	79.0	11,076	30.6	17.7	0.0	8,746	12.4	67.2	10,980
Second	6.8	75.0	81.8	11,074	35.6	25.5	0.0	9,056	19.5	62.9	11,000
Middle	9.6	74.6	84.1	11,072	38.1	30.6	0.0	9,317	23.2	61.3	11,027
Fourth	11.2	73.3	84.5	11,073	40.7	34.2	0.0	9,355	27.1	57.7	11,034
Highest	27.7	62.6	90.3	11,074	57.4	49.3	0.2	9,996	43.3	47.5	11,018
Total	11.9	72.0	83.9	55,369	40.9	31.9	0.1	46,471	25.1	59.3	55,059

¹ Soap includes soap or detergent in bar, liquid, powder, or paste form.

² Cleansing agents other than soap include locally available materials such as ash, mud, or sand.

³ The availability of a handwashing facility on premises with soap and water

⁴ The availability of a handwashing facility on premises without soap and/or water

Table 2.7 Household population by age, sex, and residence

Percent distribution of the de facto household population by age groups, according to sex and residence, Rwanda DHS 2019-20

Age	Urban			Rural			Male	Female	Total
	Male	Female	Total	Male	Female	Total			
<5	15.4	14.1	14.7	16.1	13.7	14.9	16.0	13.8	14.8
5-9	13.8	11.2	12.4	14.7	12.6	13.6	14.6	12.4	13.4
10-14	10.4	10.5	10.4	15.0	12.8	13.8	14.2	12.4	13.2
15-19	10.6	11.4	11.0	11.7	11.0	11.3	11.5	11.0	11.3
20-24	9.9	10.9	10.4	6.7	7.6	7.2	7.3	8.2	7.8
25-29	7.9	9.8	9.0	5.5	6.4	6.0	5.9	7.0	6.5
30-34	8.3	9.1	8.8	6.2	6.8	6.5	6.5	7.2	6.9
35-39	7.0	6.7	6.8	6.2	7.1	6.7	6.3	7.0	6.7
40-44	5.2	4.8	5.0	4.3	5.1	4.7	4.4	5.0	4.7
45-49	3.4	4.0	3.8	3.3	4.1	3.7	3.3	4.1	3.7
50-54	2.9	2.1	2.5	2.5	2.9	2.7	2.5	2.8	2.7
55-59	1.9	1.5	1.7	2.6	2.8	2.7	2.5	2.6	2.5
60-64	1.5	1.4	1.4	2.0	2.6	2.3	1.9	2.4	2.2
65-69	0.8	0.9	0.8	1.3	1.6	1.5	1.3	1.5	1.4
70-74	0.3	0.6	0.5	0.9	1.1	1.0	0.8	1.0	0.9
75-79	0.2	0.4	0.3	0.4	0.7	0.5	0.4	0.6	0.5
80+	0.4	0.6	0.5	0.7	1.0	0.9	0.6	1.0	0.8
Don't know/missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0-14	39.6	35.8	37.5	45.8	39.1	42.3	44.8	38.5	41.5
15-64	58.7	61.7	60.3	50.8	56.5	53.8	52.1	57.4	54.9
65+	1.7	2.5	2.2	3.3	4.4	3.9	3.1	4.1	3.6
Don't know/missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	45.9	42.4	44.0	53.7	46.6	49.9	52.4	45.9	48.9
18+	54.1	57.6	56.0	46.3	53.4	50.1	47.6	54.1	51.1
Don't know/missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10-19	21.0	21.8	21.4	26.6	23.7	25.1	25.7	23.4	24.5
Number of persons	4,333	5,149	9,482	21,529	24,469	45,998	25,862	29,618	55,479

Table 2.8 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of households, and percentage of households with children under age 18 who are orphans or not living with a biological parent, according to residence, Rwanda DHS 2019-20

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	65.5	68.7	68.1
Female	34.5	31.3	31.9
Total	100.0	100.0	100.0
Number of usual members			
0	0.0	0.0	0.0
1	13.6	6.4	7.7
2	12.8	11.5	11.7
3	16.7	18.1	17.9
4	18.8	19.7	19.6
5	14.9	18.1	17.5
6	11.6	12.8	12.6
7	5.8	7.3	7.0
8	3.1	3.5	3.5
9+	2.8	2.6	2.6
Total	100.0	100.0	100.0
Mean size of households	4.0	4.3	4.3
Percentage of households with children under age 18 who are orphans or not living with a biological parent			
Double orphans	0.5	0.7	0.6
Single orphans ¹	7.1	8.6	8.3
Children not living with a biological parent ²	16.0	17.9	17.6
Orphans and/or children not living with a biological parent	19.3	22.6	22.0
Number of households	2,355	10,594	12,949

Note: Table is based on de jure household members, i.e., usual residents.

¹ Includes children with one dead parent and an unknown survival status of the other parent

² Children not living with a biological parent are those under age 18 living in households with neither their mother nor their father present.

Table 2.9 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents dead, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Missing information on father/ mother	Total	Percentage not living with a biological parent	Percentage with one or both parents dead ¹	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead						
Age															
0-4	71.4	21.8	1.3	0.5	0.2	3.5	0.3	0.2	0.0	0.8	100.0	4.1	2.0	8,157	
<2	74.2	23.5	0.9	0.1	0.0	0.6	0.2	0.1	0.0	0.6	100.0	0.8	1.2	3,220	
2-4	69.5	20.6	1.5	0.8	0.2	5.5	0.3	0.3	0.1	1.0	100.0	6.2	2.6	4,938	
5-9	64.9	18.6	2.8	1.9	0.6	8.1	0.6	0.6	0.2	1.8	100.0	9.5	4.9	7,420	
10-14	60.6	16.2	5.4	2.6	1.1	9.8	0.9	1.4	0.4	1.7	100.0	12.5	9.3	7,325	
15-17	53.4	14.2	8.6	1.9	1.3	14.5	1.7	2.4	1.1	0.9	100.0	19.6	15.2	4,066	
Sex															
Male	64.9	18.3	3.9	1.7	0.8	7.3	0.5	0.9	0.4	1.2	100.0	9.1	6.7	13,499	
Female	63.0	18.2	3.9	1.6	0.6	9.0	0.9	1.1	0.3	1.4	100.0	11.3	6.9	13,469	
Residence															
Urban	58.1	23.5	2.8	2.5	0.9	8.8	0.8	1.2	0.3	1.0	100.0	11.2	6.1	4,142	
Rural	65.0	17.3	4.1	1.5	0.7	8.0	0.7	0.9	0.4	1.4	100.0	10.0	6.9	22,826	
Province															
City of Kigali	60.9	22.7	3.1	2.5	0.7	7.0	0.8	1.1	0.2	1.1	100.0	9.0	5.9	3,143	
South	61.8	17.9	4.0	1.7	0.6	9.5	0.5	1.2	0.7	2.0	100.0	11.9	7.2	5,842	
West	67.2	16.3	4.4	0.7	0.8	7.2	0.8	1.3	0.3	0.9	100.0	9.6	7.7	6,409	
North	68.0	17.0	3.9	0.8	0.5	7.1	0.5	0.7	0.3	1.1	100.0	8.6	6.0	4,054	
East	61.9	18.8	3.8	2.6	0.8	8.9	0.9	0.6	0.3	1.3	100.0	10.8	6.6	7,521	
Wealth quintile															
Lowest	55.0	26.1	7.2	1.6	0.7	5.9	0.5	0.8	0.4	1.8	100.0	7.7	9.7	5,806	
Second	63.7	17.3	4.8	1.3	0.8	8.4	0.8	0.6	0.3	1.8	100.0	10.2	7.5	5,553	
Middle	72.1	14.0	2.8	1.4	0.7	6.5	0.4	0.7	0.4	1.0	100.0	8.0	5.2	5,471	
Fourth	67.7	15.9	2.4	1.6	0.6	8.4	0.8	1.0	0.5	1.2	100.0	10.6	5.3	5,344	
Highest	61.5	17.2	1.9	2.6	0.7	12.1	1.2	1.8	0.3	0.7	100.0	15.4	5.9	4,794	
Total <15	65.8	18.9	3.1	1.6	0.6	7.0	0.6	0.7	0.2	1.4	100.0	8.5	5.3	22,902	
Total <18	63.9	18.2	3.9	1.7	0.7	8.1	0.7	1.0	0.4	1.3	100.0	10.2	6.8	26,968	

Note: Table is based on de jure members, i.e., usual residents.

¹ Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

Table 2.10 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of children whose births are registered and who:			Number of children
	Had a birth certificate	Did not have a birth certificate	Total percentage of children whose births are registered	
Age				
<2	16.8	64.2	81.0	3,220
2-4	16.5	72.1	88.6	4,938
Sex				
Male	17.2	68.5	85.8	4,111
Female	15.9	69.5	85.4	4,047
Residence				
Urban	23.4	61.2	84.6	1,389
Rural	15.2	70.6	85.8	6,768
Province				
City of Kigali	21.6	58.0	79.7	1,085
South	10.4	74.2	84.6	1,664
West	19.4	68.5	87.8	1,974
North	14.7	76.2	90.9	1,239
East	17.3	66.9	84.2	2,195
Wealth quintile				
Lowest	9.6	68.2	77.8	1,903
Second	12.7	74.2	86.9	1,598
Middle	15.1	72.1	87.2	1,596
Fourth	18.8	69.0	87.8	1,569
Highest	28.9	61.1	90.1	1,490
Total	16.6	69.0	85.6	8,157

Table 2.11.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary	Don't know/missing	Total	Number	Median years completed
Age										
6-9	18.0	82.0	0.0	0.0	0.0	0.0	0.0	100.0	2,826	0.5
10-14	1.2	78.4	8.3	12.0	0.0	0.0	0.0	100.0	3,662	3.6
15-19	1.1	31.0	19.7	45.7	2.1	0.4	0.0	100.0	3,269	5.7
20-24	1.6	31.1	17.9	29.8	14.7	4.7	0.1	100.0	2,432	5.9
25-29	6.7	34.5	16.8	19.9	13.8	8.2	0.1	100.0	2,076	5.5
30-34	10.9	47.5	17.3	8.1	8.5	7.7	0.0	100.0	2,127	4.3
35-39	15.4	51.9	19.9	3.7	4.1	4.9	0.0	100.0	2,081	3.6
40-44	17.4	48.6	21.9	5.6	2.9	3.5	0.0	100.0	1,485	4.6
45-49	24.5	55.4	10.0	5.5	2.2	2.4	0.0	100.0	1,218	3.9
50-54	33.5	49.0	10.8	2.6	1.6	2.3	0.2	100.0	822	2.6
55-59	43.8	37.3	14.4	2.0	1.5	0.9	0.0	100.0	767	1.4
60-64	49.4	38.0	9.2	2.3	1.2	0.0	0.0	100.0	716	0.0
65+	67.6	27.4	3.2	1.1	0.5	0.1	0.1	100.0	1,210	0.0
Don't know/missing	*	*	*	*	*	*	*	100.0	1	*
Residence										
Urban	7.4	36.8	12.4	22.5	9.9	11.0	0.0	100.0	4,286	5.6
Rural	16.4	53.3	13.4	12.6	3.3	1.0	0.0	100.0	20,405	3.5
Province										
City of Kigali	6.9	38.5	12.6	21.4	10.1	10.5	0.0	100.0	3,184	5.5
South	16.6	51.8	13.9	13.0	3.1	1.6	0.0	100.0	5,564	3.6
West	17.4	51.8	13.1	12.7	3.7	1.4	0.0	100.0	5,512	3.4
North	15.3	52.3	14.8	11.9	3.9	1.7	0.0	100.0	3,763	3.8
East	14.8	52.8	12.2	14.8	3.7	1.7	0.0	100.0	6,668	3.6
Wealth quintile										
Lowest	24.8	59.0	10.6	5.2	0.3	0.0	0.0	100.0	4,936	2.1
Second	19.4	57.5	12.2	9.8	1.0	0.1	0.0	100.0	5,012	2.9
Middle	14.4	55.2	14.6	13.6	2.2	0.0	0.1	100.0	4,781	3.7
Fourth	10.4	47.6	16.1	19.7	5.4	0.8	0.0	100.0	4,932	4.6
Highest	5.2	33.3	12.8	23.2	13.0	12.5	0.0	100.0	5,029	6.0
Total	14.8	50.4	13.2	14.3	4.4	2.7	0.0	100.0	24,691	3.8

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Completed 6th grade (for 6-grade system) and 8th grade (for 8-grade system) at the primary level or were in vocational school

² Completed 6th grade at the secondary level

Table 2.11.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary	Don't know/missing	Total	Number	Median years completed
Age										
6-9	22.0	77.9	0.0	0.1	0.0	0.0	0.0	100.0	2,958	0.3
10-14	1.9	84.3	5.9	7.8	0.0	0.0	0.0	100.0	3,668	3.1
15-19	1.4	40.6	15.8	40.2	1.8	0.2	0.0	100.0	2,974	5.4
20-24	3.5	36.1	18.9	24.3	13.0	4.3	0.1	100.0	1,878	5.5
25-29	5.5	36.3	15.7	16.6	16.2	9.7	0.0	100.0	1,521	5.5
30-34	10.1	45.5	16.9	8.8	9.7	8.8	0.1	100.0	1,687	4.6
35-39	13.2	45.9	25.2	4.8	3.9	6.8	0.2	100.0	1,631	4.3
40-44	12.9	49.8	22.6	6.1	3.6	4.8	0.2	100.0	1,143	4.9
45-49	14.2	57.8	11.9	7.3	3.5	5.2	0.0	100.0	862	5.0
50-54	21.4	50.9	12.5	4.3	5.7	5.1	0.1	100.0	657	4.3
55-59	26.1	43.7	22.0	3.1	2.0	3.0	0.0	100.0	635	3.1
60-64	30.4	40.4	21.4	3.8	2.2	1.8	0.0	100.0	497	2.7
65+	35.1	42.4	17.2	2.8	1.6	0.6	0.2	100.0	791	2.3
Don't know/missing	*	*	*	*	*	*	*	100.0	1	*
Residence										
Urban	6.0	39.6	12.5	19.1	11.3	11.4	0.1	100.0	3,531	5.5
Rural	12.0	58.5	13.6	11.3	3.0	1.5	0.1	100.0	17,373	3.4
Province										
City of Kigali	6.4	40.4	14.1	17.5	11.3	10.3	0.1	100.0	2,744	5.4
South	12.4	57.8	13.9	11.3	2.3	2.3	0.1	100.0	4,660	3.3
West	11.7	55.2	14.4	12.8	4.2	1.8	0.0	100.0	4,595	3.5
North	10.5	59.0	13.8	10.5	3.4	2.7	0.1	100.0	3,206	3.6
East	11.8	58.5	11.7	12.5	3.5	1.8	0.1	100.0	5,698	3.4
Wealth quintile										
Lowest	18.8	66.5	9.6	4.4	0.5	0.1	0.0	100.0	3,849	2.0
Second	13.9	63.1	13.3	8.3	1.2	0.2	0.0	100.0	4,094	2.9
Middle	10.8	60.1	15.2	11.5	1.9	0.3	0.1	100.0	4,370	3.5
Fourth	8.1	52.1	16.3	16.9	5.0	1.6	0.0	100.0	4,275	4.4
Highest	4.3	36.5	12.2	21.1	12.8	13.1	0.1	100.0	4,316	5.9
Total	11.0	55.3	13.4	12.6	4.4	3.2	0.1	100.0	20,904	3.7

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Completed 6th grade (for 6-grade system) and 8th grade (for 8-grade system) at the primary level or were in vocational school

² Completed 6th grade at the secondary level

Table 2.12 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Net attendance ratio ¹				Gross attendance ratio ²			
	Male	Female	Total	Gender parity index ³	Male	Female	Total	Gender parity index ³
PRIMARY SCHOOL								
Residence								
Urban	90.9	88.9	89.8	0.98	135.3	125.6	130.2	0.93
Rural	91.3	92.7	92.0	1.01	138.5	138.6	138.6	1.00
Province								
City of Kigali	89.4	90.2	89.8	1.01	129.7	125.7	127.6	0.97
South	91.5	92.4	91.9	1.01	136.8	133.7	135.3	0.98
West	90.6	90.7	90.7	1.00	131.9	133.0	132.5	1.01
North	93.4	94.0	93.7	1.01	142.7	141.7	142.3	0.99
East	91.2	92.9	92.1	1.02	145.1	143.7	144.4	0.99
Wealth quintile								
Lowest	86.5	91.5	88.9	1.06	129.7	133.5	131.5	1.03
Second	92.7	93.9	93.3	1.01	142.8	142.6	142.7	1.00
Middle	93.8	94.9	94.3	1.01	143.3	143.5	143.4	1.00
Fourth	93.9	92.0	92.9	0.98	143.8	135.5	139.6	0.94
Highest	89.9	87.4	88.6	0.97	130.5	126.3	128.4	0.97
Total	91.3	92.1	91.7	1.01	138.1	136.6	137.4	0.99
SECONDARY SCHOOL								
Residence								
Urban	56.1	52.6	54.2	0.94	77.7	74.6	76.0	0.96
Rural	30.2	36.7	33.5	1.22	40.2	46.8	43.5	1.16
Province								
City of Kigali	53.2	49.8	51.4	0.94	74.4	69.6	71.8	0.94
South	31.5	42.7	37.2	1.35	41.6	54.1	48.0	1.30
West	33.8	36.5	35.1	1.08	45.3	48.5	46.9	1.07
North	28.3	30.3	29.3	1.07	37.1	40.0	38.6	1.08
East	32.1	39.2	35.8	1.22	43.3	49.8	46.7	1.15
Wealth quintile								
Lowest	11.9	14.7	13.4	1.23	17.0	17.4	17.2	1.03
Second	19.1	26.8	23.0	1.41	26.1	33.2	29.7	1.27
Middle	31.6	36.4	34.0	1.15	41.1	44.7	42.9	1.09
Fourth	43.3	54.1	48.7	1.25	55.1	69.2	62.1	1.26
Highest	59.3	57.2	58.1	0.96	83.9	81.6	82.6	0.97
Total	33.9	39.2	36.6	1.16	45.6	51.2	48.5	1.12

¹ The NAR for primary school is the percentage of the primary school-age (7-12 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school-age (13-18 years) population that is attending secondary school. By definition, the NAR cannot exceed 100.0.

² The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0.

³ The gender parity index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The gender parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Table 2.13 Household bank account and health insurance

Percentage of households in which at least one member has a bank account and is covered by health insurance, according to residence, province, and wealth quintile, Rwanda DHS 2019-20

Background characteristic	Percentage of households with at least one member who has a bank account	Percentage of households with at least one member covered by health insurance	Number of households
Residence			
Urban	68.3	87.2	2,355
Rural	45.8	85.6	10,594
Province			
City of Kigali	68.3	85.3	1,810
South	49.6	86.1	3,003
West	48.2	85.3	2,770
North	48.4	92.0	2,012
East	42.4	82.7	3,353
Wealth quintile			
Lowest	20.7	72.9	2,837
Second	34.4	84.1	2,609
Middle	48.6	88.1	2,473
Fourth	62.0	90.6	2,570
Highest	88.5	95.5	2,460
Total	49.9	85.9	12,949

CHARACTERISTICS OF RESPONDENTS

Key Findings

- **Education:** The percentage of women age 15-49 with no education has decreased since 2014-15, from 12% to 9%. Over the same period, the median number of years of schooling completed has increased from 4.6 to 5.2 years.
- **Exposure to mass media:** The level of exposure to mass media is generally low in Rwanda. Thirty-four percent of women and 16% of men have no access to any of three specified media sources (newspaper, television, and radio) at least once a week.
- **Internet usage:** Urban women and men (40% and 58%, respectively) are more likely than rural women and men (8% and 17%, respectively) to have ever used the internet.
- **Employment:** 66% of women and 87% of men are currently employed.

This chapter presents information on the demographic and socioeconomic characteristics of the survey respondents such as age, education, place of residence, marital status, employment, and wealth status. This information is useful for understanding the factors that affect use of reproductive health services, contraceptive use, and other health behaviors.

3.1 BASIC CHARACTERISTICS OF SURVEY RESPONDENTS

The 2019-20 RDHS interviewed 14,634 women age 15-49 and 6,513 men age 15-59. **Table 3.1** shows the percent distribution of women and men age 15-49 by background characteristics. The majority of women and men are under age 30 (53% of women and 55% of men).

Nearly all Rwandans are Christians; 97% of women and 95% of men are Catholics, Protestants, Adventists, or Jehovah's Witnesses. The remaining 3% of women and 5% of men practice other religions (Islam, traditional, etc.) or do not practice any religion.

Women are more likely than men to be currently married or living together with a partner (51% and 49%, respectively). Women are less likely than men to have never been married (40% and 49%, respectively).

About four in every five Rwandans live in rural areas (80% of women and 81% of men).

3.2 EDUCATION AND LITERACY

Literacy

Respondents who had attended higher than secondary school were assumed to be literate. All other respondents, shown a typed sentence to read aloud, were considered literate if they could read all or part of the sentence.

Sample: Women and men age 15-49

Education is one of the most important determinants of an individual's knowledge and behavior. **Table 3.2.1, Table 3.2.2** and **Figure 3.1** show that men and women have relatively similar levels of education. Only 9% of women and 7% of men age 15-49 have no formal education, while nearly one-third of women and men (32% each) have some secondary education or higher.

Eighty-five percent of women and 86% of men are literate (**Tables 3.3.1** and **3.3.2**).

Trends: The percentage of women and men who are literate has increased since 2014-15, from 80% to 85% among women and from 84% to 86% among men. The percentage of women and men with no education has decreased over the same period, from 12% to 9% among women and from 9% to 7% among men. The median number of years of schooling completed has increased from 4.6 to 5.2 years among women and from 4.8 to 5.1 years among men.

Figure 3.1 Education of survey respondents

Percent distribution of women and men age 15-49 by highest level of schooling attended or completed

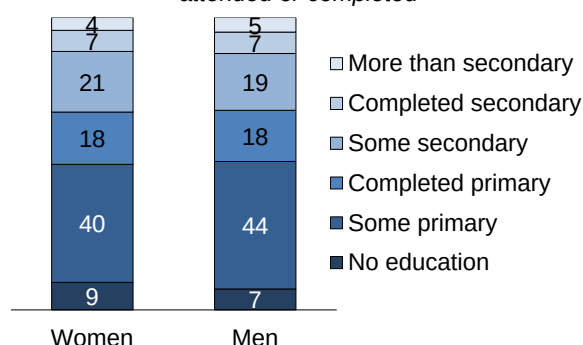
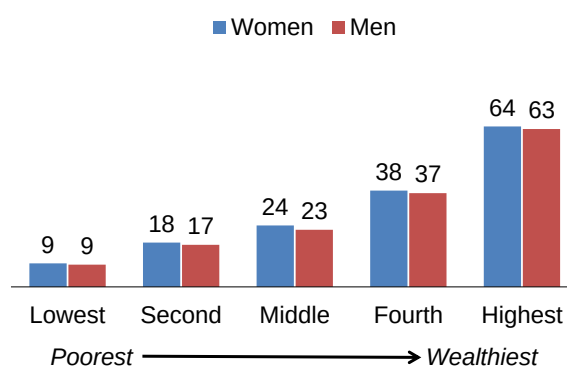


Figure 3.2 Secondary education by household wealth

Percentage of women and men age 15-49 with a secondary education or higher



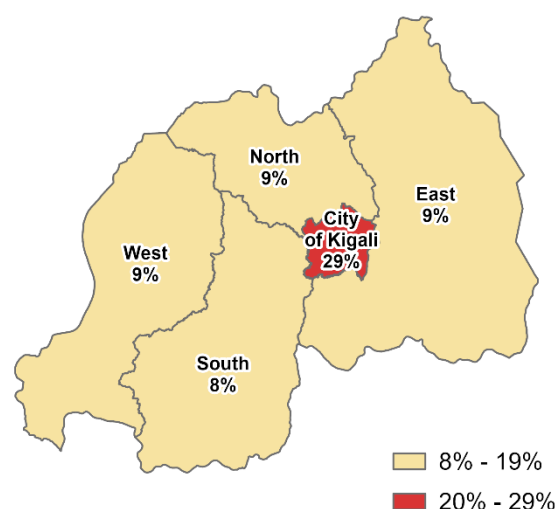
Patterns by background characteristics

- Urban women are better educated than rural women; only 5% of urban women have no education, as opposed to 11% of rural women (**Table 3.2.1**).
- Educational attainment among women increases with increasing household wealth (**Figure 3.2**). For example, only 9% of women in the lowest wealth quintile have a secondary education or higher, as compared with 64% of those in the highest quintile. A similar pattern is observed among men.

- The percentage of women who have completed secondary education or higher is highest in City of Kigali (29%) and lowest in South province (8%) (**Figure 3.3**).
- Median number of years of education completed is higher among urban residents than rural residents. Urban women have completed a median of 7.3 years of education, while the median among rural women is 4.8 years. The corresponding figures among men are 7.6 years and 4.8 years.
- Women and men in the lowest wealth quintile (68% each) are less likely than other women and men to be literate (**Table 3.3.1** and **Table 3.3.2**).

Figure 3.3 Secondary education among women, by province

Percentage of women who have completed secondary education or higher



3.3 MASS MEDIA EXPOSURE

Exposure to mass media

Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded *at least once a week* are considered regularly exposed to that form of media.

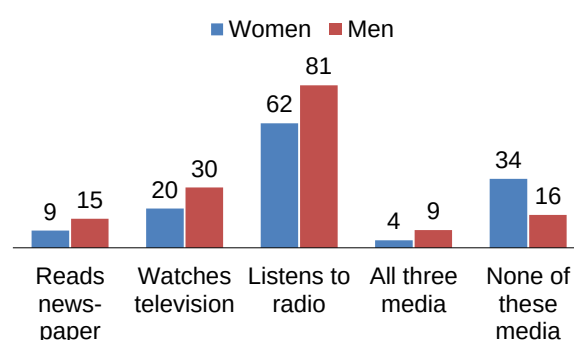
Sample: Women and men age 15-49

Exposure to different mass media is key to information dissemination and expansion of knowledge. **Tables 3.4.1** and **3.4.2** show the percentages of women and men who are exposed to different types of media, by background characteristics. The level of exposure to mass media is generally low in Rwanda. Among both women and men, radio is the most frequently accessed form of media: 62% of women and 81% of men listen to the radio. Twenty percent of women watch television, and 9% read newspapers. The corresponding percentages among men are 30% and 15%.

Figure 3.4 shows that one-third of female respondents (34%) and 16% of male respondents have no access to any of the three media sources at least once a week.

Figure 3.4 Exposure to mass media

Percentage of women and men age 15-49 who are exposed to media on a weekly basis



Trends: Women's and men's exposure to mass media has changed very little since 2014-15. For example, the proportion of women who listen to the radio at least once a week has remained constant at 62%. Among men, this proportion has increased slightly from 79% to 81%. The proportion of respondents having no access to any of the three sources (newspaper, television, and radio) has decreased slightly, from 36% to 34% among women and from 19% to 16% among men.

Patterns by background characteristics

- The percentage of women who read a newspaper at least once a week is very low. However, urban women are over two times more likely to read a newspaper than rural women (16% and 7%,

respectively). The urban-rural gap is more evident in television viewing, with 51% of urban women and only 12% of rural women watching television at least once a week.

- The percentages of women and men with no access to any of the three media sources are lowest in City of Kigali (15% and 5%, respectively) and among those in the highest wealth quintile (8% and 2%, respectively). Women and men with no formal education are most likely to have no access to any of the three media (62% and 39%, respectively).

3.4 INTERNET USAGE

The internet has gradually become an important means of transacting business, sharing information, and interacting through social media, and a number of organizations have adopted it as a way to reach people. There are currently online shopping platforms through which business is transacted on a daily basis in Rwanda. Also, some e-health platforms have started operating in the country. Overall, 14% of women and 25% of men age 15-49 reported that they had ever used the internet. However, only 12% of women and 23% of men had used the internet in the past 12 months (**Tables 3.5.1 and 3.5.2**).

Patterns by background characteristics

- Urban women and men (40% and 58%, respectively) are more likely than rural women and men (8% and 17%, respectively) to have ever used the internet.
- The percentages of women and men who have ever used the internet are highest in City of Kigali (40% and 56%, respectively).
- The proportion of women and men who have ever used the internet increases dramatically by level of wealth. Less than 1% of women and 3% of men in the lowest wealth quintile have ever used the internet, as compared with 45% of women and 63% of men in the highest wealth quintile.

3.5 EMPLOYMENT

Currently employed

Respondents who were employed in the 7 days before the survey.

Sample: Women and men age 15-49

In the 2019-20 RDHS, respondents were asked whether they were employed at the time of the survey and, if not, whether they had worked at any time during the 12 months preceding the survey. **Tables 3.6.1 and 3.6.2** show that 66% of women and 87% of men are currently employed. Furthermore, 7% of women and 2% of men reported that they had worked in the past 12 months but were not currently employed.

Trends: Current employment among women age 15-49 has declined over the past 5 years, from 78% in 2014-15 to 66% in 2019-20. However, the percentage of men who are currently employed has increased slightly from 85% to 87%.

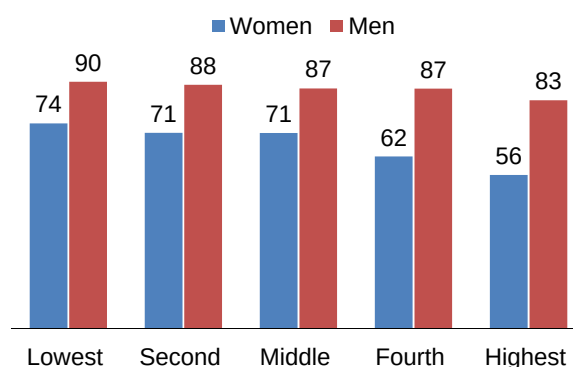
Patterns by background characteristics

- Divorced, separated, or widowed women (82%) are more likely to be employed than women who are currently married or living together with a partner (77%) and those who have never been married (49%) (**Table 3.6.1**). Among men, those who are currently married or living with a partner (99%) and those who are divorced, separated, or widowed (93%) are more likely to be employed than those who have never been married (74%) (**Table 3.6.2**).

- There are notable variations in the proportion of currently employed women and men by place of residence. Rural women and men (69% and 88%, respectively) are more likely to be employed than urban women and men (57% and 83%, respectively).
- The percentage of women who are currently employed decreases with increasing wealth, from 74% among those in the lowest wealth quintile to 56% among those in the highest wealth quintile. A similar pattern is observed among men; 90% of those in the lowest wealth quintile are currently employed, as compared with 83% of those in the highest quintile (**Figure 3.5**).
- There is no linear relationship between current employment and level of education among either female or male respondents.

Figure 3.5 Employment status by household wealth

Percentage of women and men age 15-49 who are currently employed



3.6 OCCUPATION

Occupation

Categorized as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, agriculture, and other.

Sample: Women and men age 15-49 who were currently employed or had worked in the 12 months before the survey

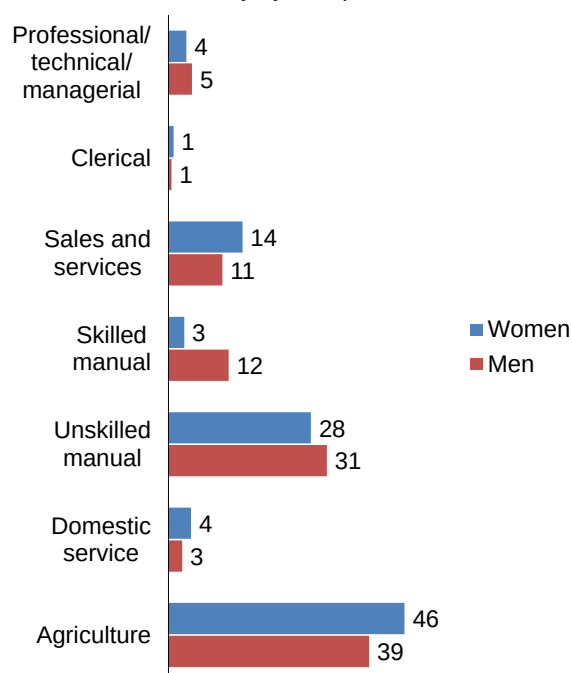
Tables 3.7.1 and 3.7.2 show that only small proportions of men and women were employed in professional/technical/managerial occupations in the 12 months before the survey (5% and 4%, respectively). The two most frequently reported occupations in Rwanda are agriculture (46% among women and 39% among men) and unskilled manual labor (28% among women and 31% among men). A higher percentage of women than men are engaged in agricultural work (**Figure 3.6**).

Twenty-three percent of employed women in Rwanda are not paid for their work. Women engaged in agricultural work are much more likely (42%) than those working in nonagricultural occupations (8%) to not be paid for their work. Forty-eight percent of women who worked in the past year are self-employed (**Table 3.8**).

Trends: There has been a substantial decline since 2014-15 in the proportion of women working in agricultural occupations, from 76% to 46%. Among men, the proportion has decreased from 58% to 39%. The proportion of women and men who are engaged in unskilled manual labor has increased dramatically, from 10% to 28% among women and from 2% to 31% among men.

Figure 3.6 Occupation

Percentage of women and men age 15-49 employed in the 12 months before the survey by occupation



Patterns by background characteristics

- Women and men living in rural areas are more likely to be engaged in agriculture (53% and 46%, respectively) than those living in urban areas (14% and 8%, respectively) (**Tables 3.7.1 and 3.7.2**).
- Women and men with more than a secondary education are more likely than those at other educational levels to be engaged in professional/technical/managerial work (48% and 53%, respectively). Women and men with no education are mostly engaged in unskilled manual labor (43% and 46%, respectively).
- The percentages of men and women employed in professional/technical/managerial and clerical occupations generally increase with increasing wealth.

3.7 HEALTH INSURANCE COVERAGE

Health insurance improves access to health care, thus promoting good health. Reasonable access to health care encourages individuals to seek health maintenance services more regularly than they otherwise would, thereby preventing potentially serious illnesses. Additionally, health insurance protects individuals from financial hardships that may result from large or unexpected medical bills.

The 2019-20 RDHS collected information about specific types of insurance coverage and the percentages of women and men with any health insurance according to background characteristics. More than 4 in every 5 Rwandan women and men age 15-49 (83% each) have health insurance. Mutuelle/community health insurance is the most popular type of insurance among both women and men (77% and 78%, respectively) (**Table 3.9.1 and Table 3.9.2**).

Trends: The percentage of women and men who have any form of health insurance has increased since 2014-15, from 74% to 83% among women and from 73% to 83% among men.

Patterns by background characteristics

- Health insurance coverage increases with increasing wealth. Ninety-one percent of women and 92% of men in the highest wealth quintile have insurance coverage, as compared with 67% of women and 63% of men in the lowest quintile.
- Women and men with more than a secondary education are more likely to have Rwandaise d'Assurance Maladie (RAMA) or Rwandan Social Security Board (RSSB) insurance (33% and 37%, respectively) than those with other levels of education.

3.8 TOBACCO USE

Table 3.10.1 shows that cigarette smoking and use of any type of tobacco are rare among women (less than 1%). Seven percent of men smoke any type of tobacco (nearly all of whom smoke cigarettes), and 5% smoke daily (**Table 3.10.2**). Among men who smoke cigarettes daily, about two-thirds (67%) smoke less than 5 cigarettes each day, while 22% smoke 5-9 cigarettes and 10% smoke 10 or more cigarettes each day (**Table 3.11**). Less than 1 percent of women and men use smokeless tobacco (**Table 3.12**).

Trends: Smoking among women is uncommon in Rwanda; since 2014-15, 1% or less of women have reported that they smoke. The proportion of men who reported smoking any type of tobacco decreased from 12% in 2014-15 to 7% in 2019-20.

Patterns by background characteristics

- The percentage of men who use any type of tobacco increases from less than 1% among those age 15-19 to a peak of 16% among those age 40-44 before declining to 15% among those age 45-49.

- There are variations by province in cigarette smoking among men, from 4% in North and West to 10% in South (**Table 3.10.2**).
- The percentage of men who smoke cigarettes declines with increasing education, from 21% among those with no formal education to 2% among those with more than a secondary education. Similarly, 15% of men in the lowest wealth quintile smoke cigarettes, as compared with only 4% in the highest wealth quintile.

LIST OF TABLES

For more information on the characteristics of survey respondents, see the following tables:

- **Table 3.1** **Background characteristics of respondents**
- **Table 3.2.1** **Educational attainment: Women**
- **Table 3.2.2** **Educational attainment: Men**
- **Table 3.3.1** **Literacy: Women**
- **Table 3.3.2** **Literacy: Men**
- **Table 3.4.1** **Exposure to mass media: Women**
- **Table 3.4.2** **Exposure to mass media: Men**
- **Table 3.5.1** **Internet usage: Women**
- **Table 3.5.2** **Internet usage: Men**
- **Table 3.6.1** **Employment status: Women**
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- **Table 3.10.1** **Tobacco smoking: Women**
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- **Table 3.11** **Average number of cigarettes smoked daily: Men**
- **Table 3.12** **Smokeless tobacco use and any tobacco use**

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Rwanda DHS 2019-20

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	22.3	3,258	3,308	26.1	1,526	1,534
20-24	16.5	2,414	2,424	16.4	960	954
25-29	14.2	2,073	2,047	12.1	710	735
30-34	14.5	2,118	2,095	14.3	835	816
35-39	14.2	2,072	2,043	13.6	793	784
40-44	10.2	1,488	1,487	9.8	575	570
45-49	8.3	1,211	1,230	7.7	447	440
Religion						
Catholic	36.7	5,364	5,506	42.0	2,455	2,520
Protestant	47.2	6,905	6,754	40.0	2,340	2,262
Adventist	12.5	1,836	1,842	12.8	748	748
Muslim	1.8	269	287	2.6	153	161
Traditional	0.0	1	1	0.0	0	1
Jehovah's Witness	0.9	128	114	0.5	30	28
Other	0.2	29	24	0.1	8	6
No religion	0.7	104	106	1.9	112	107
Marital status						
Never married	40.4	5,914	6,060	49.0	2,867	2,908
Married	32.1	4,703	4,706	30.6	1,786	1,779
Living together	18.4	2,698	2,584	18.4	1,074	1,026
Divorced/separated	6.4	935	906	1.8	105	107
Widowed	2.6	383	378	0.2	14	13
Residence						
Urban	19.9	2,909	3,551	19.1	1,115	1,366
Rural	80.1	11,725	11,083	80.9	4,731	4,467
Province						
City of Kigali	14.8	2,166	1,921	15.0	879	766
South	20.9	3,065	3,482	21.2	1,239	1,409
West	21.7	3,174	3,312	21.7	1,268	1,334
North	15.2	2,226	2,294	15.1	886	915
East	27.4	4,003	3,625	26.9	1,574	1,409
Education						
No education	9.4	1,377	1,352	7.2	420	417
Primary	58.3	8,529	8,500	61.0	3,569	3,522
Secondary	27.9	4,086	4,110	26.7	1,562	1,565
More than secondary	4.4	642	672	5.0	295	329
Wealth quintile						
Lowest	18.7	2,741	2,844	15.8	924	967
Second	18.8	2,756	2,707	18.4	1,076	1,058
Middle	18.8	2,757	2,709	21.0	1,227	1,182
Fourth	20.3	2,966	2,884	21.9	1,278	1,261
Highest	23.3	3,414	3,490	23.0	1,342	1,365
Total 15-49	100.0	14,634	14,634	100.0	5,846	5,833
50-59	na	na	na	na	667	680
Total 15-59	na	na	na	na	6,513	6,513

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.
na = Not applicable

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary			
Age									
15-24	1.4	30.9	18.8	39.1	7.6	2.2	100.0	5.8	5,672
15-19	1.0	31.1	19.6	45.9	2.1	0.4	100.0	5.7	3,258
20-24	1.8	30.6	17.9	30.0	15.0	4.7	100.0	5.9	2,414
25-29	6.5	34.9	16.6	19.8	13.8	8.4	100.0	5.5	2,073
30-34	11.3	46.9	16.9	8.3	9.0	7.6	100.0	4.3	2,118
35-39	16.5	51.0	20.1	3.8	3.8	4.8	100.0	3.6	2,072
40-44	18.4	48.4	21.0	5.6	3.2	3.5	100.0	4.5	1,488
45-49	25.6	54.6	10.1	5.3	2.1	2.4	100.0	3.8	1,211
Residence									
Urban	4.6	23.4	14.9	27.8	14.0	15.2	100.0	7.3	2,909
Rural	10.6	44.6	18.7	18.9	5.5	1.7	100.0	4.8	11,725
Province									
City of Kigali	3.9	25.5	15.8	26.2	14.1	14.5	100.0	7.1	2,166
South	9.8	43.3	19.0	19.8	5.4	2.7	100.0	5.0	3,065
West	12.4	42.5	18.0	18.5	6.2	2.3	100.0	4.8	3,174
North	9.0	43.8	20.3	17.5	6.6	2.8	100.0	5.0	2,226
East	10.0	42.6	16.8	21.9	6.0	2.7	100.0	5.0	4,003
Wealth quintile									
Lowest	20.3	54.9	15.5	8.7	0.6	0.0	100.0	3.2	2,741
Second	12.9	51.7	17.9	15.7	1.8	0.1	100.0	4.2	2,756
Middle	8.2	46.7	20.7	20.5	3.8	0.1	100.0	4.9	2,757
Fourth	5.8	34.9	21.0	28.2	8.8	1.3	100.0	5.6	2,966
Highest	2.0	19.2	15.0	28.0	18.3	17.5	100.0	8.3	3,414
Total	9.4	40.4	17.9	20.7	7.2	4.4	100.0	5.2	14,634

¹ Completed 6th grade (for 6-grade system) and 8th grade (for 8-grade system) at the primary level or were in vocational school

² Completed 6th grade at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary			
Age									
15-24	2.0	37.4	17.2	34.4	7.1	2.0	100.0	5.5	2,486
15-19	0.9	39.5	15.9	41.2	2.4	0.1	100.0	5.5	1,526
20-24	3.6	34.1	19.3	23.6	14.5	5.0	100.0	5.6	960
25-29	5.1	37.3	14.4	15.5	16.8	10.8	100.0	5.5	710
30-34	10.0	46.2	15.9	8.6	10.0	9.3	100.0	4.5	835
35-39	12.8	49.9	23.7	4.9	2.7	6.0	100.0	3.9	793
40-44	13.8	52.9	21.2	3.8	3.7	4.7	100.0	4.7	575
45-49	15.7	59.5	11.2	7.9	1.8	3.8	100.0	4.8	447
Residence									
Urban	3.5	24.4	14.3	25.7	16.1	16.0	100.0	7.6	1,115
Rural	8.1	48.1	18.2	17.9	5.3	2.5	100.0	4.8	4,731
Province									
City of Kigali	2.8	27.5	16.7	24.3	15.3	13.4	100.0	6.8	879
South	9.0	47.6	17.9	17.4	4.6	3.5	100.0	4.7	1,239
West	7.6	43.5	18.1	19.6	8.2	3.0	100.0	5.1	1,268
North	6.9	46.6	19.7	16.3	5.4	5.2	100.0	5.0	886
East	8.1	47.7	15.9	19.7	5.5	3.2	100.0	4.8	1,574
Wealth quintile									
Lowest	17.3	60.3	13.6	7.5	1.1	0.2	100.0	3.0	924
Second	9.6	55.2	18.6	13.7	2.6	0.4	100.0	4.2	1,076
Middle	6.9	50.0	20.4	18.7	3.5	0.5	100.0	4.8	1,227
Fourth	3.7	37.8	21.2	25.8	8.6	2.9	100.0	5.5	1,278
Highest	1.9	22.3	13.0	26.7	17.8	18.3	100.0	8.2	1,342
Total 15-49	7.2	43.6	17.5	19.4	7.3	5.0	100.0	5.1	5,846
50-59	24.4	50.8	14.7	3.7	2.9	3.6	100.0	3.3	667
Total 15-59	9.0	44.3	17.2	17.8	6.9	4.9	100.0	5.0	6,513

¹ Completed 6th grade (for 6-grade system) and 8th grade (for 8-grade system) at the primary level or were in vocational school

² Completed 6th grade at the secondary level

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Higher than primary schooling	No schooling, preschool or primary school					Total	Percentage literate ¹	Number of women
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired			
Age									
15-24	49.7	36.1	6.8	7.3	0.0	0.1	100.0	92.6	5,672
15-19	49.2	37.6	6.0	7.2	0.0	0.0	100.0	92.8	3,258
20-24	50.3	34.0	7.9	7.5	0.0	0.2	100.0	92.3	2,414
25-29	42.6	38.0	8.0	11.4	0.0	0.0	100.0	88.6	2,073
30-34	25.9	45.9	10.2	18.0	0.0	0.0	100.0	82.0	2,118
35-39	13.0	51.0	12.6	23.3	0.0	0.0	100.0	76.7	2,072
40-44	14.2	54.4	7.7	23.5	0.1	0.1	100.0	76.3	1,488
45-49	13.7	47.7	9.4	28.5	0.0	0.6	100.0	70.9	1,211
Residence									
Urban	58.4	29.5	5.4	6.6	0.0	0.2	100.0	93.3	2,909
Rural	27.3	46.0	9.4	17.2	0.0	0.1	100.0	82.6	11,725
Province									
City of Kigali	56.0	33.1	4.5	6.4	0.0	0.0	100.0	93.6	2,166
South	29.7	42.9	11.5	15.8	0.0	0.1	100.0	84.1	3,065
West	28.2	45.4	8.2	18.0	0.0	0.2	100.0	81.8	3,174
North	27.9	48.6	7.5	15.8	0.0	0.2	100.0	84.1	2,226
East	31.3	42.3	9.6	16.7	0.0	0.1	100.0	83.2	4,003
Wealth quintile									
Lowest	10.0	44.4	13.1	32.3	0.0	0.1	100.0	67.5	2,741
Second	18.3	47.7	13.2	20.7	0.0	0.1	100.0	79.2	2,756
Middle	25.4	52.9	8.3	13.3	0.0	0.1	100.0	86.6	2,757
Fourth	39.6	44.9	6.0	9.4	0.0	0.1	100.0	90.5	2,966
Highest	65.6	27.1	3.9	3.3	0.0	0.1	100.0	96.6	3,414
Total	33.4	42.7	8.6	15.1	0.0	0.1	100.0	84.8	14,634

¹ Refers to women who attended schooling higher than the primary level and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Higher than primary schooling	No schooling, preschool or primary school					Total	Percentage literate ¹	Number of men
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired			
Age									
15-24	44.3	37.9	8.3	9.5	0.0	0.0	100.0	90.5	2,486
15-19	44.3	38.4	8.5	8.8	0.0	0.0	100.0	91.2	1,526
20-24	44.3	37.1	8.0	10.7	0.0	0.0	100.0	89.3	960
25-29	43.9	34.9	8.0	13.2	0.0	0.0	100.0	86.8	710
30-34	29.1	44.3	10.4	16.1	0.0	0.0	100.0	83.9	835
35-39	14.7	51.7	12.1	21.5	0.0	0.0	100.0	78.5	793
40-44	16.1	59.1	8.9	15.9	0.0	0.0	100.0	84.1	575
45-49	19.9	52.2	7.1	20.8	0.0	0.0	100.0	79.2	447
Residence									
Urban	59.8	31.4	3.8	5.0	0.0	0.0	100.0	94.9	1,115
Rural	27.2	46.4	10.3	16.1	0.0	0.0	100.0	83.9	4,731
Province									
City of Kigali	54.8	37.0	4.1	4.1	0.0	0.0	100.0	95.9	879
South	27.5	41.6	13.5	17.3	0.0	0.0	100.0	82.6	1,239
West	32.6	46.0	6.7	14.7	0.0	0.0	100.0	85.3	1,268
North	28.3	51.3	5.0	15.4	0.0	0.0	100.0	84.6	886
East	29.8	42.2	12.4	15.6	0.0	0.0	100.0	84.4	1,574
Wealth quintile									
Lowest	9.4	45.0	13.1	32.5	0.0	0.0	100.0	67.5	924
Second	16.9	49.7	14.2	19.2	0.0	0.0	100.0	80.8	1,076
Middle	24.6	51.0	11.2	13.2	0.0	0.0	100.0	86.8	1,227
Fourth	39.1	46.2	6.2	8.6	0.0	0.0	100.0	91.4	1,278
Highest	65.9	28.2	2.9	3.0	0.0	0.0	100.0	97.0	1,342
Total 15-49	33.4	43.5	9.0	14.0	0.0	0.0	100.0	86.0	5,846
50-59	16.3	48.3	9.1	25.8	0.0	0.6	100.0	73.6	667
Total 15-59	31.7	44.0	9.1	15.2	0.0	0.1	100.0	84.7	6,513

¹ Refers to men who attended schooling higher than the primary level and men who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	11.8	22.1	66.7	3.1	28.5	3,258
20-24	10.1	22.5	69.0	4.6	27.7	2,414
25-29	10.0	21.2	63.6	5.7	33.6	2,073
30-34	7.9	17.9	58.7	4.3	38.5	2,118
35-39	5.7	15.8	56.4	3.1	40.4	2,072
40-44	5.5	18.7	59.0	2.8	38.3	1,488
45-49	5.3	14.7	54.2	1.7	42.8	1,211
Residence						
Urban	16.1	51.1	77.3	11.0	16.0	2,909
Rural	6.8	11.8	58.5	1.9	39.0	11,725
Province						
City of Kigali	15.5	53.0	76.4	11.0	15.2	2,166
South	7.4	12.1	56.5	2.6	41.0	3,065
West	5.2	14.7	56.3	1.5	41.1	3,174
North	8.4	9.5	57.6	2.3	40.3	2,226
East	8.7	16.8	66.1	3.2	31.3	4,003
Education						
No education	0.2	5.6	36.2	0.0	62.2	1,377
Primary	4.2	12.4	57.0	0.7	40.0	8,529
Secondary	15.0	30.9	78.1	6.6	18.0	4,086
More than secondary	45.3	73.2	86.1	33.8	4.7	642
Wealth quintile						
Lowest	2.7	2.3	26.0	0.1	71.9	2,741
Second	4.5	2.7	49.4	0.2	48.9	2,756
Middle	6.0	4.3	66.5	0.6	32.0	2,757
Fourth	8.2	13.3	78.0	1.6	19.5	2,966
Highest	19.2	64.9	84.6	13.9	7.6	3,414
Total	8.6	19.6	62.2	3.7	34.4	14,634

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	11.3	33.1	81.9	6.2	14.5	1,526
20-24	18.7	38.7	86.0	11.6	11.2	960
25-29	19.1	30.9	82.3	10.9	15.6	710
30-34	17.3	24.2	77.3	10.5	20.8	835
35-39	11.8	25.3	80.3	7.7	18.4	793
40-44	13.9	28.7	79.2	9.8	19.2	575
45-49	9.3	21.5	77.6	6.2	19.8	447
Residence						
Urban	34.2	60.8	91.0	25.3	5.2	1,115
Rural	9.8	22.9	78.8	5.0	19.0	4,731
Province						
City of Kigali	33.0	63.9	91.0	25.9	5.1	879
South	9.0	19.3	76.4	5.1	22.6	1,239
West	15.3	30.4	78.4	7.4	19.0	1,268
North	9.4	20.1	79.6	5.1	17.5	886
East	10.6	25.2	82.5	5.5	15.1	1,574
Education						
No education	0.3	11.1	59.1	0.3	39.0	420
Primary	6.1	21.7	78.9	2.9	19.1	3,569
Secondary	26.8	46.0	90.0	16.4	6.8	1,562
More than secondary	70.5	74.8	93.5	52.8	1.5	295
Wealth quintile						
Lowest	3.7	11.9	54.0	1.3	43.2	924
Second	5.3	14.1	73.3	2.0	24.7	1,076
Middle	7.2	16.3	84.4	2.4	13.7	1,227
Fourth	14.8	29.2	90.9	7.0	7.7	1,278
Highest	35.6	69.1	93.9	27.0	2.1	1,342
Total 15-49	14.5	30.1	81.2	8.8	16.4	5,846
50-59	8.7	21.3	72.8	5.9	25.6	667
Total 15-59	13.9	29.2	80.3	8.5	17.3	6,513

Table 3.5.1 Internet usage: Women

Percentage of women age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among women who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used the internet:					Total	Number
				Almost every day	At least once a week	Less than once a week	Not at all	Missing		
Age										
15-19	12.3	11.1	3,258	28.8	41.2	17.0	13.1	0.0	100.0	363
20-24	22.4	19.2	2,414	46.8	34.6	6.1	12.6	0.0	100.0	462
25-29	20.5	17.9	2,073	59.0	27.9	6.7	6.4	0.0	100.0	371
30-34	14.5	13.0	2,118	57.6	28.9	5.7	7.7	0.0	100.0	276
35-39	8.9	7.9	2,072	63.2	27.8	5.5	3.5	0.0	100.0	164
40-44	8.1	7.1	1,488	69.8	20.1	5.3	4.8	0.0	100.0	106
45-49	5.4	5.0	1,211	56.2	33.0	9.0	1.7	0.0	100.0	60
Residence										
Urban	39.8	36.4	2,909	59.8	27.9	6.1	6.1	0.0	100.0	1,058
Rural	7.5	6.4	11,725	37.3	38.1	11.5	13.1	0.0	100.0	745
Province										
City of Kigali	39.7	36.1	2,166	60.6	26.3	7.7	5.3	0.0	100.0	781
South	9.3	8.0	3,065	42.8	39.3	8.4	9.5	0.0	100.0	245
West	9.3	7.7	3,174	35.7	41.3	10.3	12.7	0.0	100.0	244
North	9.3	8.3	2,226	43.4	29.7	10.0	16.9	0.0	100.0	185
East	9.9	8.7	4,003	47.3	35.1	7.4	10.2	0.0	100.0	347
Education										
No education	0.1	0.0	1,377	*	*	*	*	*	*	0
Primary	2.3	1.8	8,529	30.2	44.6	10.8	14.5	0.0	100.0	152
Secondary	29.8	25.9	4,086	38.4	38.0	11.7	11.9	0.0	100.0	1,057
More than secondary	96.8	92.5	642	77.2	18.5	1.8	2.5	0.0	100.0	594
Wealth quintile										
Lowest	0.5	0.3	2,741	*	*	*	*	*	*	8
Second	1.8	1.2	2,756	(10.7)	(42.8)	(9.3)	(37.2)	(0.0)	(100.0)	34
Middle	3.7	2.7	2,757	16.3	44.3	12.4	27.0	0.0	100.0	75
Fourth	12.0	9.6	2,966	27.8	41.6	14.3	16.4	0.0	100.0	285
Highest	44.5	41.0	3,414	58.2	29.3	6.8	5.7	0.0	100.0	1,400
Total	13.9	12.3	14,634	50.5	32.1	8.3	9.0	0.0	100.0	1,803

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.5.2 Internet usage: Men

Percentage of men age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among men who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used the internet:					Total	Number
				Almost every day	At least once a week	Less than once a week	Not at all	Missing		
Age										
15-19	22.1	20.8	1,526	48.7	30.3	7.9	13.1	0.0	100.0	318
20-24	39.7	37.0	960	57.2	28.2	5.2	9.3	0.0	100.0	355
25-29	35.2	32.7	710	62.9	20.7	4.1	12.3	0.0	100.0	232
30-34	25.1	23.1	835	68.3	19.2	3.6	8.8	0.0	100.0	193
35-39	14.5	14.1	793	71.4	18.9	5.3	4.4	0.0	100.0	112
40-44	17.1	15.7	575	76.8	19.2	1.9	2.1	0.0	100.0	90
45-49	10.7	9.7	447	(66.2)	(13.1)	(20.7)	(0.0)	(0.0)	(100.0)	43
Residence										
Urban	58.4	56.3	1,115	74.3	17.1	4.1	4.5	0.0	100.0	627
Rural	16.6	15.1	4,731	48.5	30.5	7.1	13.8	0.0	100.0	715
Province										
City of Kigali	56.2	54.8	879	81.7	10.5	4.7	3.2	0.0	100.0	482
South	14.3	13.0	1,239	49.1	32.4	9.3	9.2	0.0	100.0	162
West	22.1	20.5	1,268	54.7	28.5	6.4	10.4	0.0	100.0	260
North	20.8	18.5	886	43.1	33.8	3.4	19.6	0.0	100.0	164
East	19.2	17.5	1,574	46.4	33.8	6.1	13.8	0.0	100.0	275
Education										
No education	1.0	0.7	420	*	*	*	*	*	*	3
Primary	8.5	7.3	3,569	46.2	33.3	6.2	14.3	0.0	100.0	262
Secondary	54.0	50.8	1,562	55.8	26.4	7.1	10.7	0.0	100.0	793
More than secondary	97.8	96.5	295	86.7	10.2	1.4	1.6	0.0	100.0	285
Wealth quintile										
Lowest	3.1	2.2	924	*	*	*	*	*	*	21
Second	9.3	8.1	1,076	26.6	38.3	8.5	26.6	0.0	100.0	87
Middle	11.4	9.9	1,227	33.8	34.6	11.5	20.1	0.0	100.0	122
Fourth	25.8	23.4	1,278	47.8	28.8	9.6	13.8	0.0	100.0	299
Highest	62.5	60.7	1,342	74.0	19.0	3.1	3.9	0.0	100.0	814
Total 15-49	24.6	23.0	5,846	60.6	24.2	5.7	9.5	0.0	100.0	1,343
50-59	7.3	6.6	667	(83.0)	(7.3)	(2.1)	(7.6)	(0.0)	(100.0)	44
Total 15-59	22.8	21.3	6,513	61.3	23.7	5.6	9.4	0.0	100.0	1,387

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.6.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed ¹	Not currently employed			
Age					
15-19	38.2	5.1	56.6	100.0	3,258
20-24	61.8	9.6	28.6	100.0	2,414
25-29	73.2	7.9	18.9	100.0	2,073
30-34	76.2	7.5	16.3	100.0	2,118
35-39	79.6	6.3	14.1	100.0	2,072
40-44	80.8	6.3	13.0	100.0	1,488
45-49	81.1	6.5	12.3	100.0	1,211
Marital status					
Never married	49.4	6.6	44.0	100.0	5,914
Married or living together	76.9	7.3	15.8	100.0	7,401
Divorced/separated/widowed	82.4	7.0	10.5	100.0	1,318
Number of living children					
0	47.0	6.7	46.3	100.0	5,368
1-2	74.0	8.3	17.6	100.0	4,150
3-4	79.8	6.4	13.7	100.0	3,184
5+	80.9	5.9	13.3	100.0	1,932
Residence					
Urban	56.7	9.0	34.2	100.0	2,909
Rural	68.7	6.5	24.8	100.0	11,725
Province					
City of Kigali	54.6	10.7	34.7	100.0	2,166
South	62.7	5.7	31.6	100.0	3,065
West	69.9	7.1	23.0	100.0	3,174
North	71.7	7.4	20.9	100.0	2,226
East	69.5	5.7	24.9	100.0	4,003
Education					
No education	80.5	6.7	12.8	100.0	1,377
Primary	73.0	6.5	20.5	100.0	8,529
Secondary	48.9	7.6	43.5	100.0	4,086
More than secondary	57.7	9.8	32.5	100.0	642
Wealth quintile					
Lowest	74.4	6.9	18.7	100.0	2,741
Second	71.0	7.1	21.9	100.0	2,756
Middle	70.9	6.7	22.4	100.0	2,757
Fourth	62.4	7.1	30.5	100.0	2,966
Highest	55.7	7.1	37.2	100.0	3,414
Total	66.3	7.0	26.7	100.0	14,634

¹ "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed ¹	Not currently employed			
Age					
15-19	61.9	4.6	33.6	100.0	1,526
20-24	89.0	2.0	9.0	100.0	960
25-29	94.2	2.2	3.5	100.0	710
30-34	98.2	1.1	0.7	100.0	835
35-39	98.6	0.7	0.7	100.0	793
40-44	98.1	0.8	1.1	100.0	575
45-49	97.5	1.4	1.0	100.0	447
Marital status					
Never married	74.3	3.7	22.0	100.0	2,867
Married or living together	98.9	0.8	0.3	100.0	2,860
Divorced/separated/widowed	92.8	2.2	5.1	100.0	119
Number of living children					
0	74.9	3.7	21.4	100.0	2,936
1-2	98.3	1.2	0.5	100.0	1,229
3-4	98.8	0.6	0.6	100.0	1,051
5+	99.0	0.4	0.6	100.0	630
Residence					
Urban	83.0	4.0	13.1	100.0	1,115
Rural	87.6	1.8	10.6	100.0	4,731
Province					
City of Kigali	80.4	3.5	16.1	100.0	879
South	83.9	1.4	14.7	100.0	1,239
West	87.5	3.8	8.7	100.0	1,268
North	92.7	1.7	5.6	100.0	886
East	88.4	1.2	10.4	100.0	1,574
Education					
No education	97.9	0.8	1.4	100.0	420
Primary	90.8	1.6	7.7	100.0	3,569
Secondary	74.5	3.7	21.8	100.0	1,562
More than secondary	86.5	4.7	8.8	100.0	295
Wealth quintile					
Lowest	89.5	1.8	8.6	100.0	924
Second	88.4	1.3	10.4	100.0	1,076
Middle	87.1	2.2	10.7	100.0	1,227
Fourth	87.0	2.0	10.9	100.0	1,278
Highest	82.8	3.5	13.7	100.0	1,342
Total 15-49	86.7	2.2	11.0	100.0	5,846
50-59	96.0	1.2	2.9	100.0	667
Total 15-59	87.7	2.1	10.2	100.0	6,513

¹ "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.7.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of women
Age									
15-19	0.4	0.2	11.5	3.0	32.3	11.8	40.8	100.0	1,413
20-24	2.7	1.6	17.8	4.3	26.4	8.6	38.6	100.0	1,722
25-29	4.2	2.4	18.3	3.6	28.6	3.8	39.1	100.0	1,680
30-34	5.5	1.3	16.0	3.5	26.3	2.4	45.0	100.0	1,773
35-39	4.0	0.4	12.9	2.5	28.1	1.1	51.0	100.0	1,780
40-44	3.7	0.8	12.1	2.3	25.3	1.3	54.6	100.0	1,295
45-49	3.8	0.0	9.0	2.1	26.6	1.1	57.2	100.0	1,062
Marital status									
Never married	3.2	1.7	16.3	3.7	27.3	11.6	36.2	100.0	3,312
Married or living together	4.1	0.9	13.5	3.1	26.0	0.9	51.6	100.0	6,234
Divorced/separated/widowed	1.5	0.1	13.8	1.9	37.8	2.4	42.5	100.0	1,179
Number of living children									
0	3.6	2.1	15.9	4.5	25.8	11.1	37.1	100.0	2,884
1-2	4.3	1.1	16.6	3.2	28.1	3.1	43.6	100.0	3,419
3-4	4.0	0.3	12.9	2.8	28.2	1.2	50.6	100.0	2,747
5+	1.1	0.5	9.5	1.3	29.2	0.6	57.8	100.0	1,676
Residence									
Urban	9.4	4.1	35.7	5.8	15.5	15.8	13.7	100.0	1,914
Rural	2.3	0.4	9.7	2.6	30.3	1.9	52.9	100.0	8,812
Province									
City of Kigali	9.3	4.1	36.2	6.5	13.1	16.1	14.6	100.0	1,414
South	3.2	0.4	8.6	2.5	30.2	3.0	52.0	100.0	2,097
West	2.1	0.8	15.2	2.6	34.2	2.7	42.4	100.0	2,445
North	2.7	0.7	10.2	2.9	29.1	2.3	52.1	100.0	1,761
East	2.7	0.4	9.9	2.6	26.7	2.3	55.4	100.0	3,008
Education									
No education	0.0	0.0	6.8	0.6	43.3	1.6	47.7	100.0	1,200
Primary	0.1	0.1	10.6	2.7	29.6	4.3	52.5	100.0	6,784
Secondary	7.1	2.0	26.6	6.1	18.6	6.4	33.2	100.0	2,308
More than secondary	47.5	13.0	29.6	1.5	1.9	1.7	4.8	100.0	433
Wealth quintile									
Lowest	0.0	0.0	3.4	0.8	49.4	0.7	45.6	100.0	2,227
Second	0.0	0.0	7.1	1.2	37.2	1.1	53.4	100.0	2,154
Middle	0.7	0.1	9.1	2.8	27.0	1.1	59.3	100.0	2,140
Fourth	2.3	0.6	20.1	5.0	17.1	2.6	52.3	100.0	2,061
Highest	14.8	4.5	32.7	6.2	6.5	16.4	19.0	100.0	2,144
Total	3.5	1.0	14.4	3.1	27.7	4.4	45.9	100.0	10,726

Table 3.7.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of men
Age									
15-19	0.6	0.0	11.9	4.3	40.8	5.3	37.1	100.0	1,014
20-24	3.7	0.6	13.2	12.3	32.9	5.8	31.6	100.0	873
25-29	5.3	1.4	11.4	13.1	31.9	3.0	33.9	100.0	685
30-34	7.8	1.5	8.6	15.3	28.9	0.8	37.1	100.0	829
35-39	5.6	0.5	7.9	15.2	25.6	0.7	44.5	100.0	787
40-44	5.5	0.4	10.4	13.7	26.1	0.5	43.4	100.0	569
45-49	5.7	0.0	9.3	9.9	20.5	0.3	54.2	100.0	443
Marital status									
Never married	4.3	0.7	13.3	9.3	34.8	5.5	32.0	100.0	2,237
Married or living together	5.0	0.6	8.5	13.6	26.9	0.5	44.9	100.0	2,850
Divorced/separated/widowed	0.7	0.0	8.0	11.8	50.1	1.9	27.6	100.0	113
Number of living children									
0	4.4	0.7	13.1	8.7	34.7	5.3	33.1	100.0	2,307
1-2	6.1	1.1	8.5	16.1	30.8	1.3	36.2	100.0	1,223
3-4	4.5	0.1	7.9	13.9	26.6	0.2	46.6	100.0	1,044
5+	2.6	0.2	9.6	10.4	23.3	0.1	53.7	100.0	626
Residence									
Urban	13.0	1.8	25.5	24.1	20.3	7.3	8.1	100.0	969
Rural	2.7	0.4	7.1	8.9	33.2	1.7	46.1	100.0	4,231
Province									
City of Kigali	11.3	1.5	23.0	29.0	17.8	8.4	8.9	100.0	738
South	3.4	0.4	7.5	9.8	34.6	2.0	42.3	100.0	1,057
West	3.4	0.8	12.1	10.2	31.5	1.2	40.8	100.0	1,158
North	5.0	0.3	6.6	7.1	34.2	1.2	45.5	100.0	836
East	2.7	0.4	7.3	8.0	32.1	2.4	47.0	100.0	1,411
Education									
No education	0.4	0.0	2.9	5.0	46.1	1.7	43.9	100.0	415
Primary	0.4	0.0	8.2	10.5	33.4	2.6	44.8	100.0	3,295
Secondary	6.7	1.0	18.5	17.0	24.4	3.9	28.6	100.0	1,222
More than secondary	53.4	7.2	14.8	12.1	4.0	0.5	8.0	100.0	269
Wealth quintile									
Lowest	0.0	0.1	3.1	3.9	55.0	0.5	37.4	100.0	844
Second	0.1	0.0	5.8	4.1	36.0	0.5	53.5	100.0	964
Middle	0.7	0.1	6.3	7.3	30.9	0.6	54.2	100.0	1,095
Fourth	3.3	0.5	11.3	17.5	26.4	1.8	39.2	100.0	1,139
Highest	16.7	2.2	23.2	22.2	12.9	9.2	13.7	100.0	1,158
Total 15-49	4.6	0.6	10.5	11.7	30.8	2.7	39.0	100.0	5,200
50-59	5.1	0.4	6.1	10.4	18.1	0.2	59.7	100.0	648
Total 15-59	4.7	0.6	10.0	11.6	29.4	2.4	41.3	100.0	5,848

Table 3.8 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Rwanda DHS 2019-20

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	14.4	69.5	44.2
Cash and in-kind	32.8	21.2	26.5
In-kind only	11.4	1.3	5.9
Not paid	41.5	8.0	23.3
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	14.8	6.1	10.0
Employed by non-family member	21.9	59.7	42.4
Self-employed	63.3	34.3	47.6
Total	100.0	100.0	100.0
Continuity of employment			
All year	58.7	48.1	53.0
Seasonal	8.6	8.4	8.5
Occasional	32.7	43.5	38.5
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	4,918	5,807	10,726

Note: Total includes women with missing information on type of employment who are not shown separately.

Table 3.9.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	RAMA ¹ / RSSB ²	Employer	Mutuelle/ community health insurance	Private insurance company	MMI ³	None	Any health insurance	Number of women
Age								
15-19	2.3	0.2	78.5	0.4	0.8	17.9	82.1	3,258
20-24	2.1	0.0	81.4	0.5	0.4	15.6	84.4	2,414
25-29	4.1	0.1	77.8	0.8	0.8	16.6	83.4	2,073
30-34	5.6	0.1	73.6	1.0	1.8	18.0	82.0	2,118
35-39	4.5	0.1	74.7	0.7	2.2	18.1	81.9	2,072
40-44	4.3	0.1	74.5	0.7	2.4	18.3	81.7	1,488
45-49	3.7	0.1	77.8	0.7	0.6	17.2	82.8	1,211
Residence								
Urban	7.4	0.2	70.7	2.3	2.8	16.8	83.2	2,909
Rural	2.7	0.1	78.8	0.2	0.8	17.5	82.5	11,725
Province								
City of Kigali	5.7	0.2	69.8	2.6	2.7	19.2	80.8	2,166
South	3.0	0.0	80.2	0.3	0.5	15.9	84.1	3,065
West	3.4	0.0	76.4	0.2	0.7	19.3	80.7	3,174
North	3.8	0.0	84.5	0.4	1.2	10.3	89.7	2,226
East	3.0	0.2	75.3	0.4	1.4	19.9	80.1	4,003
Education								
No education	0.0	0.1	71.4	0.0	0.2	28.3	71.7	1,377
Primary	0.6	0.0	79.3	0.1	0.6	19.3	80.7	8,529
Secondary	6.5	0.1	78.9	0.8	2.3	11.6	88.4	4,086
More than secondary	32.6	0.7	49.5	8.2	4.9	4.2	95.8	642
Wealth quintile								
Lowest	0.0	0.0	67.3	0.0	0.0	32.7	67.3	2,741
Second	0.2	0.1	79.9	0.0	0.0	19.7	80.3	2,756
Middle	0.5	0.0	83.8	0.1	0.1	15.6	84.4	2,757
Fourth	3.3	0.2	83.0	0.3	0.8	12.5	87.5	2,966
Highest	12.1	0.2	72.5	2.4	4.4	8.8	91.2	3,414
Total	3.6	0.1	77.2	0.6	1.2	17.4	82.6	14,634

¹ RAMA: Rwandaise d'Assurance Maladie

² RSSB: Rwandan Social Security Board

³ MMI: Military Medical Insurance

Table 3.9.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	RAMA ¹ / RSSB ²	Employer	Mutuelle/ community health insurance	Private insurance company	MMI ³	Other	None	Any health insurance	Number of men
Age									
15-19	3.0	0.1	80.7	0.5	0.8	0.0	15.2	84.8	1,526
20-24	2.6	0.5	80.5	0.7	0.8	0.1	15.4	84.6	960
25-29	3.4	0.5	76.3	1.2	0.5	0.0	18.5	81.5	710
30-34	7.1	0.2	75.2	1.1	0.5	0.1	16.1	83.9	835
35-39	4.9	0.0	74.3	0.7	0.5	0.0	20.0	80.0	793
40-44	6.0	0.6	73.7	0.6	1.5	0.0	18.1	81.9	575
45-49	4.4	0.0	76.8	1.0	1.1	0.0	16.7	83.3	447
Residence									
Urban	9.6	1.1	70.0	2.7	2.7	0.1	14.6	85.4	1,115
Rural	3.0	0.1	79.3	0.3	0.3	0.0	17.3	82.7	4,731
Province									
City of Kigali	6.9	1.1	71.1	2.7	3.2	0.1	15.7	84.3	879
South	3.1	0.1	78.1	0.3	0.2	0.0	18.4	81.6	1,239
West	4.1	0.0	77.4	0.4	0.3	0.0	17.9	82.1	1,268
North	5.1	0.3	83.8	0.4	0.6	0.0	10.1	89.9	886
East	3.2	0.1	77.1	0.5	0.3	0.0	19.0	81.0	1,574
Education									
No education	0.0	0.0	69.5	0.0	0.0	0.0	30.5	69.5	420
Primary	0.8	0.1	79.3	0.1	0.4	0.0	19.5	80.5	3,569
Secondary	7.0	0.2	81.8	0.9	1.5	0.1	9.2	90.8	1,562
More than secondary	36.9	3.5	44.7	9.9	3.0	0.0	5.1	94.9	295
Wealth quintile									
Lowest	0.1	0.0	63.3	0.1	0.0	0.0	36.6	63.4	924
Second	0.6	0.0	78.4	0.0	0.0	0.0	21.0	79.0	1,076
Middle	0.3	0.1	87.0	0.1	0.0	0.0	12.6	87.4	1,227
Fourth	3.5	0.1	83.9	0.3	0.4	0.0	11.9	88.1	1,278
Highest	14.2	0.9	71.8	3.0	3.0	0.1	8.2	91.8	1,342
Total 15-49	4.2	0.3	77.5	0.8	0.8	0.0	16.8	83.2	5,846
50-59	4.6	0.0	78.7	0.5	0.5	0.0	15.8	84.2	667
Total 15-59	4.3	0.2	77.6	0.7	0.7	0.0	16.7	83.3	6,513

¹ RAMA: Rwandaise d'Assurance Maladie

² RSSB: Rwandan Social Security Board

³ MMI: Military Medical Insurance

Table 3.10.1 Tobacco smoking: Women

Percentage of women age 15-49 who smoke various tobacco products, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who smoke: ¹			Number of women
	Cigarettes ²	Other type of tobacco ³	Any type of tobacco	
Age				
15-19	0.5	0.0	0.5	3,258
20-24	0.2	0.0	0.2	2,414
25-29	0.3	0.0	0.3	2,073
30-34	0.3	0.0	0.3	2,118
35-39	0.5	0.2	0.7	2,072
40-44	1.5	0.9	2.2	1,488
45-49	2.1	1.8	3.6	1,211
Residence				
Urban	0.7	0.0	0.7	2,909
Rural	0.6	0.3	0.9	11,725
Province				
City of Kigali	0.8	0.0	0.8	2,166
South	0.9	0.1	0.9	3,065
West	0.7	0.0	0.7	3,174
North	0.5	0.6	0.9	2,226
East	0.4	0.6	0.9	4,003
Education				
No education	2.3	1.5	3.6	1,377
Primary	0.6	0.2	0.8	8,529
Secondary	0.2	0.0	0.2	4,086
More than secondary	0.5	0.0	0.5	642
Wealth quintile				
Lowest	1.0	0.7	1.6	2,741
Second	0.9	0.4	1.2	2,756
Middle	0.4	0.2	0.6	2,757
Fourth	0.5	0.1	0.6	2,966
Highest	0.5	0.0	0.5	3,414
Total	0.6	0.3	0.9	14,634

¹ Includes daily and occasional (less than daily) use

² Cigarettes include kreteks.

³ Includes pipes full of tobacco, cigars, cheroots, cigarillos, and water pipes

Table 3.10.2 Tobacco smoking: Men

Percentage of men age 15-49 who smoke various tobacco products, and percent distribution of men by smoking frequency, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who smoke: ¹			Smoking frequency			Total	Number of men
	Cigarettes ²	Other type of tobacco ³	Any type of tobacco	Daily smoker	Occasional smoker ⁴	Non-smoker		
Age								
15-19	0.3	0.0	0.3	0.2	0.1	99.7	100.0	1,526
20-24	1.7	0.3	1.8	0.9	1.0	98.1	100.0	960
25-29	6.8	0.1	6.8	3.3	3.5	93.2	100.0	710
30-34	9.4	0.4	9.4	7.4	2.1	90.6	100.0	835
35-39	12.9	0.2	12.9	9.6	3.3	87.1	100.0	793
40-44	15.5	0.2	15.5	11.2	4.3	84.5	100.0	575
45-49	15.0	0.3	15.3	11.4	3.9	84.7	100.0	447
Residence								
Urban	6.8	0.2	6.9	4.7	2.2	93.0	100.0	1,115
Rural	7.0	0.2	7.0	5.0	2.0	93.0	100.0	4,731
Province								
City of Kigali	7.5	0.2	7.5	5.8	1.7	92.5	100.0	879
South	9.6	0.2	9.6	7.4	2.2	90.4	100.0	1,239
West	4.4	0.0	4.4	2.6	1.9	95.6	100.0	1,268
North	4.3	0.3	4.5	2.4	2.3	95.4	100.0	886
East	8.0	0.2	8.0	5.8	2.2	92.0	100.0	1,574
Education								
No education	21.3	1.4	21.3	14.9	6.4	78.7	100.0	420
Primary	7.4	0.1	7.4	5.5	2.0	92.6	100.0	3,569
Secondary	3.0	0.0	3.0	1.8	1.3	97.0	100.0	1,562
More than secondary	1.7	0.0	1.7	0.6	1.4	98.0	100.0	295
Wealth quintile								
Lowest	15.2	0.4	15.4	10.9	4.5	84.6	100.0	924
Second	8.2	0.3	8.2	5.9	2.3	91.8	100.0	1,076
Middle	5.1	0.2	5.1	3.6	1.6	94.9	100.0	1,227
Fourth	5.1	0.1	5.1	3.7	1.4	94.9	100.0	1,278
Highest	3.6	0.1	3.6	2.4	1.3	96.3	100.0	1,342
Total 15-49	6.9	0.2	7.0	4.9	2.1	93.0	100.0	5,846
50-59	23.1	2.0	24.6	20.4	4.2	75.4	100.0	667
Total 15-59	8.6	0.4	8.8	6.5	2.3	91.2	100.0	6,513

¹ Includes daily and occasional (less than daily) use

² Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks

³ Includes pipes, cigars, cheroots, cigarillos, and water pipes

⁴ Occasional refers to less often than daily use.

Table 3.11 Average number of cigarettes smoked daily: Men

Among men age 15-49 who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Average number of cigarettes smoked per day ¹					Don't know/missing	Total	Number of respondents who smoke cigarettes daily ¹
	<5	5-9	10-14	15-24	≥25			
Age								
15-19	*	*	*	*	*	*	*	3
20-24	*	*	*	*	*	*	*	8
25-29	*	*	*	*	*	*	*	23
30-34	65.2	17.9	9.2	7.7	0.0	0.0	100.0	62
35-39	68.9	25.7	3.3	2.0	0.0	0.0	100.0	76
40-44	72.5	18.6	8.9	0.0	0.0	0.0	100.0	64
45-49	(62.4)	(22.6)	(3.7)	(8.4)	(3.0)	(0.0)	(100.0)	51
Residence								
Urban	71.2	12.8	13.4	2.6	0.0	0.0	100.0	52
Rural	66.6	24.2	4.2	4.3	0.6	0.0	100.0	235
Province								
City of Kigali	(70.8)	(11.4)	(13.5)	(4.3)	(0.0)	(0.0)	(100.0)	51
South	73.6	21.8	3.0	1.6	0.0	0.0	100.0	92
West	(64.1)	(30.2)	(5.7)	(0.0)	(0.0)	(0.0)	(100.0)	32
North	*	*	*	*	*	*	*	21
East	58.1	25.8	6.0	8.5	1.6	0.0	100.0	92
Education								
No education	67.9	18.9	9.3	4.0	0.0	0.0	100.0	62
Primary	66.4	23.7	5.2	3.9	0.8	0.0	100.0	196
Secondary	(75.1)	(20.1)	(0.0)	(4.8)	(0.0)	(0.0)	(100.0)	28
More than secondary	*	*	*	*	*	*	*	2
Wealth quintile								
Lowest	75.3	20.3	2.1	2.4	0.0	0.0	100.0	101
Second	66.7	23.3	3.4	6.7	0.0	0.0	100.0	64
Middle	(60.2)	(33.7)	(6.0)	(0.0)	(0.0)	(0.0)	(100.0)	43
Fourth	(58.1)	(19.4)	(18.3)	(4.2)	(0.0)	(0.0)	(100.0)	48
Highest	(67.5)	(14.7)	(4.2)	(8.8)	(4.7)	(0.0)	(100.0)	32
Total 15-49	67.4	22.2	5.9	4.0	0.5	0.0	100.0	287
50-59	72.1	22.5	5.3	0.0	0.0	0.0	100.0	126
Total 15-59	68.9	22.3	5.7	2.8	0.4	0.0	100.0	413

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks

Table 3.12 Smokeless tobacco use and any tobacco use

Percentage of women and men age 15-49 who currently use smokeless tobacco, according to type of tobacco product, and percentage who use any type of tobacco, Rwanda DHS 2019-20

Tobacco product	Women	Men
Snuff, by mouth	0.4	0.0
Snuff, by nose	0.0	0.1
Chewing tobacco	0.4	0.0
Any type of smokeless tobacco ¹	0.8	0.1
Any type of tobacco ²	1.5	7.0
Number	14,634	5,846

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily).

¹ Includes snuff by mouth, snuff by nose, chewing tobacco, and betel quid with tobacco

² Includes all types of smokeless tobacco shown in this table along with cigarettes, kreteks, pipes, cigars, cheroots, cigarillos, and water pipes

MARRIAGE AND SEXUAL ACTIVITY

Key Findings

- **Current marital status:** 51% of women and 49% of men age 15-49 are currently in union.
- **Polygyny:** 8% of currently married women report that their husband has multiple wives.
- **Age at first marriage:** The median age at first marriage among women age 25-49 is 22.8 years. Men marry later than women, with the median age at first marriage among men age 30-59 being 25.8 years.
- **Sexual initiation:** The median age at first sexual intercourse among women age 25-49 is 20.7 years, while the median age among men age 25-59 is 22.2 years.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. However, the timing and circumstances of marriage and sexual activity also have profound consequences for women's and men's lives.

4.1 MARITAL STATUS

Currently married

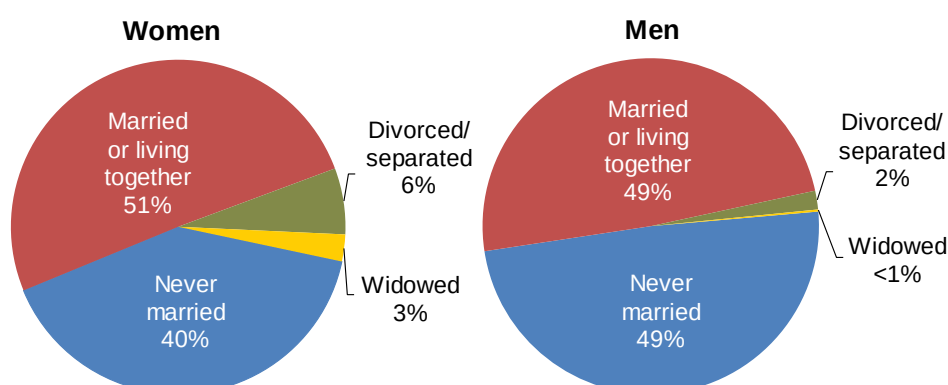
Women and men who report being married or living together with a partner as though married at the time of the survey.

Sample: Women and men age 15-49

Fifty-one percent of women and 49% of men are currently married or living together with a partner. By age 45-49, only 6% of women and 2% of men have never been married (**Table 4.1** and **Figure 4.1**). Overall, women are more likely than men to be divorced, separated, or widowed. Women are less likely to be single; 40% of women and 49% of men have never been married.

Figure 4.1 Marital status

Percent distribution of women and men age 15-49



Trends: Overall, the percentage of women and men who are currently in union is consistent with the percentage in 2014-15, when 52% of women and 50% of men were in union.

4.2 POLYGyny

Polygyny

Women who report that their husband or partner has other wives are considered to be in a polygynous marriage.

Sample: Currently married women age 15-49

Eight percent of women age 15-49 reported that their husband or partner has other wives, while 3% of men age 15-49 reported having more than one wife (Table 4.2.1 and Table 4.2.2).

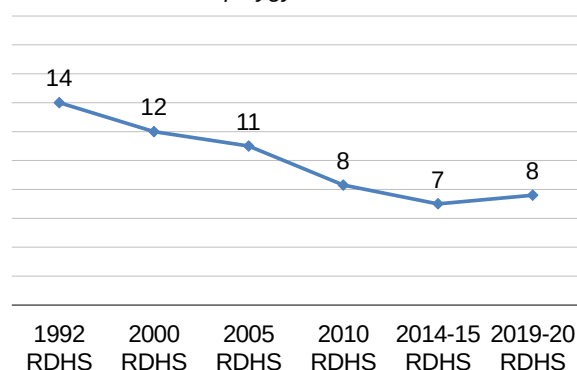
Trends: Eight percent of currently married women are in a polygynous union, as compared with 14% in 1992 and 7% in 2014-15 (Figure 4.2).

Patterns by background characteristics

- Eight percent of rural women have one or more co-wives, compared with 6% of urban women (Table 4.2.1).
- By province, the percentage of women with one or more co-wives is highest in South and East (9% each) and lowest in North (4%) (Table 4.2.1).
- Women with no education are much more likely to have co-wives (12%) than women who have more than a secondary education (2%).
- Twelve percent of women in the lowest wealth quintile report that they have one or more co-wives, as compared with 5% of women in the highest quintile.
- The percentage of men with two or more wives is higher in City of Kigali (4%) than in the other provinces (Table 4.2.2).
- Men with no education or a primary education are more likely to have two or more wives (3% each) than men with more than a secondary education (0%).

Figure 4.2 Trends in polygyny

Percentage of married women age 15-49 in a polygynous union



4.3 AGE AT FIRST MARRIAGE

Median age at first marriage

Age by which half of respondents have been married.

Sample: Women age 20-49, 25-49, and 30-49 and men age 20-49, 25-49, 30-49, 20-59, 25-59, and 30-59

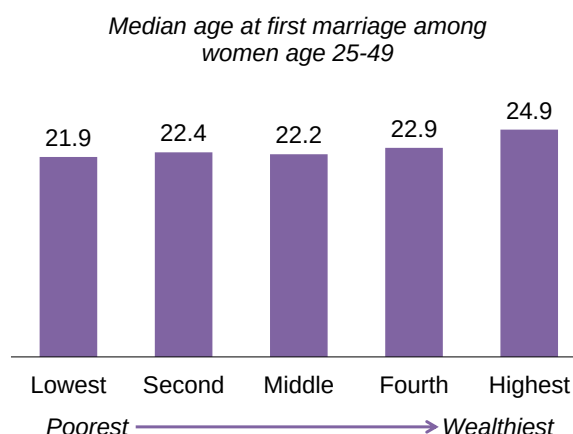
Median ages at first marriage are 22.8 years and 22.5 years among women age 25-49 and 30-49, respectively. The median age at first marriage is 25.6 years among men age 30-49, while the median age is 25.8 years among men age 30-59. These findings corroborate the fact that women tend to marry earlier than men. Nine percent of women age 25-49 and only 3% of men age 30-49 marry before their 18th birthday (Table 4.3).

Trends: The median age at first marriage among women age 25-49 has increased slightly since 2014-15, from 21.9 years to 22.8 years. Within the same age group, the percentage of women marrying before age 18 has declined from 14% to 9%. The percentage of men age 30-49 marrying before age 18 has not changed since 2014-15 (3%).

Patterns by background characteristics

- Rural women age 25-49 marry at younger ages than their urban counterparts (22.5 years versus 24.8 years) (**Table 4.4**).
- Women in City of Kigali marry at a much later age (24.9 years) than women in East (21.9 years).
- Women in the lowest wealth quintile marry 3 years earlier than women in the highest quintile (21.9 years versus 24.9 years) (**Figure 4.3**).

Figure 4.3 Women's median age at marriage by wealth



4.4 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse.

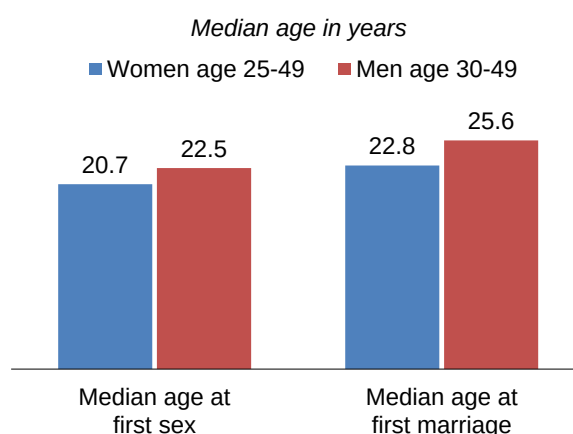
Sample: Women age 20-49, 25-49, and 30-49 and men age 20-49, 25-49, 30-49, 20-59, 25-59, and 30-59

The median age at first sexual intercourse among women age 30-49 in Rwanda is 20.6 years, while the median age among men is 22.5 years. On average, women initiate sexual intercourse 1.9 years earlier than men (**Table 4.5**).

The median age at first sexual intercourse is 3.1 years earlier than the median age at first marriage among men age 30-49, while the median age at first sexual intercourse is 1.9 years earlier than the median age at first marriage among women (**Figure 4.4**). This indicates that the gap between age at initiation of sexual intercourse and age at first marriage is longer among men than among women.

Two percent of women age 25-49 initiate sexual intercourse by age 15 and 20% by age 18. By age 20, 42% of women have had sexual intercourse (**Table 4.5**). Three percent of men age 25-49 have their first sexual intercourse by age 15, and 31% of men have had sexual intercourse by age 20.

Figure 4.4 Median age at first sex and first marriage



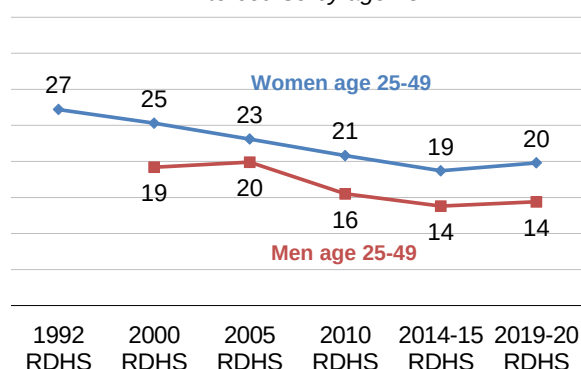
Trends: The percentage of women age 25-49 who have had sexual intercourse by age 18 has changed only minimally since 2014-15 (19% versus 20%), and the percentage among men has not changed (14%) (**Figure 4.5**). The median age at first sexual intercourse among women age 25-49 has decreased since 2014-15 from 21.8 years to 20.7 years.

Patterns by background characteristics

- There are only minimal differences by residence in median age at first sexual intercourse. Rural women age 25-49 initiate sexual intercourse 0.3 years earlier than urban women. In contrast, urban men age 25-59 initiate sexual intercourse 0.5 years earlier than their rural counterparts (**Table 4.6**).
- There is very little variation by province in the median age at first sexual intercourse among either women or men.
- Women with no education engage in sexual intercourse earlier than women with more than a secondary education (19.1 years versus 24.8 years).
- Women in the lowest wealth quintile initiate sexual intercourse earlier than women in the highest quintile (19.7 years versus 22.0 years).

Figure 4.5 Trends in early sexual intercourse

Percentage who had first sexual intercourse by age 18



4.5 RECENT SEXUAL ACTIVITY

The survey collected data on recent sexual activity. Overall, nearly half of women and men age 15-49 (48% and 49%, respectively) reported having sexual intercourse during the 4 weeks before the survey. Twenty-seven percent of women and 30% of men reported that they have not had sexual intercourse. For more information on recent sexual activity, see **Tables 4.7.1** and **4.7.2**.

LIST OF TABLES

For more information on marriage and sexual activity, see the following tables:

- Table 4.1** Current marital status
- Table 4.2.1** Number of women's co-wives
- Table 4.2.2** Number of men's wives
- Table 4.3** Age at first marriage
- Table 4.4** Median age at first marriage by background characteristics
- Table 4.5** Age at first sexual intercourse
- Table 4.6** Median age at first sexual intercourse according to background characteristics
- Table 4.7.1** Recent sexual activity: Women
- Table 4.7.2** Recent sexual activity: Men

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Rwanda DHS 2019-20

Age	Marital status						Total	Percent- age of respond- ents currently in union	Number of respond- ents
	Never married	Married	Living together	Divorced	Separated	Widowed			
WOMEN									
15-19	97.4	0.0	2.2	0.1	0.2	0.0	100.0	2.3	3,258
20-24	64.5	7.6	23.4	1.2	3.0	0.2	100.0	31.1	2,414
25-29	29.1	29.3	33.3	2.2	5.5	0.6	100.0	62.6	2,073
30-34	13.2	49.2	28.3	2.8	5.4	1.1	100.0	77.5	2,118
35-39	6.8	61.5	20.1	4.1	5.0	2.5	100.0	81.6	2,072
40-44	6.0	62.2	14.3	5.8	5.3	6.4	100.0	76.5	1,488
45-49	5.7	55.4	11.5	4.7	6.6	16.2	100.0	66.8	1,211
Total 15-49	40.4	32.1	18.4	2.5	3.9	2.6	100.0	50.6	14,634
MEN									
15-19	99.8	0.0	0.2	0.0	0.0	0.0	100.0	0.2	1,526
20-24	85.7	1.9	11.5	0.3	0.4	0.0	100.0	13.5	960
25-29	46.4	16.8	34.0	0.8	1.9	0.0	100.0	50.9	710
30-34	15.3	47.2	35.6	0.3	1.3	0.4	100.0	82.8	835
35-39	5.7	64.6	26.2	1.2	2.0	0.4	100.0	90.7	793
40-44	1.9	72.5	20.3	2.3	2.4	0.6	100.0	92.8	575
45-49	1.9	72.7	21.7	0.9	1.9	0.9	100.0	94.4	447
Total 15-49	49.0	30.6	18.4	0.7	1.1	0.2	100.0	48.9	5,846
50-59	2.1	76.6	16.3	0.4	2.3	2.2	100.0	93.0	667
Total 15-59	44.2	35.3	18.2	0.6	1.3	0.4	100.0	53.4	6,513

Table 4.2.1 Number of women's co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, and percentage of currently married women with one or more co-wives, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Number of co-wives				Total	Percentage with one or more co-wives ¹	Number of women
	0	1	2+	Don't know			
Age							
15-19	93.1	6.9	0.0	0.0	100.0	6.9	73
20-24	93.2	5.4	0.8	0.6	100.0	6.2	750
25-29	93.1	5.4	0.9	0.6	100.0	6.3	1,297
30-34	91.9	5.5	1.6	1.0	100.0	7.1	1,642
35-39	91.3	6.1	1.7	0.8	100.0	7.8	1,690
40-44	89.9	7.4	2.1	0.6	100.0	9.5	1,139
45-49	89.4	6.3	2.9	1.4	100.0	9.1	809
Residence							
Urban	92.1	5.4	1.0	1.5	100.0	6.4	1,288
Rural	91.4	6.1	1.7	0.7	100.0	7.9	6,114
Province							
City of Kigali	92.4	4.9	1.4	1.3	100.0	6.3	1,006
South	90.2	6.8	2.3	0.7	100.0	9.1	1,559
West	92.1	6.3	1.2	0.4	100.0	7.4	1,628
North	94.6	2.9	1.2	1.2	100.0	4.1	1,201
East	89.9	7.6	1.8	0.7	100.0	9.4	2,007
Education							
No education	86.8	9.5	2.7	1.0	100.0	12.2	952
Primary	91.4	6.1	1.7	0.8	100.0	7.8	4,834
Secondary	94.2	4.4	0.8	0.7	100.0	5.2	1,250
More than secondary	97.6	1.3	0.3	0.9	100.0	1.6	365
Wealth quintile							
Lowest	86.4	8.6	3.5	1.5	100.0	12.1	1,443
Second	90.6	6.7	2.2	0.6	100.0	8.8	1,397
Middle	92.2	6.3	0.8	0.6	100.0	7.2	1,509
Fourth	93.4	4.9	0.9	0.7	100.0	5.8	1,520
Highest	94.8	3.8	0.7	0.8	100.0	4.5	1,532
Total	91.5	6.0	1.6	0.8	100.0	7.6	7,401

¹ Excludes women who responded "don't know" when asked if their husband has other wives

Table 4.2.2 Number of men's wives

Percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Number of wives		Total	Number of men
	1	2+		
Age				
15-19	*	*	100.0	3
20-24	99.3	0.7	100.0	130
25-29	99.3	0.7	100.0	361
30-34	98.0	2.0	100.0	691
35-39	97.8	2.2	100.0	719
40-44	95.5	4.5	100.0	534
45-49	95.3	4.7	100.0	422
Residence				
Urban	97.0	3.0	100.0	466
Rural	97.4	2.6	100.0	2,394
Province				
City of Kigali	96.3	3.7	100.0	384
South	98.1	1.9	100.0	584
West	96.7	3.3	100.0	634
North	98.2	1.8	100.0	477
East	97.2	2.8	100.0	782
Education				
No education	96.8	3.2	100.0	339
Primary	97.1	2.9	100.0	2,022
Secondary	97.8	2.2	100.0	360
More than secondary	100.0	0.0	100.0	139
Wealth quintile				
Lowest	96.6	3.4	100.0	541
Second	98.4	1.6	100.0	545
Middle	96.8	3.2	100.0	624
Fourth	98.2	1.8	100.0	604
Highest	96.5	3.5	100.0	546
Total 15-49	97.3	2.7	100.0	2,860
50-59	95.3	4.7	100.0	620
Total 15-59	96.9	3.1	100.0	3,480

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 4.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Rwanda DHS 2019-20

	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
Current age	15	18	20	22	25			
WOMEN								
15-19	0.1	na	na	na	na	97.4	3,258	a
20-24	0.3	5.5	17.4	na	na	64.5	2,414	a
25-29	0.5	5.3	18.6	35.6	58.6	29.1	2,073	23.9
30-34	0.7	6.0	18.5	35.9	60.1	13.2	2,118	23.7
35-39	0.7	8.8	23.3	44.0	67.0	6.8	2,072	22.7
40-44	2.0	14.8	35.7	53.6	71.2	6.0	1,488	21.5
45-49	1.9	16.1	32.1	53.6	77.3	5.7	1,211	21.6
20-49	0.9	8.5	22.9	na	na	24.1	11,376	a
25-49	1.0	9.3	24.3	43.1	65.5	13.2	8,962	22.8
30-49	1.2	10.5	26.1	45.3	67.6	8.4	6,890	22.5
MEN								
15-19	0.0	na	na	na	na	99.8	1,526	a
20-24	0.0	0.4	2.9	na	na	85.7	960	a
25-29	0.2	1.4	4.6	14.7	38.9	46.4	710	a
30-34	0.6	2.3	5.5	16.6	39.7	15.3	835	26.1
35-39	0.1	3.0	9.0	19.3	45.4	5.7	793	25.5
40-44	0.5	3.3	9.6	24.6	50.1	1.9	575	25.0
45-49	0.2	2.0	7.2	18.5	45.3	1.9	447	25.5
20-49	0.3	2.0	6.2	na	na	31.1	4,320	a
25-49	0.3	2.4	7.1	18.4	43.4	15.5	3,360	a
30-49	0.4	2.7	7.7	19.4	44.6	7.2	2,650	25.6
20-59	0.2	2.0	6.5	na	na	27.2	4,987	a
25-59	0.3	2.4	7.4	18.3	42.6	13.3	4,027	a
30-59	0.3	2.7	8.0	19.1	43.4	6.2	3,317	25.8

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na = Not applicable due to censoring
a = Omitted because less than 50% of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.4 Median age at first marriage by background characteristics

Median age at first marriage among women age 25-49 and age 30-49, and median age at first marriage among men age 25-59 and age 30-59, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women age		Men age	
	25-49	30-49	25-59	30-59
Residence				
Urban	24.8	24.4	a	29.0
Rural	22.5	22.2	a	25.4
Province				
City of Kigali	24.9	24.7	a	29.4
South	23.5	23.3	a	26.8
West	22.6	22.2	a	24.9
North	22.1	21.8	24.5	24.5
East	21.9	21.7	a	25.0
Education				
No education	21.1	21.1	24.8	24.9
Primary	22.2	22.2	a	25.3
Secondary	a	25.3	a	28.7
More than secondary	a	27.3	a	a
Wealth quintile				
Lowest	21.9	21.9	24.9	24.9
Second	22.4	22.2	24.8	24.7
Middle	22.2	22.0	a	25.1
Fourth	22.9	22.5	a	26.1
Highest	24.9	24.5	a	28.3
Total	22.8	22.5	a	25.8

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
a = Omitted because less than 50% of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Rwanda DHS 2019-20

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number	Median age at first intercourse
	15	18	20	22	25			
WOMEN								
15-19	4.5	na	na	na	na	83.5	3,258	a
20-24	2.9	20.8	43.5	na	na	35.7	2,414	a
25-29	2.0	16.0	38.4	60.1	80.7	10.5	2,073	21.0
30-34	2.2	16.7	35.8	57.0	78.8	3.7	2,118	21.3
35-39	1.8	18.6	38.2	61.4	80.5	2.2	2,072	21.0
40-44	3.0	26.0	52.8	71.2	83.8	1.2	1,488	19.8
45-49	1.7	26.4	50.4	70.6	87.6	0.9	1,211	20.0
20-49	2.3	20.0	42.1	na	na	10.8	11,376	a
25-49	2.1	19.8	41.7	62.9	81.7	4.1	8,962	20.7
30-49	2.2	21.0	42.8	63.8	81.9	2.2	6,890	20.6
15-24	3.8	na	na	na	na	63.1	5,672	a
MEN								
15-19	10.1	na	na	na	na	81.6	1,526	a
20-24	5.4	21.9	40.4	na	na	40.9	960	a
25-29	5.3	21.1	37.6	53.5	77.4	12.3	710	21.5
30-34	2.6	12.9	27.6	44.1	65.9	2.9	835	22.7
35-39	2.0	12.1	27.2	45.9	67.2	0.6	793	22.4
40-44	1.4	14.1	33.2	50.0	70.5	0.4	575	22.0
45-49	1.8	11.2	28.1	44.7	68.9	0.3	447	22.6
20-49	3.3	16.1	32.8	na	na	11.9	4,320	a
25-49	2.7	14.4	30.6	47.6	69.8	3.6	3,360	22.3
30-49	2.0	12.6	28.8	46.0	67.8	1.2	2,650	22.5
15-24	8.3	na	na	na	na	65.9	2,486	a
20-59	3.0	15.9	32.8	na	na	10.4	4,987	a
25-59	2.4	14.5	31.0	48.2	69.4	3.1	4,027	22.2
30-59	1.8	13.1	29.6	47.1	67.7	1.2	3,317	22.4

na = Not applicable due to censoring

a = Omitted because less than 50% of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.6 Median age at first sexual intercourse according to background characteristics

Median age at first sexual intercourse among women age 20-49, age 25-49, and age 30-49 and median age at first sexual intercourse among men age 25-59 and age 30-59, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women age			Men age	
	20-49	25-49	30-49	25-59	30-59
Residence					
Urban	a	20.9	20.9	21.8	22.0
Rural	a	20.6	20.6	22.3	22.4
Province					
City of Kigali	a	21.3	21.4	22.0	22.2
South	a	21.0	21.0	23.1	23.3
West	a	20.9	20.7	22.4	22.6
North	a	20.7	20.7	22.0	22.1
East	20.0	20.0	19.9	21.6	21.7
Education					
No education	19.1	19.1	19.1	21.8	21.9
Primary	a	20.5	20.6	22.1	22.3
Secondary	a	22.2	22.3	22.5	22.8
More than secondary	a	24.8	25.1	24.2	24.7
Wealth quintile					
Lowest	19.7	19.7	19.7	21.7	22.1
Second	a	20.5	20.4	21.8	22.0
Middle	a	20.5	20.5	22.4	22.5
Fourth	a	21.0	20.9	22.4	22.5
Highest	a	22.0	21.9	22.4	22.6
Total	a	20.7	20.6	22.2	22.4

a = Omitted because less than 50% of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Timing of last sexual intercourse			Never had sexual intercourse	Total	Number of women
	Within the past 4 weeks	Within 1 year ¹	One or more years			
Age						
15-19	3.4	4.9	8.2	83.5	100.0	3,258
20-24	33.3	14.3	16.7	35.7	100.0	2,414
25-29	60.7	14.4	14.5	10.5	100.0	2,073
30-34	72.1	12.8	11.4	3.7	100.0	2,118
35-39	74.7	11.9	11.2	2.2	100.0	2,072
40-44	69.0	12.1	17.7	1.2	100.0	1,488
45-49	59.5	9.3	30.2	0.9	100.0	1,211
Marital status						
Never married	4.1	10.6	18.5	66.8	100.0	5,914
Married or living together	89.0	8.2	2.8	0.0	100.0	7,401
Divorced/separated/ widowed	12.2	29.4	58.4	0.0	100.0	1,318
Marital duration²						
0-4 years	90.2	8.2	1.6	0.0	100.0	1,610
5-9 years	91.1	6.8	2.1	0.0	100.0	1,574
10-14 years	90.0	7.7	2.3	0.0	100.0	1,368
15-19 years	86.7	9.4	3.8	0.0	100.0	943
20-24 years	88.2	8.4	3.4	0.0	100.0	778
25+ years	85.1	8.1	6.9	0.0	100.0	500
Married more than once	86.3	10.5	3.2	0.0	100.0	630
Residence						
Urban	42.0	14.2	16.4	27.5	100.0	2,909
Rural	49.2	10.3	13.6	26.9	100.0	11,725
Province						
City of Kigali	44.4	14.2	15.7	25.7	100.0	2,166
South	48.3	10.7	14.5	26.4	100.0	3,065
West	47.7	10.1	13.6	28.6	100.0	3,174
North	49.9	10.1	12.8	27.1	100.0	2,226
East	48.2	10.9	14.2	26.8	100.0	4,003
Education						
No education	62.2	12.9	20.4	4.6	100.0	1,377
Primary	54.1	10.9	14.3	20.7	100.0	8,529
Secondary	29.7	10.1	12.0	48.2	100.0	4,086
More than secondary	49.0	14.8	12.5	23.7	100.0	642
Wealth quintile						
Lowest	48.6	13.1	19.0	19.3	100.0	2,741
Second	48.5	10.5	14.7	26.3	100.0	2,756
Middle	52.5	8.6	11.6	27.3	100.0	2,757
Fourth	49.7	10.2	12.0	28.1	100.0	2,966
Highest	41.2	12.6	13.7	32.5	100.0	3,414
Total	47.8	11.0	14.2	27.0	100.0	14,634

¹ Excludes women who had sexual intercourse within the last 4 weeks

² Excludes women who are not currently married

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Timing of last sexual intercourse			Never had sexual intercourse	Total	Number of men
	Within the past 4 weeks	Within 1 year ¹	One or more years			
Age						
15-19	1.6	4.7	12.1	81.6	100.0	1,526
20-24	18.5	17.2	23.4	40.9	100.0	960
25-29	55.5	13.9	18.4	12.3	100.0	710
30-34	80.1	10.3	6.6	2.9	100.0	835
35-39	85.9	8.7	4.8	0.6	100.0	793
40-44	87.5	8.3	3.9	0.4	100.0	575
45-49	86.4	10.0	3.3	0.3	100.0	447
Marital status						
Never married	4.3	13.1	21.3	61.3	100.0	2,867
Married or living together	93.9	5.8	0.4	0.0	100.0	2,860
Divorced/separated/ widowed	22.4	35.8	41.7	0.0	100.0	119
Marital duration²						
0-4 years	95.8	4.1	0.2	0.0	100.0	632
5-9 years	93.6	6.3	0.1	0.0	100.0	653
10-14 years	95.0	4.6	0.4	0.0	100.0	576
15-19 years	91.3	7.8	1.0	0.0	100.0	372
20-24 years	91.9	7.8	0.4	0.0	100.0	279
25+ years	92.3	7.4	0.2	0.0	100.0	74
Married more than once	93.8	5.8	0.4	0.0	100.0	275
Residence						
Urban	43.3	15.2	14.1	27.3	100.0	1,115
Rural	49.7	8.7	10.8	30.7	100.0	4,731
Province						
City of Kigali	43.3	17.8	12.0	26.9	100.0	879
South	47.7	7.7	13.6	31.0	100.0	1,239
West	50.4	7.3	11.4	30.9	100.0	1,268
North	51.7	9.5	9.0	29.9	100.0	886
East	48.7	9.8	10.9	30.5	100.0	1,574
Education						
No education	76.5	7.8	8.1	7.6	100.0	420
Primary	55.1	9.6	10.2	25.2	100.0	3,569
Secondary	25.8	10.4	13.8	50.1	100.0	1,562
More than secondary	49.3	15.8	19.2	15.6	100.0	295
Wealth quintile						
Lowest	57.7	7.9	10.2	24.1	100.0	924
Second	48.6	8.4	11.4	31.5	100.0	1,076
Middle	50.2	7.6	10.7	31.4	100.0	1,227
Fourth	46.6	11.1	11.3	31.0	100.0	1,278
Highest	42.2	13.7	13.1	31.0	100.0	1,342
Total 15-49	48.5	10.0	11.5	30.1	100.0	5,846
50-59	82.2	11.1	5.7	0.9	100.0	667
Total 15-59	52.0	10.1	10.9	27.1	100.0	6,513

¹ Excludes men who had sexual intercourse within the last 4 weeks

² Excludes men who are not currently married

Key Findings

- **Total fertility rate:** The total fertility rate for the 3 years preceding the survey is 4.1 children per woman (3.4 in urban areas and 4.3 in rural areas).
- **Fertility patterns:** Fertility generally decreases with increasing education and wealth.
- **Age at first birth:** The median age at first birth among women age 25-49 is 23 years. This means that half of women age 25-49 give birth for the first time before age 23.
- **Birth intervals:** The median birth interval in Rwanda is 40.8 months. Fifteen percent of non-first births occur within 2 years after the preceding birth. Twenty-six percent of births occur 24-35 months after the previous birth, and 25% occur 5 or more years after.
- **Teenage childbearing:** 5% of women age 15-19 have begun childbearing; 4% have given birth, and 1% are pregnant with their first child.

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality (Adhikari R 2010).

This chapter describes the current level of fertility in Rwanda and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (due to postpartum amenorrhea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

5.1 CURRENT FERTILITY

Total fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.

Sample: Women age 15-49

The total fertility rate (TFR) in Rwanda is 4.1 children per woman. The age-specific fertility rate in the 15-19 age group is 32 births per 1,000 women; the rate peaks in the 25-29 age group (202 births per 1,000 women) and drops thereafter, to 11 births per 1,000 women in the 45-49 age group. Age-specific fertility rates are lower in urban areas than in rural areas among women in all age groups (**Table 5.1** and **Table 5.3**). On average, rural women have 0.9 more children than urban women (4.3 versus 3.4 children) (**Table 5.1**).

Trends: There has been a gradual decline in the TFR over time, from 6.2 children per woman in 1992 to 4.1 in 2019-20. There has been a similar decline among women in both rural areas (from 6.3 to 4.3) and urban areas (from 4.5 to 3.4) during the same period (**Figure 5.1**). In the last three RDHS surveys (2010, 2014-15, and 2019-20), the age-specific fertility rate has been highest among women age 25-29 (**Figure 5.2**).

Patterns by background characteristics

- By province, the TFR is highest in West (4.5 children per woman) and lowest in City of Kigali (3.6 children per woman) (**Table 5.2** and **Figure 5.3**).

Figure 5.1 Trends in fertility by residence

TFR for the 3 years before each survey

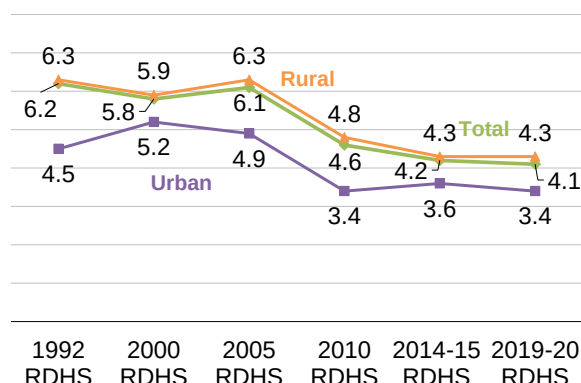


Figure 5.2 Trends in age-specific fertility

Births per 1,000 women

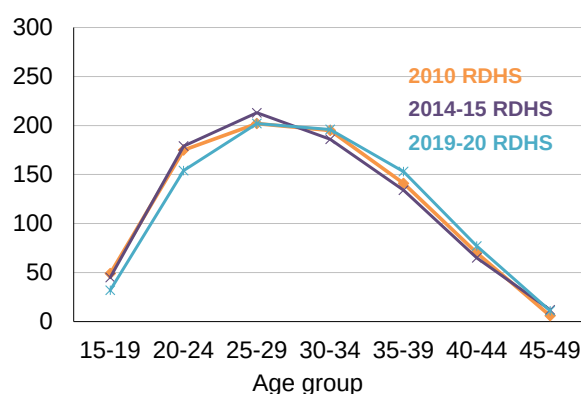
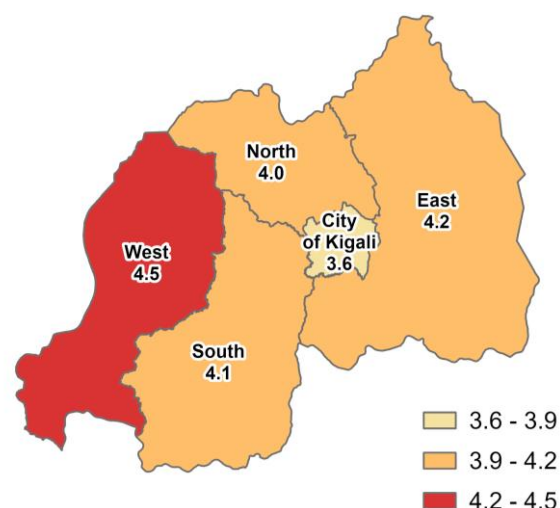


Figure 5.3 Fertility by province

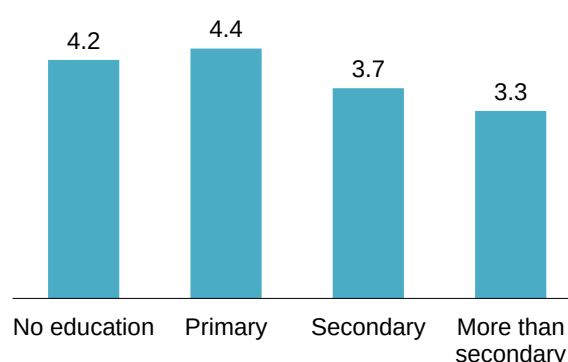
TFR for the 3 years before the survey



- The TFR is higher among women with a primary education and no education (4.4 children and 4.2 children, respectively) than among women with a secondary education and more than a secondary education (3.7 children and 3.3 children, respectively) (**Figure 5.4**).
- The number of children per woman declines with increasing wealth. Women in the lowest wealth quintile have an average of 4.9 children, as compared with 3.4 children among those in the highest quintile.

Figure 5.4 Fertility by mother's education

TFR for the 3 years before the survey



5.2 CHILDREN EVER BORN AND LIVING

The 2019-20 RDHS also collected information on the number of children ever born to women age 15-49 and those still surviving by the time of the survey. Women have a mean of 2.14 children overall and a mean of 1.95 surviving children (a difference of 0.19). Among married women, the corresponding numbers are 3.39 children and 3.12 children (a difference of 0.27). On average, women age 45-49 have given birth to 5.30 children, of whom 4.47 survived to the time of the survey (**Table 5.4**). Of the 5.69 children on average born to currently married women age 45-49, 4.88 survived to the time of the survey. In Rwanda, 2% of currently married women age 45-49 have never given birth. Since voluntary childlessness is rare, this is often viewed as a measure of primary sterility (**Table 5.4**).

5.3 BIRTH INTERVALS

Median birth interval

Number of months since the preceding birth by which half of children are born.

Sample: Non-first births in the 5 years before the survey

Short birth intervals, particularly those less than 24 months, place newborns and their mothers at increased health risk. The median birth interval in Rwanda is 40.8 months. Only 15% of non-first births occur within 2 years after the preceding birth (**Table 5.5**). Twenty-six percent of births occur 24-35 months after the previous birth, and 25% occur 5 or more years after (**Figure 5.5**).

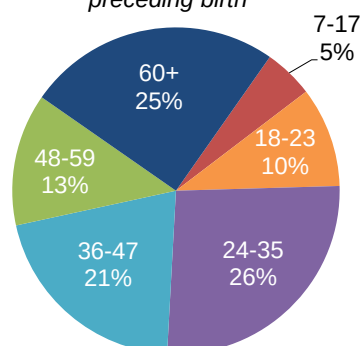
Trends: Median birth intervals have increased since 1992, particularly in the past 10 years. Median intervals were 32.2 months in 2010, 38.5 months in 2014-15, and 40.8 months in 2019-20.

Patterns by background characteristics

- Births to older women occur after longer intervals than births to younger women. The median birth interval among women age 40-49 is more than 15 months longer than the interval among women age 20-29 (51.2 months versus 35.6 months) (**Table 5.5**).

Figure 5.5 Birth intervals

Percent distribution of non-first births by number of months since the preceding birth



- The median birth interval is more than 10 months longer if the child from the preceding birth is living than if the child has died. In contrast, there is no difference in the median birth interval by sex of the preceding child (**Table 5.5**).

5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhea

The period of time after the birth of a child and before the resumption of menstruation.

Postpartum abstinence

The period of time after the birth of a child and before the resumption of sexual intercourse.

Postpartum insusceptibility

The period of time during which a woman is considered not at risk of pregnancy because she is postpartum amenorrheic and/or abstaining from sexual intercourse postpartum.

Sample: Women age 15-49

Median duration of postpartum amenorrhea

Number of months after childbirth by which time half of women have begun menstruating.

Sample: Women who gave birth in the 3 years before the survey

Median duration of postpartum insusceptibility

Number of months after childbirth by which time half of women are no longer protected against pregnancy by either postpartum amenorrhea or abstinence from sexual intercourse.

Sample: Women who gave birth in the 3 years before the survey

Postpartum amenorrhea refers to the interval between the birth of a child and the resumption of menstruation. The length and intensity of breastfeeding influence the duration of amenorrhea, which offers protection from conception. Postpartum abstinence refers to the period between childbirth and the time when a woman resumes sexual activity.

Following births in the 3 years preceding the survey, the median duration of postpartum amenorrhea is 14.1 months. Overall, women are insusceptible to pregnancy after childbirth (still amenorrheic and/or still abstaining) for a median duration of 15.6 months (**Table 5.6**).

Trends: In Rwanda, the median duration of postpartum amenorrhea declined steadily between 1992 and 2014-15, from 16.6 months to 10.5 months, before increasing to 14.1 months in 2019-20. The median duration of insusceptibility has followed a similar pattern.

Patterns by background characteristics

- By province, the duration of postpartum insusceptibility is longest in North (17.2 months) and shortest in City of Kigali (12.3 months).
- The duration of postpartum insusceptibility decreases with increasing education, from 17.0 months among women with no education to 8.7 months among those with more than a secondary education (**Table 5.7**).
- The duration of insusceptibility also decreases with increasing wealth, from 18.9 months among women in the lowest wealth quintile to 9.6 months among those in the highest quintile.

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrheic and have not had a menstrual period in the 6 months before the survey, if they report being menopausal or having had a hysterectomy, or if they have never menstruated.

Sample: Women age 30-49

Women who have reached menopause are no longer able to become pregnant. In Rwanda, 9% of women age 30-49 are menopausal. The percentage of menopausal women increases with age, from 4% among those age 30-34 to 41% among those age 48-49 (**Table 5.8**).

5.5 AGE AT FIRST BIRTH

Median age at first birth

Age by which half of women have had their first child.

Sample: Women age 20-49 and 25-49

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and well-being of the mother and child. In Rwanda, the median age at first birth among women age 25-49 is 23 years. This means that half of women age 25-49 give birth for the first time before age 23 (**Table 5.9**). Sixty-seven percent of women have given birth by age 25.

Patterns by background characteristics

- Urban women age 25-49 begin childbearing 1.1 years later than their rural counterparts (23.9 years versus 22.8 years) (**Table 5.10**).
- By province, the median age at first birth ranges from 22.3 years among women in East to 24.1 years among women in City of Kigali.
- Women with no education begin childbearing about 3 years earlier than women with a secondary education (21.8 years versus 24.7 years).
- Women in the highest wealth quintile start childbearing later than women in the lowest quintile (24.8 years versus 22.2 years).

5.6 TEENAGE CHILDBEARING

Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child.

Sample: Women age 15-19

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both the mother and the child. Childbearing during adolescence is known to have adverse social consequences, particularly regarding educational attainment, as women who become mothers in their teens are more likely to drop out of school. In Rwanda, only 5% of women age 15-19 have begun childbearing; 4% have given birth, and 1% are pregnant with their first child (**Table 5.11**).

Trends: The percentage of teenagers who have given birth or are pregnant with their first child has declined since 2014-15, from 7% to 5%.

Patterns by background characteristics

- The percentage of women age 15-19 who have begun childbearing increases with age, from less than 1% among those age 15 to 15% among those age 19.
- Teenage childbearing does not vary substantially by urban-rural residence (**Table 5.11**).
- By province, the percentage of teenagers who have begun childbearing is highest in East and South (6% each) and lowest in West and City of Kigali (4% each).
- Teenage childbearing is less common in the wealthiest households: 3% of women in the highest wealth quintile have begun childbearing, as compared with 8% of those in the lowest quintile.

The tendency to initiate sexual intercourse before age 15 is higher among men than women (10% versus 5%). Less than 1 percent of women age 15-19 were married by age 15, and less than 1% had given birth by that age. No men reported fathering a child before age 15 (**Table 5.12**).

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For more information on fertility levels and some of the determinants of fertility, see the following tables:

- **Table 5.1** **Current fertility**
- **Table 5.2** **Fertility by background characteristics**
- **Table 5.3** **Trends in age-specific fertility rates**
- **Table 5.4** **Children ever born and living**
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- **Table 5.10** **Median age at first birth**
- **Table 5.11** **Teenage pregnancy and motherhood**
- **Table 5.12** **Sexual and reproductive health behaviors before age 15**

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by residence, Rwanda DHS 2019-20

Age group	Residence		Total
	Urban	Rural	
10-14	[0]	[0]	[0]
15-19	22	34	32
20-24	110	168	154
25-29	180	210	202
30-34	170	202	196
35-39	137	156	153
40-44	57	81	77
45-49	[3]	[12]	[11]
TFR (15-49)	3.4	4.3	4.1
GFR	113	139	134
CBR	32.4	31.6	31.8

Notes: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates are for the period 1-36 months preceding the interview. Rates for the 10-14 age group are based on retrospective data from women age 15-17.

TFR: Total fertility rate, expressed per woman

GFR: General fertility rate, expressed per 1,000 women age 15-44

CBR: Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.4	5.5	4.4
Rural	4.3	6.0	5.1
Province			
City of Kigali	3.6	5.1	4.2
South	4.1	6.8	4.7
West	4.5	6.3	5.3
North	4.0	5.9	5.0
East	4.2	5.5	5.3
Education			
No education	4.2	5.4	5.6
Primary	4.4	6.1	4.9
Secondary	3.7	5.6	4.2
More than secondary	3.3	6.8	3.5
Wealth quintile			
Lowest	4.9	5.6	5.4
Second	4.4	6.3	5.1
Middle	4.2	6.5	5.1
Fourth	4.0	5.8	5.0
Highest	3.4	5.6	4.3
Total	4.1	5.9	5.0

Note: Total fertility rates are for the period 1-36 months prior to the interview.

Table 5.3 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, Rwanda DHS 2019-20

Age group	Number of years preceding survey			
	0-4	5-9	10-14	15-19
10-14	0	1	0	1
15-19	35	39	35	37
20-24	156	170	191	213
25-29	204	214	253	297
30-34	200	189	229	[272]
35-39	151	139	[181]	
40-44	74	[76]		
45-49	[11]			

Notes: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of the interview. For the 0-4 year period, rates for the 10-14 age group are based on retrospective data from women age 15-19.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Rwanda DHS 2019-20

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	96.2	3.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3,258	0.04	0.04
20-24	58.1	29.8	10.3	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,414	0.56	0.54
25-29	21.9	29.3	31.2	13.3	3.4	0.9	0.0	0.0	0.0	0.0	0.0	100.0	2,073	1.50	1.43
30-34	7.5	13.0	29.0	27.8	14.6	5.2	2.0	0.7	0.1	0.0	0.0	100.0	2,118	2.57	2.44
35-39	4.0	5.3	13.3	23.6	22.8	14.8	8.9	4.6	1.8	0.6	0.4	100.0	2,072	3.76	3.50
40-44	2.9	3.5	7.7	15.1	18.6	17.2	15.1	10.6	5.3	2.0	1.9	100.0	1,488	4.70	4.23
45-49	2.6	3.2	5.9	9.0	14.7	17.4	17.2	13.8	8.3	5.1	2.9	100.0	1,211	5.30	4.47
Total	36.3	13.1	13.5	11.8	8.9	6.2	4.5	3.0	1.5	0.7	0.5	100.0	14,634	2.14	1.95
CURRENTLY MARRIED WOMEN															
15-19	31.9	67.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	73	0.69	0.68
20-24	18.1	52.5	24.3	4.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	750	1.17	1.12
25-29	7.1	29.7	39.7	17.5	4.7	1.2	0.0	0.0	0.0	0.0	0.0	100.0	1,297	1.86	1.78
30-34	1.8	10.5	30.4	31.3	16.1	6.2	2.5	0.9	0.1	0.0	0.0	100.0	1,642	2.84	2.70
35-39	1.3	2.9	12.4	25.0	23.9	16.3	10.1	5.1	2.0	0.7	0.4	100.0	1,690	4.02	3.74
40-44	1.2	2.3	6.1	13.5	19.3	18.0	16.2	13.0	6.1	2.1	2.2	100.0	1,139	5.01	4.53
45-49	1.7	1.9	3.0	7.5	14.5	17.0	19.7	15.4	9.0	6.6	3.6	100.0	809	5.69	4.88
Total	4.5	14.8	20.3	19.1	14.4	9.9	7.5	5.0	2.4	1.2	0.8	100.0	7,401	3.39	3.12

Table 5.5 Birth intervals

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Mother's age									
15-19	*	*	*	*	*	*	100.0	3	*
20-29	7.2	13.6	30.1	24.5	14.0	10.6	100.0	1,513	35.6
30-39	4.6	9.3	26.9	19.7	12.9	26.5	100.0	3,655	41.4
40-49	2.5	6.5	18.9	19.0	12.2	40.9	100.0	1,034	51.2
Sex of preceding birth									
Male	5.0	9.6	25.9	20.7	13.2	25.5	100.0	3,130	41.3
Female	4.8	10.2	26.7	20.8	12.9	24.5	100.0	3,076	40.4
Survival of preceding birth									
Living	3.8	9.6	26.7	21.2	13.2	25.4	100.0	5,853	41.3
Dead	23.4	15.0	19.9	12.6	11.0	18.1	100.0	353	30.8
Birth order									
2-3	5.7	9.2	24.4	22.1	14.0	24.6	100.0	3,391	41.5
4-6	4.2	10.2	28.2	18.9	12.1	26.3	100.0	2,216	40.2
7+	3.4	13.0	30.4	19.6	11.1	22.5	100.0	598	37.3
Residence									
Urban	6.6	12.4	23.8	17.3	12.2	27.7	100.0	998	40.4
Rural	4.6	9.4	26.8	21.4	13.2	24.5	100.0	5,208	40.9
Province									
City of Kigali	8.1	13.4	23.3	17.1	11.4	26.8	100.0	816	39.3
South	3.5	7.8	22.9	22.9	15.2	27.7	100.0	1,222	44.2
West	5.6	12.1	30.9	21.1	9.7	20.6	100.0	1,579	36.6
North	3.7	7.8	25.9	20.2	16.3	26.1	100.0	930	43.1
East	4.5	8.9	26.2	20.9	13.8	25.8	100.0	1,659	41.7
Mother's education									
No education	3.6	7.7	30.4	19.4	13.6	25.4	100.0	889	40.7
Primary	4.1	10.0	25.5	21.1	13.0	26.3	100.0	4,279	42.0
Secondary	9.8	11.4	27.0	21.2	13.5	17.2	100.0	826	36.7
More than secondary	7.4	11.4	24.6	17.7	10.9	28.0	100.0	212	39.3
Wealth quintile									
Lowest	4.3	8.9	29.1	23.5	13.1	21.0	100.0	1,519	39.9
Second	4.8	8.8	28.6	22.4	10.9	24.4	100.0	1,221	39.8
Middle	3.6	9.2	26.4	20.5	15.9	24.4	100.0	1,248	42.3
Fourth	5.7	10.2	21.3	19.5	13.6	29.8	100.0	1,185	43.2
Highest	6.7	13.2	25.3	16.4	11.5	26.9	100.0	1,033	38.9
Total	4.9	9.9	26.3	20.7	13.1	25.0	100.0	6,206	40.8

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Rwanda DHS 2019-20

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible ¹	
<2	93.5	48.3	94.4	240
2-3	79.8	15.2	81.7	273
4-5	73.6	14.1	77.8	287
6-7	74.4	11.3	76.8	272
8-9	69.0	12.4	73.8	270
10-11	59.1	12.0	64.2	299
12-13	57.5	8.9	62.0	300
14-15	41.5	9.6	45.6	280
16-17	43.3	10.2	49.2	256
18-19	33.1	8.1	37.8	265
20-21	26.7	12.0	34.5	284
22-23	27.5	8.3	32.3	282
24-25	14.4	10.2	23.4	275
26-27	12.8	6.9	19.0	256
28-29	13.1	8.0	19.9	294
30-31	5.8	11.6	15.4	240
32-33	5.5	7.2	11.8	325
34-35	6.9	5.9	11.3	276
Total	40.6	11.9	45.8	4,974
Median	14.1	a	15.6	na
Mean	15.7	5.4	17.6	na

Note: Estimates are based on status at the time of the survey.

na = Not applicable

a = Omitted because less than 50% of the women began abstaining before reaching the beginning of the age group

¹ Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility ¹
Mother's age			
15-29	13.8	1.2	16.9
30-49	14.3	a	15.0
Residence			
Urban	8.8	(1.6)	11.4
Rural	15.0	a	16.2
Province			
City of Kigali	7.4	(1.7)	12.3
South	13.9	a	15.3
West	14.9	a	16.3
North	16.3	a	17.2
East	14.2	a	15.6
Mother's education			
No education	16.2	*	17.0
Primary	14.7	a	15.9
Secondary	13.6	a	15.5
More than secondary	8.4	*	8.7
Wealth quintile			
Lowest	17.8	a	18.9
Second	15.5	a	17.5
Middle	15.4	a	16.4
Fourth	12.8	a	14.0
Highest	7.9	(1.9)	9.6
Total	14.1	a	15.6

Note: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

a = Omitted because less than 50% of the women began abstaining before reaching the beginning of the age group

¹ Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, Rwanda DHS 2019-20

Age	Percentage menopausal ¹	Number of women
30-34	4.4	2,118
35-39	5.4	2,072
40-41	5.5	678
42-43	7.9	559
44-45	9.8	505
46-47	19.3	435
48-49	41.3	522
Total	9.2	6,890

¹ Percentage of women (1) who are not pregnant, (2) who have had a birth in the past 5 years and are not postpartum amenorrheic, and (3) for whom one of the following additional conditions applies: (a) their last menstrual period occurred 6 or more months preceding the survey, (b) they declared that they are in menopause or have had a hysterectomy, or (c) they have never menstruated

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Rwanda DHS 2019-20

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	0.2	na	na	na	na	96.2	3,258	a
20-24	0.4	5.5	19.1	na	na	58.1	2,414	a
25-29	0.2	4.2	17.3	39.3	64.0	21.9	2,073	23.1
30-34	0.4	4.5	15.6	33.6	63.1	7.5	2,118	23.6
35-39	0.0	4.9	16.9	36.9	66.5	4.0	2,072	23.1
40-44	0.6	8.2	25.5	47.6	72.7	2.9	1,488	22.2
45-49	0.8	7.8	22.0	45.9	74.0	2.6	1,211	22.4
20-49	0.4	5.6	18.9	na	na	19.1	11,376	a
25-49	0.4	5.6	18.8	39.7	67.1	8.6	8,962	23.0

na = Not applicable due to censoring

a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.10 Median age at first birth

Median age at first birth among women age 25-49, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women age 25-49
Residence	
Urban	23.9
Rural	22.8
Province	
City of Kigali	24.1
South	23.6
West	22.9
North	22.7
East	22.3
Education	
No education	21.8
Primary	22.6
Secondary	24.7
More than secondary	a
Wealth quintile	
Lowest	22.2
Second	22.7
Middle	22.6
Fourth	23.1
Highest	24.8
Total	23.0

a = Omitted because less than 50% of the women had a birth before reaching the beginning of the age group

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of women age 15-19 who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
Age				
15-17	0.9	0.7	1.6	2,158
15	0.1	0.0	0.1	810
16	0.6	0.4	1.0	680
17	2.1	1.8	3.9	667
18	6.7	1.9	8.6	504
19	12.1	3.3	15.4	596
Residence				
Urban	3.2	1.8	5.0	579
Rural	4.0	1.3	5.2	2,680
Province				
City of Kigali	2.5	2.0	4.4	397
South	3.7	1.8	5.5	681
West	3.3	0.8	4.1	694
North	3.5	1.1	4.6	497
East	5.0	1.4	6.4	989
Education				
No education	(8.6)	(16.5)	(25.1)	32
Primary	5.9	1.5	7.3	1,650
Secondary	1.6	1.0	2.6	1,564
More than secondary	*	*	*	13
Wealth quintile				
Lowest	5.7	2.0	7.7	497
Second	4.1	2.4	6.5	619
Middle	5.5	1.0	6.4	650
Fourth	2.5	1.4	4.0	678
Highest	2.2	0.5	2.7	814
Total	3.8	1.4	5.2	3,258

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.12 Sexual and reproductive health behaviors before age 15

Among women and men age 15-19, percentage who initiated sexual intercourse, were married, and had a live birth/fathered a child before age 15, according to sex, Rwanda DHS 2019-20

Sex	Had sexual intercourse before age 15	Married before age 15	Gave birth/fathered a child before age 15	Number
Women	4.5	0.1	0.2	3,258
Men	10.1	0.0	0.0	1,526

FERTILITY PREFERENCES

Key Findings

- **Desire for another child:** 10% of currently married women age 15-49 want to have another child within 2 years, and 34% want to wait at least 2 years.
- **Limiting childbearing:** 51% of currently married women and 52% of currently married men want no more children or are sterilized.
- **Ideal family size:** In Rwanda, women desire slightly more children than men (3.5 children versus 3.1 children).
- **Unwanted births:** Of all births in the past 5 years and current pregnancies, 61% were wanted at the time of conception, 27% were mistimed, and 12% were unwanted.
- **Wanted births:** The wanted fertility rate is 3.1, while the total fertility rate is 4.1. This suggests that Rwandan women are currently having, on average, one more child than they want.

Information on fertility preferences can help family planning program planners assess the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. This information may suggest the direction that fertility patterns will take in the future.

This chapter presents information on whether and when married women and men want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women and men who are sterilized are assumed not to want any more children.

Sample: Currently married women and men age 15-49

Forty-five percent of currently married women age 15-49 want to have another child; 10% of these women want to have another child within 2 years, 34% want to wait at least 2 years, and 1% are undecided on when they would want another child. The majority of currently married women want to limit childbearing: 49% want no more children, 2% are sterilized, and 3% are infecund. Overall, 47% of currently married men age 15-49 want to have another child; 9% want to have another child within 2 years, 37% want to wait at least 2 years, and 1% are undecided with respect to time. Fifty-two percent of currently married men want no more children or are sterilized (**Table 6.1**).

Trends: With respect to number of living children, the percentage of currently married women with three living children who want no more children has increased slightly since 2014-15, from 54% to 58%, while the percentage of women with four living children who want no more children has increased from 75% to 78% (**Figure 6.1**).

Patterns by background characteristics

- The more children a woman already has, the more likely she is to want no more children. Eighty-seven percent of currently married women with six or more children want no more children or are sterilized, as compared with 1% of women with no children (**Figure 6.2**).
- Women in rural areas are more likely than those in urban areas to want no more children (52% versus 47%). The pattern is similar among men (**Table 6.2.1** and **Table 6.2.2**).
- By province, the percentage of women who want no more children is lowest in North (45%) and highest in South (56%).
- Women's desire for a smaller family tends to decrease with increasing education. For example, among women who have three children, 60% of those with no education want no more children, as compared with 52% of those with more than a secondary education.
- The desire to limit childbearing generally decreases with increasing wealth; 45% of women in the highest wealth quintile want no more children, compared with 54% of women in the lowest quintile. There is no consistent pattern among men.

Figure 6.1 Trends in desire to limit childbearing by number of living children

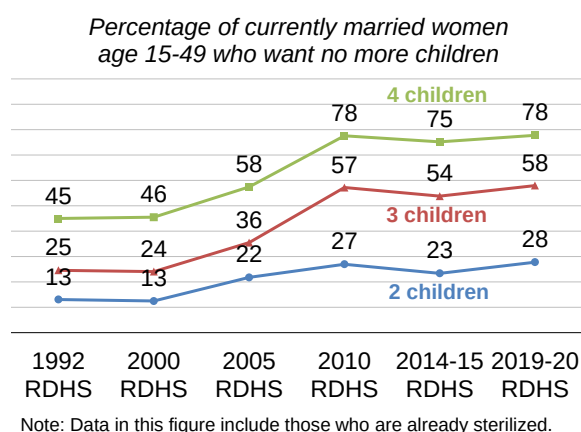
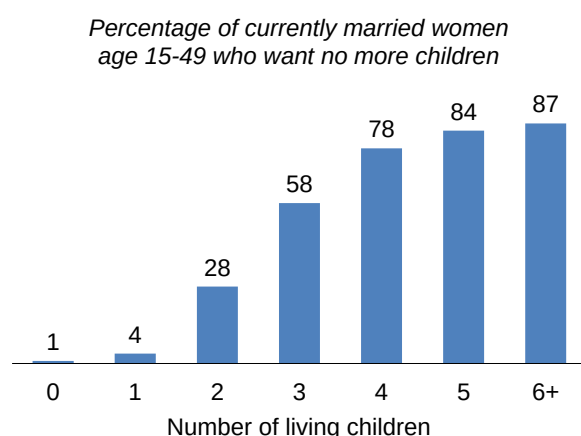


Figure 6.2 Desire to limit childbearing by number of living children



6.2 IDEAL FAMILY SIZE

Ideal family size

Respondents with no children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"

Sample: Women and men age 15-49

In Rwanda, women desire more children than men (3.5 children and 3.1 children, respectively) (**Table 6.3**). The ideal family size is slightly larger among women and men who are currently married (**Figure 6.3**). Forty-two percent of women consider four or more children to be ideal, while 56% prefer to have three or fewer children.

Trends: The mean ideal number of children among currently married women changed only minimally between 2014-15 and 2019-20 (3.6 and 3.7, respectively).

Patterns by background characteristics

- In general, the more children respondents already have, the more children they consider ideal. Women who have one child consider 3.0 children to be ideal on average. On the other hand, women with six or more children consider 4.9 children to be ideal (**Figure 6.4**). Among men and women with the same number of children, men consistently consider a slightly lower number of children to be ideal than women.
- By province, women's mean ideal number of children is highest in West (3.7 children) and lowest in City of Kigali (3.3 children).
- The mean ideal number of children among women with no education is 4.1, as compared with 3.2 and 3.4 among women with a secondary education and women with more than a secondary education, respectively (**Table 6.4**).

Figure 6.3 Ideal family size

Mean ideal number of children among women and men age 15-49

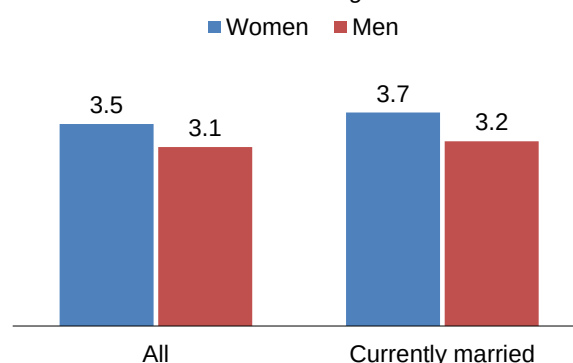
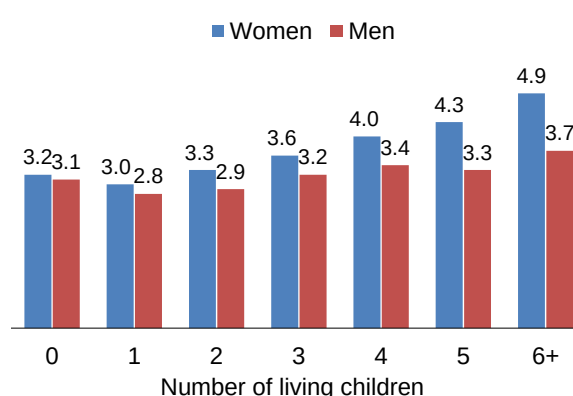


Figure 6.4 Ideal family size by number of living children

Mean ideal number of children



6.3 FERTILITY PLANNING STATUS

Planning status of births/pregnancies

Women reported whether their births/pregnancies were wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth).

Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

Most births were wanted at the time of conception (61%), while 27% were mistimed (that is, wanted at a later date). Only 12% of births were not wanted at all (Table 6.5 and Figure 6.5).

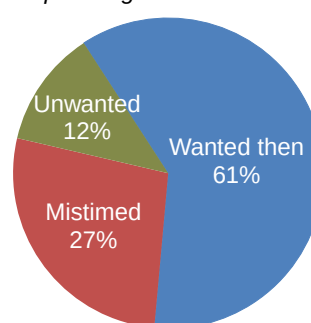
Trends: Over the past 5 years, the proportion of births that were wanted at the time of conception has slightly declined from 64% to 61%.

Patterns by background characteristics

- The more children a woman has, the more likely it is that her most recent birth was unwanted. Two percent of first births were unwanted, as compared with 29% of fourth- or higher-order births.
- The proportion of unwanted births ranges from 3% among women age 20-24 to 42% among women age 40-44 (Table 6.5).

Figure 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years before the survey (including current pregnancies) by planning status of births



Note: Figures may not add to 100% due to rounding.

6.4 WANTED FERTILITY RATES

The wanted fertility rate is a measure of the potential demographic impact of fertility that would have prevailed in the 3 years preceding the survey if all unwanted births were prevented. It is calculated in the same manner as the total fertility rate, except that only wanted births are included. A birth is considered wanted if the number of living children at the time of conception is fewer than the ideal number of children reported by the respondent.

The wanted fertility rate in Rwanda is 3.1 children, as compared with the actual total fertility rate of 4.1 children. In other words, on average, women in Rwanda have one more child than they want (Table 6.6).

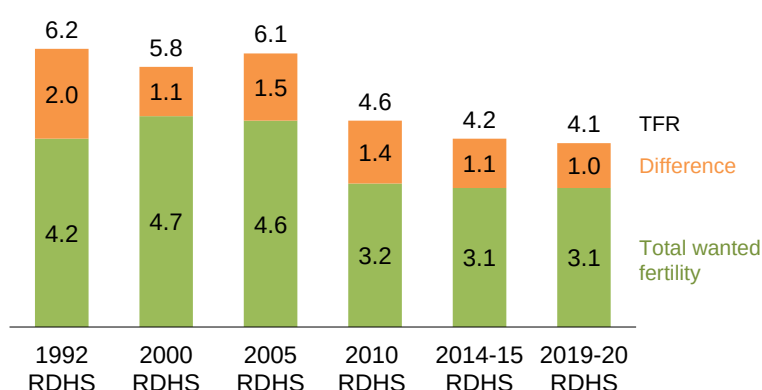
Trends: The total fertility rate in Rwanda has changed only minimally over the past 5 years (4.2 children in 2014-15 and 4.1 children in 2019-20). The gap between wanted and actual fertility has also remained relatively constant (1.1 in 2014-15 and 1.0 in 2019-20) (Figure 6.6).

Patterns by background characteristics

- The gap between wanted and actual fertility is larger in rural areas (1.1 children) than in urban areas (0.6 children) (Table 6.6).
- The gap between wanted and actual fertility narrows with increasing education, falling from 1.3 children among women with no education to 0.3 children among women with more than a secondary education (Table 6.6).

Figure 6.6 Trends in wanted and actual fertility

Wanted and actual number of children per woman



LIST OF TABLES

For more information on fertility preferences, see the following tables:

- **Table 6.1** **Fertility preferences by number of living children**
- **Table 6.2.1** **Desire to limit childbearing: Women**
- **Table 6.2.2** **Desire to limit childbearing: Men**
- **Table 6.3** **Ideal number of children by number of living children**
- **Table 6.4** **Mean ideal number of children**
- **Table 6.5** **Fertility planning status**
- **Table 6.6** **Wanted fertility rates**

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Rwanda DHS 2019-20

	Number of living children ¹							Total	Total
Desire for children	0	1	2	3	4	5	6+	15-49	15-59
WOMEN									
Have another soon ²	86.5	22.6	11.6	5.9	3.0	1.7	0.9	10.3	na
Have another later ³	0.5	71.8	57.4	32.5	14.1	8.4	4.7	34.4	na
Have another, undecided when	2.7	1.0	1.0	0.4	0.7	0.2	0.8	0.7	na
Undecided	1.7	0.6	0.7	1.0	0.7	1.0	1.5	0.9	na
Want no more	0.9	3.4	27.5	56.9	73.4	79.3	82.1	48.8	na
Sterilized ⁴	0.0	0.2	0.3	1.1	4.4	4.9	4.7	2.1	na
Declared infecund	7.8	0.4	1.5	2.2	3.7	4.4	5.3	2.8	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na
Number	193	1,144	1,650	1,522	1,194	806	893	7,401	na
MEN ⁵									
Have another soon ²	90.8	22.8	7.7	5.8	2.1	2.3	0.6	9.3	8.6
Have another later ³	6.2	70.3	59.2	37.1	17.2	8.8	5.7	36.6	30.8
Have another, undecided when	0.0	2.7	2.9	0.4	1.1	0.3	0.0	1.3	1.1
Undecided	0.0	0.2	0.2	0.3	0.2	0.0	0.5	0.2	0.2
Want no more	0.9	4.0	29.4	56.1	77.8	88.0	91.1	51.7	57.9
Sterilized ⁴	0.0	0.0	0.2	0.1	0.7	0.5	1.6	0.4	0.5
Declared infecund	2.1	0.0	0.4	0.2	0.9	0.0	0.5	0.4	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	68	437	643	632	436	291	354	2,860	3,480

na = Not applicable

¹ The number of living children includes the current pregnancy.

² Wants next birth within 2 years

³ Wants to delay next birth for 2 or more years

⁴ Includes both female and male sterilization

⁵ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	(4.2)	2.7	31.4	59.8	75.2	86.5	82.5	46.7
Rural	0.0	3.8	26.9	57.6	78.2	83.8	87.4	51.8
Province								
City of Kigali	(4.3)	2.9	33.9	63.4	79.8	92.1	80.3	48.9
South	(0.0)	2.6	31.5	66.7	86.4	89.7	94.5	55.6
West	(0.0)	3.8	24.8	49.5	73.8	82.3	80.1	51.4
North	(0.0)	5.0	23.0	54.0	74.0	74.6	83.9	45.0
East	(0.0)	3.8	26.5	56.6	76.1	84.9	92.6	51.3
Education								
No education	*	11.4	29.9	60.1	80.7	81.8	84.8	66.4
Primary	1.5	4.1	27.4	58.5	77.8	84.0	87.1	54.2
Secondary	(0.0)	2.1	27.2	56.1	69.6	(90.1)	(90.8)	30.4
More than secondary	*	2.2	31.8	51.7	(86.6)	*	*	36.8
Wealth quintile								
Lowest	(0.0)	5.2	32.3	63.7	81.3	84.3	88.0	54.2
Second	(0.0)	2.6	26.3	57.9	81.0	85.0	91.9	52.6
Middle	(0.0)	6.7	26.5	57.3	77.7	81.0	86.6	53.4
Fourth	(4.4)	1.4	23.6	56.9	74.9	86.1	83.4	49.2
Highest	0.0	2.6	29.9	54.6	74.3	84.5	83.1	45.4
Total	0.9	3.6	27.8	58.0	77.8	84.2	86.8	50.9

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ The number of living children includes the current pregnancy.

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	*	3.9	28.1	64.4	79.1	(76.5)	79.2	46.1
Rural	0.0	4.0	29.9	54.6	78.4	90.4	94.5	53.3
Province								
City of Kigali	*	2.7	30.6	59.8	(84.8)	*	*	47.0
South	*	3.0	34.7	59.3	76.2	95.6	92.6	53.2
West	*	8.0	19.7	49.2	80.3	77.2	92.5	52.3
North	*	4.4	28.4	63.3	79.7	(91.1)	(96.2)	51.9
East	*	1.8	32.0	53.6	75.4	91.6	93.0	53.8
Education								
No education	*	(6.0)	39.0	59.9	82.4	(85.8)	88.7	62.5
Primary	(1.4)	4.4	27.5	55.4	78.0	89.3	94.7	54.4
Secondary	*	3.6	33.0	54.5	(73.3)	*	(85.7)	35.9
More than secondary	*	(0.0)	29.3	(63.8)	*	*	*	36.2
Wealth quintile								
Lowest	*	6.2	33.9	57.1	80.8	92.6	93.0	51.3
Second	*	3.9	33.6	50.2	82.8	89.3	99.1	53.2
Middle	*	6.0	30.1	57.7	72.3	86.1	90.9	54.1
Fourth	*	1.5	25.2	55.2	80.9	89.3	90.6	50.4
Highest	*	1.5	25.8	61.6	77.7	(85.5)	90.3	51.4
Total 15-49	0.9	4.0	29.6	56.3	78.5	88.5	92.6	52.1
50-59	*	*	*	79.8	88.1	91.6	92.9	87.5
Total 15-59	0.8	5.5	31.2	58.7	80.0	89.4	92.8	58.4

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.3 Ideal number of children by number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Rwanda DHS 2019-20

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
WOMEN ¹								
0	0.7	0.6	0.2	0.2	0.3	0.4	0.5	0.5
1	0.9	1.3	1.9	1.0	0.6	0.9	0.2	1.0
2	22.2	25.5	19.8	13.0	12.7	7.8	5.1	18.1
3	42.1	50.0	39.6	33.0	21.7	22.0	14.4	36.4
4	25.0	17.3	30.8	37.6	36.3	32.7	35.6	28.7
5	5.9	3.0	3.9	8.9	11.6	15.2	12.5	7.2
6+	2.2	1.2	2.7	4.4	14.0	16.5	25.6	6.1
Non-numeric responses	1.0	1.2	1.2	1.7	2.8	4.6	6.2	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	5,120	2,064	2,164	1,880	1,417	967	1,022	14,634
Mean ideal number of children for: ²								
All women	3.2	3.0	3.3	3.6	4.0	4.3	4.9	3.5
Number of women	5,067	2,040	2,138	1,847	1,378	923	959	14,352
Currently married women	3.1	3.0	3.3	3.6	4.1	4.3	4.9	3.7
Number of currently married women	184	1,130	1,631	1,496	1,165	765	837	7,208
MEN ³								
0	0.4	0.0	0.5	0.5	0.2	1.5	0.3	0.4
1	1.1	2.1	1.8	2.5	2.6	2.7	1.3	1.7
2	27.2	35.2	26.0	18.1	25.5	19.6	18.5	25.7
3	43.4	47.7	50.2	40.1	25.7	38.6	39.3	42.4
4	22.1	13.1	19.7	33.2	31.9	22.9	25.2	23.2
5	4.7	1.5	1.5	4.8	8.3	9.7	7.1	4.7
6+	0.9	0.2	0.3	0.8	5.8	5.0	8.3	1.8
Non-numeric responses	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,868	543	679	646	450	298	362	5,846
Mean ideal number of children for: ²								
All men	3.1	2.8	2.9	3.2	3.4	3.3	3.7	3.1
Number of men	2,863	542	679	646	450	298	362	5,840
Currently married men	3.0	2.8	2.9	3.2	3.4	3.3	3.7	3.2
Number of currently married men	68	437	643	632	436	291	354	2,860
Mean ideal number of children for men 15-59: ²								
All men	3.1	2.8	2.9	3.2	3.3	3.2	3.5	3.1
Number of men	2,885	563	711	723	538	412	676	6,506
Currently married men	3.0	2.8	2.9	3.2	3.3	3.2	3.5	3.2
Number of currently married men	78	451	665	704	517	399	664	3,479

¹ The number of living children includes the current pregnancy.

² Means are calculated excluding respondents who gave non-numeric responses.

³ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Mean	Number of women ¹
Age		
15-19	3.2	3,231
20-24	3.0	2,394
25-29	3.2	2,058
30-34	3.4	2,092
35-39	3.8	2,025
40-44	4.1	1,418
45-49	4.4	1,134
Residence		
Urban	3.4	2,851
Rural	3.5	11,501
Province		
City of Kigali	3.3	2,102
South	3.4	3,035
West	3.7	3,131
North	3.6	2,179
East	3.5	3,905
Education		
No education	4.1	1,324
Primary	3.6	8,342
Secondary	3.2	4,053
More than secondary	3.4	633
Wealth quintile		
Lowest	3.5	2,689
Second	3.5	2,710
Middle	3.5	2,701
Fourth	3.5	2,906
Highest	3.4	3,345
Total	3.5	14,352

¹ Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Rwanda DHS 2019-20

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	71.5	26.2	2.3	0.0	100.0	2,361
2	66.8	30.3	2.9	0.0	100.0	2,074
3	64.5	28.0	7.5	0.0	100.0	1,682
4+	46.0	25.3	28.7	0.0	100.0	3,076
Mother's age at birth						
<20	46.6	47.4	6.0	0.0	100.0	524
20-24	63.6	33.6	2.9	0.0	100.0	1,915
25-29	67.1	27.6	5.2	0.0	100.0	2,379
30-34	61.2	26.5	12.3	0.0	100.0	2,303
35-39	56.2	18.3	25.6	0.0	100.0	1,500
40-44	47.0	11.5	41.5	0.0	100.0	534
45-49	(30.3)	(8.7)	(60.9)	(0.0)	(100.0)	40
Total	60.6	27.2	12.2	0.0	100.0	9,194

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.8	3.4
Rural	3.2	4.3
Province		
City of Kigali	2.8	3.6
South	3.0	4.1
West	3.3	4.5
North	3.2	4.0
East	3.2	4.2
Education		
No education	2.9	4.2
Primary	3.3	4.4
Secondary	3.2	3.7
More than secondary	3.0	3.3
Wealth quintile		
Lowest	3.6	4.9
Second	3.2	4.4
Middle	3.2	4.2
Fourth	3.0	4.0
Highest	2.8	3.4
Total	3.1	4.1

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

Key Findings

- **Current contraceptive use:** Modern contraceptive use is higher among currently married women (58%) than among sexually active unmarried women (48%). The contraceptive prevalence rate for any method is 64% among currently married women.
- **Contraceptive discontinuation:** About a third of women (30%) who began using a contraceptive method in the 5 years preceding the survey discontinued the method within 12 months. The most common reason for discontinuation was side effects/health concerns (30%).
- **Demand for family planning:** The total demand for family planning among currently married women is 78%; 75% of total demand is satisfied by modern methods.
- **Unmet need for family planning:** Unmet need for family planning is higher among sexually active unmarried women (37%) than among currently married women (14%).
- **Future use of contraception:** 61% of currently married women who are not using contraception intend to use family planning in the future.

Couples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on use and sources of contraceptive methods, informed choice of methods, and rates and reasons for discontinuing contraceptives. It also examines the potential demand for family planning and how much contact nonusers have with family planning providers.

7.1 CONTRACEPTIVE KNOWLEDGE AND USE

Knowledge of modern contraceptive methods is universal among both women and men (99%-100%). On average, currently married women have heard of 12 methods, while currently married men have heard of 11 methods (**Table 7.1**). The most commonly known modern methods among currently married women are injectables (100%), pills (99%), male condoms (99%), implants (99%), and IUDs (93%). Ninety-seven percent of currently married women are aware of a traditional method of contraception. The most commonly known traditional method is rhythm (96%).

Contraceptive prevalence rate

Percentage of women who use any contraceptive method.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

The contraceptive prevalence rate (CPR) is 64% among currently married women age 15-49. Most currently married women using contraception use a modern method (58%), while 6% use a traditional method. Fifty percent of sexually active unmarried women use a contraceptive method, with 48% using a modern method and 2% using a traditional method (**Table 7.3**).

Modern methods

Include male and female sterilization, injectables, intrauterine devices (IUDs), contraceptive pills, implants, female and male condoms, the standard days method (SDM), the lactational amenorrhea method (LAM), and emergency contraception.

Implants and injectables are the most commonly used modern contraceptive methods among both currently married women (27% and 15%, respectively) and sexually active unmarried women (22% and 15%, respectively) (**Figure 7.1**).

Trends: Contraceptive use among currently married women increased from 53% in 2014-15 to 64% in 2019-20. Use of any modern method of contraception also increased, from 48% to 58% (**Figure 7.2**).

Patterns by background characteristics

- Only a small proportion of currently married women who do not have a child use a modern contraceptive method (3%). Among women with children, modern contraceptive use is higher among those with three or four children (66%) than among those with one or two children (62%) and those with five or more children (52%) (**Table 7.4**).
- Use of any contraceptive method is higher among currently married women in rural areas (65%) than among those in urban areas (61%).
- By province, modern contraceptive use among currently married women ranges from 54% in West to 65% in North (**Table 7.4**).

Figure 7.1 Contraceptive use

Percentage of women age 15-49 currently using a contraceptive method

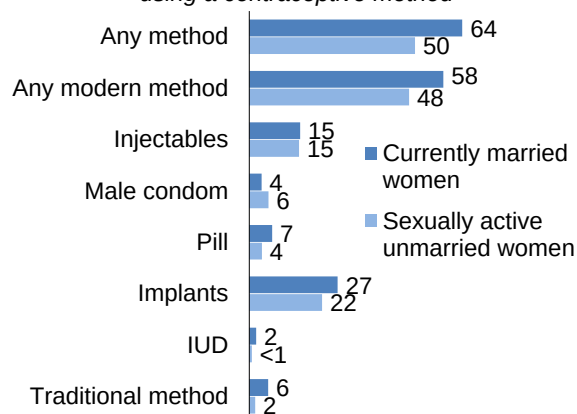
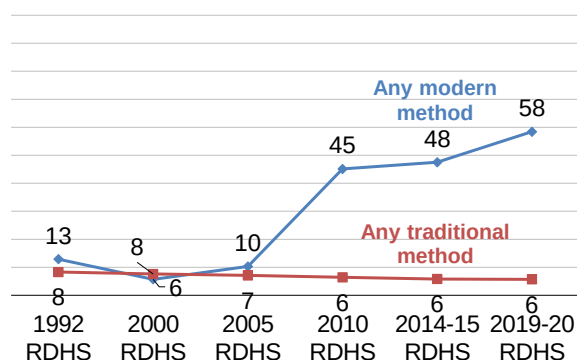


Figure 7.2 Trends in contraceptive use

Percentage of currently married women currently using a contraceptive method



- There is no clear pattern by education or household wealth in modern contraceptive use among currently married women (**Table 7.4** and **Figure 7.3**).

Knowledge of the Fertile Period

Among women using the rhythm method, 21% incorrectly perceived the fertile period to be right after a woman's menstrual period has ended, while 27% correctly perceived the fertile period to be halfway between two menstrual periods (**Table 7.5**).

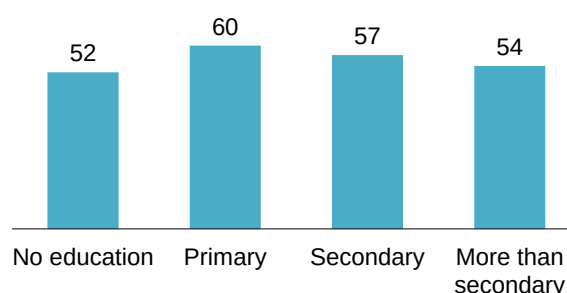
Among SDM users, 40% correctly perceived the fertile period to be halfway between two menstrual periods (**Table 7.5**).

Timing of Female Sterilization

Given the importance of female sterilization as a means of preventing unwanted pregnancies among women in high-risk groups, the Rwandan family planning program targets timely intervention. Overall, 2% of currently married women are sterilized. The median age at sterilization is 34.7 years (**Table 7.7**).

Figure 7.3 Use of modern methods by education

Percentage of currently married women age 15-49



7.2 SOURCE OF MODERN CONTRACEPTIVE METHODS

Source of modern contraceptives

The place where the modern method currently being used was obtained the last time it was acquired.

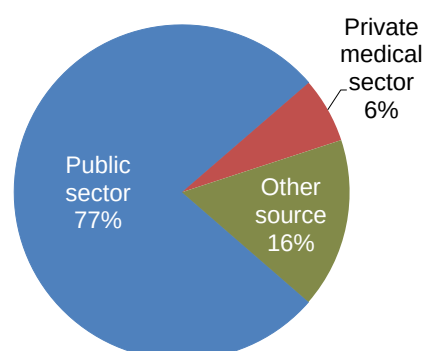
Sample: Women age 15-49 currently using a modern contraceptive method

In Rwanda, the public sector is a much more prominent source of modern contraceptive methods (77%) than the private sector (6%) (**Figure 7.4**). Other sources (particularly community health workers) provide 16% of modern methods.

In the public sector, IUDs, injectables, implants, pills, and male condoms are mainly obtained from government health centers (40%, 44%, 84%, 54%, and 39%, respectively), while provincial/district hospitals and referral hospitals are the main providers of female sterilization (71% and 19%, respectively). In the private sector, IUDs are primarily obtained from polyclinics (12%) or clinics (8%), whereas male condoms and pills are primarily obtained from pharmacies (10% each) (**Table 7.8**). With respect to other sources, injectables and pills are primarily obtained from community health workers (38% and 27%, respectively), while male condoms are mostly obtained from shops/bars (25%) (**Table 7.8**).

Figure 7.4 Source of modern contraceptive methods

Percent distribution of current users of modern methods age 15-49 by most recent source of method



Note: Figures may not add up to 100% due to rounding.

Social Marketing Brands

The majority of women who use pills or male condoms, are using a social marketing brand. Among women who use pills, 79% use Microgynon and 21% use Microlyte (**Table 7.9**). Among women who use male condoms, 43% use Prudence Plus, 39% use Love, and 11% use Plaisir Plus.

7.3 INFORMED CHOICE

Informed choice

Informed choice indicates that women were informed about their method's side effects, about what to do if they experience side effects, and about other methods they could use.

Sample: Women age 15-49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Three in five women (61%) currently using modern contraceptive methods were informed about side effects associated with the method they used, and 57% were informed about what to do if they experienced side effects. A higher percentage (77%) were informed about other available methods. Overall, more than half of women (53%) currently using modern contraceptives were provided with all three types of information (**Table 7.10**).

Women who obtained their method from the public sector were more likely to receive all three types of information (54%) than those who obtained their method from the private medical sector (40%) or from other sources (43%). Of all types of public sector health facilities, women visiting health centers were most likely to be provided with all three types of information (56%). The percentage of women who received all three types of information was highest among IUD users (60%) and lowest among users of female sterilization (35%) (**Table 7.10**).

7.4 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months.

Sample: Episodes of contraceptive use in the 5 years before the survey experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

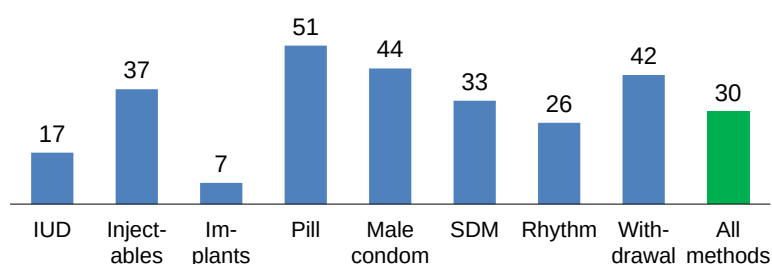
The overall 12-month contraceptive discontinuation rate was 30% in the 5 years preceding the survey (Table 7.11). The contraceptive discontinuation rate was highest for pills (51%), male condoms (44%), withdrawal (42%), and injectables (37%) (Figure 7.5).

The most common reason for discontinuation was side effects/health concerns (30%). Other prominent reasons cited for discontinuation included desire to become pregnant (28%) and desire

for a more effective method (14%) (Table 7.12). Implants, injectables, and pills were mostly discontinued due to side effects/health concerns (46%, 38%, and 28%, respectively), while withdrawal was mostly discontinued due to method failure (39%). Most women discontinued SDM and rhythm because they desire to become pregnant (46% and 42%, respectively).

Figure 7.5 Contraceptive discontinuation rates

Percentage of contraceptive episodes discontinued within 12 months among women age 15-49



7.5 DEMAND FOR FAMILY PLANNING

Unmet need for family planning

Proportion of women who (1) are not pregnant and not postpartum amenorrheic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrheic and their last birth in the last 2 years was mistimed or unwanted.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

Demand for family planning:

Unmet need for family planning
+ current contraceptive use (any method)

Proportion of demand satisfied:

$$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

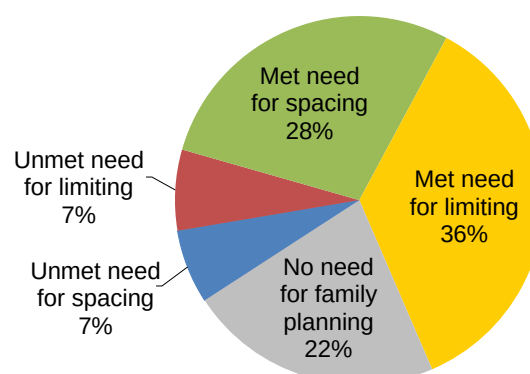
Proportion of demand satisfied by modern methods:

$$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Seventy-eight percent of currently married women have a demand for family planning, 43% for limiting and 35% for spacing. Sixty-four percent of currently married women are already using contraception. However, 14% have an unmet need for family planning (7% each for limiting and for spacing) (Figure 7.6). If all currently married women who say they want to space or limit their children were to use a family planning method, the contraceptive prevalence rate would increase from 64% to 83%. Seventy-five percent of the demand for family planning is satisfied by modern methods (Table 7.13.1).

Figure 7.6 Demand for family planning

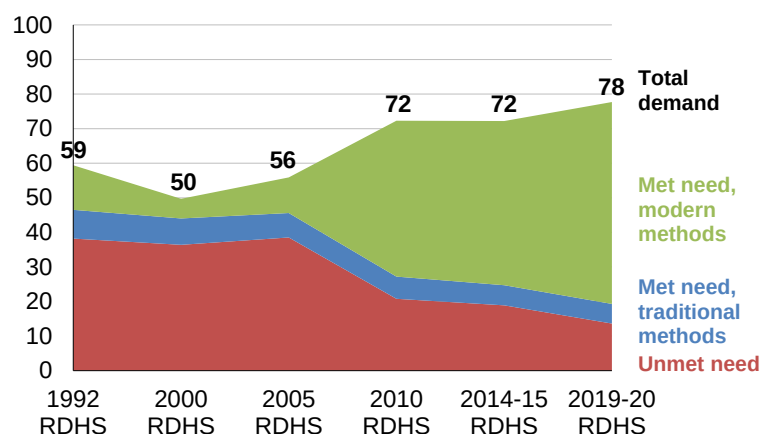
Percent distribution of currently married women age 15-49 by need for family planning



Trends: Total demand for family planning among currently married women has increased since 2000, from 50% to 78%. Over the same period, the proportion of demand satisfied by modern methods has increased from 11% to 75%. Unmet need increased from 36% in 2000 to 39% in 2005 before consistently decreasing over time, to 14% in 2019-20 (Figure 7.7).

Figure 7.7 Trends in demand for family planning

Percentage of currently married women age 15-49



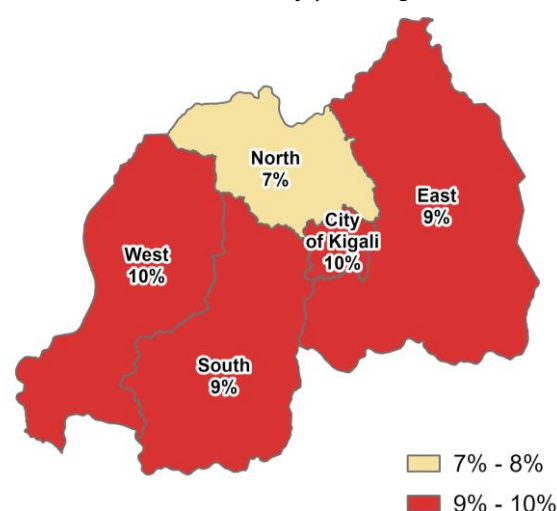
Patterns by background characteristics

- Unmet need for family planning among currently married women is 15% in urban areas and 13% in rural areas. The percentage of demand satisfied with modern methods is 73% in urban areas and 76% in rural areas (Table 7.13.1).

- Demand for family planning is lowest among currently married women in the highest wealth quintile (73%) and highest in the lowest and second wealth quintiles (80% each) (**Table 7.13.1**).
- By province, unmet need for family planning among currently married women age 15-49 is highest in City of Kigali and West (16% each) and lowest in North (10%) (**Table 7.13.1**).
- Unmet need for family planning increases from 8% among currently married women age 15-19 to 17% among women age 40-44 before decreasing slightly to 15% among women age 45-49 (**Table 7.13.1**).
- Among all women, unmet need for family planning is highest in City of Kigali and West (10% each) and lowest in North (7%) (**Table 7.13.2** and **Figure 7.8**).
- Sexually active unmarried women have a higher demand for family planning than currently married women (87% versus 78%). They also have a higher unmet need (37% versus 14%) (**Table 7.13.1** and **Table 7.13.2**).

Figure 7.8 Unmet need for family planning by province

Percentage of all women age 15-49 with unmet need for family planning



Decision Making about Family Planning

Among currently married women who are users of family planning, 88% reported that they decided jointly with their husband to use family planning, while only 10% said that they made their own decision (**Table 7.14**). Among currently married women who are nonusers, 59% decided jointly with their husband to not use family planning, 30% made their own decision, and only 4% reported that it was mainly their husband's decision to not use family planning (**Table 7.14**).

Future Use of Contraception

Sixty-one percent of currently married women who are not using contraception intend to use family planning in the future. However, 38% of women do not intend to use contraception in the future. Less than 1% of women are unsure about future use. Future intention to use contraception increases from 55% among women with no living children to a peak of 76% among those with two children before declining to 68% among those with three children and 49% among those with four or more children (**Table 7.15**).

Exposure to Family Planning Messages in the Media

The survey also collected information on exposure to family planning messages in the media and other sources among women and men age 15-49. The radio is the most common source of family planning messages in Rwanda, with 49% of women and 63% of men having heard a family planning message on the radio in the past few months. Among women, 11% reported having seen a family planning message on television and 8% saw one in a newspaper or magazine, while among men these proportions were 13% and 10%, respectively. On the other hand, 47% of women and 34% of men reported having no exposure to family planning messages through any of the four media sources (radio, television, newspaper/magazine, and mobile phone) in the past few months (**Table 7.16**).

7.6 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Contact of nonusers with family planning providers

Respondent discussed family planning in the 12 months before the survey with a fieldworker or during a visit to a health facility.

Sample: Women age 15-49 who are not currently using any contraceptive methods

Eighty percent of women age 15-49 who are not using contraception said they did not discuss family planning with a fieldworker or health facility staff member in the 12 months before the survey. Eleven percent were visited by a fieldworker who discussed family planning, and 14% discussed family planning with a staff member during a health facility visit. Forty-one percent of women visited a health facility but did not discuss family planning with a health facility worker (**Table 7.17**).

Patterns by background characteristics

- Women in rural areas are more likely than women in urban areas to have discussed family planning with a fieldworker (12% and 7%, respectively).
- The percentage of women who did not discuss family planning during a visit to a health facility ranges from a low of 37% in South to a high of 46% in North.
- The percentage of women who discussed family planning with a fieldworker was highest among those in the lowest wealth quintile (14%) and lowest among those in the highest quintile (7%).

LIST OF TABLES

For more information on family planning, see the following tables:

- **Table 7.1** Knowledge of contraceptive methods
- **Table 7.2** Knowledge of contraceptive methods according to background characteristics
- **Table 7.3** Current use of contraception by age
- **Table 7.4** Current use of contraception according to background characteristics
- **Table 7.5** Knowledge of fertile period
- **Table 7.6** Knowledge of fertile period by age
- **Table 7.7** Timing of sterilization
- **Table 7.8** Source of modern contraception methods
- **Table 7.9** Use of social marketing brand pills and condoms
- **Table 7.10** Informed choice
- **Table 7.11** Twelve-month contraceptive discontinuation rates
- **Table 7.12** Reasons for discontinuation
- **Table 7.13.1** Need and demand for family planning among currently married women
- **Table 7.13.2** Need and demand for family planning for all women and for sexually active unmarried women
- **Table 7.14** Decision making about family planning
- **Table 7.15** Future use of contraception
- **Table 7.16** Exposure to family planning messages
- **Table 7.17** Contact of nonusers with family planning providers

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Rwanda DHS 2019-20

Method	Women			Men		
	All women	Currently married women	Sexually active unmarried women ¹	All men	Currently married men	Sexually active unmarried men ¹
Any method	99.1	100.0	99.8	99.6	100.0	100.0
Any modern method	98.9	99.9	99.8	99.5	100.0	100.0
Female sterilization	82.5	88.8	84.4	74.3	83.5	74.0
Male sterilization	77.9	89.0	79.2	76.0	89.0	75.8
Pill	95.7	99.4	97.8	89.5	97.2	88.9
IUD	80.5	92.6	85.1	71.0	83.4	72.7
Injectables	95.9	99.6	98.4	90.4	98.1	85.9
Implants	94.4	99.2	97.9	88.3	98.0	87.7
Male condom	96.5	98.8	98.8	98.9	99.6	100.0
Female condom	77.6	84.1	83.8	71.0	80.8	73.2
Emergency contraception	45.0	48.6	55.7	50.4	57.4	60.4
Standard days method	73.1	89.1	76.1	60.8	80.4	65.0
Lactational amenorrhea (LAM)	73.4	88.2	78.6	61.5	76.6	64.3
Other modern method	0.1	0.1	0.4	0.1	0.1	0.0
Any traditional method	92.1	97.1	95.4	88.5	94.8	94.0
Rhythm	90.7	95.5	93.6	86.8	92.9	91.8
Withdrawal	71.7	89.4	81.9	70.2	88.2	75.0
Other traditional method	0.4	0.7	0.3	0.1	0.2	0.0
Mean number of methods known by respondents 15-49	10.6	11.6	11.1	9.9	11.3	10.1
Number of respondents	14,634	7,401	417	5,846	2,860	150
Mean number of methods known by respondents 15-59	na	na	na	10.0	11.3	10.2
Number of respondents	na	na	na	6,513	3,480	153

na = Not applicable

¹ Had last sexual intercourse within 30 days preceding the survey

Table 7.2 Knowledge of contraceptive methods according to background characteristics

Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method ¹	Number	Heard of any method	Heard of any modern method ¹	Number
Age						
15-19	100.0	100.0	73	*	*	3
20-24	99.7	99.7	750	100.0	100.0	130
25-29	100.0	100.0	1,297	100.0	100.0	361
30-34	99.9	99.9	1,642	100.0	100.0	691
35-39	100.0	99.9	1,690	100.0	100.0	719
40-44	99.9	99.9	1,139	100.0	100.0	534
45-49	100.0	100.0	809	100.0	100.0	422
Residence						
Urban	99.9	99.9	1,288	100.0	100.0	466
Rural	100.0	99.9	6,114	100.0	100.0	2,394
Province						
City of Kigali	99.8	99.8	1,006	100.0	100.0	384
South	100.0	100.0	1,559	100.0	100.0	584
West	100.0	100.0	1,628	100.0	100.0	634
North	99.9	99.9	1,201	100.0	100.0	477
East	100.0	99.9	2,007	100.0	100.0	782
Education						
No education	100.0	100.0	952	100.0	100.0	339
Primary	99.9	99.9	4,834	100.0	100.0	2,022
Secondary	100.0	99.9	1,250	100.0	100.0	360
More than secondary	99.7	99.7	365	100.0	100.0	139
Wealth quintile						
Lowest	99.9	99.9	1,443	100.0	100.0	541
Second	100.0	100.0	1,397	100.0	100.0	545
Middle	100.0	100.0	1,509	100.0	100.0	624
Fourth	100.0	100.0	1,520	100.0	100.0	604
Highest	99.9	99.8	1,532	100.0	100.0	546
Total 15-49	100.0	99.9	7,401	100.0	100.0	2,860
50-59	na	na	na	100.0	100.0	620
Total 15-59	na	na	na	100.0	100.0	3,480

na = Not applicable

¹ Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods

Table 7.3. Current use of contraception by age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Rwanda DHS 2019-20

Age	Modern method										Traditional method					Total	Number of women			
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	Emergency contraception			Any traditional method	Rhythm			Withdrawal	Other	Not currently using
											SDM	LAM	Any traditional method							
ALL WOMEN																				
15-19	3.7	2.9	0.0	0.0	0.2	0.0	0.3	2.0	0.4	0.0	0.0	0.0	0.8	0.8	0.0	0.0	96.3	100.0	3,258	
20-24	30.0	28.4	0.0	0.0	1.6	0.2	7.2	17.0	2.1	0.0	0.0	0.1	1.6	1.1	0.5	0.0	70.0	100.0	2,414	
25-29	51.4	48.6	0.1	0.0	4.3	1.4	13.7	26.2	2.2	0.0	0.1	0.5	2.8	1.5	1.2	0.2	48.6	100.0	2,073	
30-34	61.6	57.7	0.6	0.0	5.9	2.7	14.3	29.3	3.5	0.0	0.2	1.0	3.9	1.8	2.0	0.2	38.4	100.0	2,118	
35-39	60.4	55.4	2.2	0.2	7.0	2.1	15.7	22.0	3.8	0.1	0.0	2.1	5.0	2.1	2.9	0.0	39.6	100.0	2,072	
40-44	52.8	45.8	3.9	0.5	6.9	2.2	11.2	15.7	3.5	0.0	0.1	1.6	7.0	4.0	2.8	0.1	47.2	100.0	1,488	
45-49	32.9	25.1	3.2	0.1	3.5	0.5	6.3	7.4	3.0	0.0	0.1	0.8	7.9	4.0	3.7	0.2	67.1	100.0	1,211	
Total	38.6	35.1	1.1	0.1	3.8	1.2	9.1	16.5	2.4	0.0	0.1	0.8	3.5	1.8	1.5	0.1	61.4	100.0	14,634	
CURRENTLY MARRIED WOMEN																				
15-19	52.7	52.7	0.0	0.0	3.8	0.0	7.0	40.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3	100.0	73	
20-24	64.5	61.9	0.0	0.0	4.6	0.6	16.7	36.5	2.9	0.0	0.0	0.4	2.6	1.0	1.4	0.1	35.5	100.0	750	
25-29	66.6	63.0	0.1	0.0	6.2	1.9	17.8	33.6	2.2	0.0	0.1	0.8	3.6	1.5	1.8	0.3	33.4	100.0	1,297	
30-34	69.8	65.2	0.7	0.0	7.0	3.2	15.9	32.9	3.9	0.0	0.0	1.3	4.6	2.0	2.4	0.2	30.2	100.0	1,642	
35-39	66.9	61.2	2.5	0.3	8.1	2.5	16.8	23.8	4.3	0.1	0.0	2.5	5.7	2.2	3.5	0.1	33.1	100.0	1,690	
40-44	62.4	54.0	4.7	0.6	8.5	2.5	13.0	18.0	4.1	0.0	0.2	2.1	8.4	4.6	3.7	0.1	37.6	100.0	1,139	
45-49	46.0	35.2	4.4	0.1	5.2	0.8	9.2	9.8	4.4	0.0	0.1	1.2	10.7	5.1	5.3	0.3	54.0	100.0	809	
Total	64.1	58.4	2.0	0.2	6.9	2.1	15.3	26.6	3.7	0.0	0.1	1.5	5.7	2.6	3.0	0.2	35.9	100.0	7,401	
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																				
15-19	(19.7)	(18.1)	(0.0)	(0.0)	(2.4)	(0.0)	(3.7)	(6.8)	(5.1)	(0.0)	(0.0)	(0.0)	(1.6)	(1.6)	(0.0)	(0.0)	(80.3)	100.0	46	
20-24	40.2	38.7	0.0	0.0	1.9	1.0	11.7	15.2	8.9	0.0	0.0	0.0	1.5	0.6	0.9	0.0	59.8	100.0	109	
25+	59.2	57.2	0.4	0.0	4.8	0.9	18.3	27.4	4.6	0.0	0.0	0.9	2.0	1.4	0.6	0.0	40.8	100.0	263	
Total	49.9	48.1	0.2	0.0	3.8	0.8	15.0	21.9	5.8	0.0	0.0	0.6	1.8	1.2	0.6	0.0	50.1	100.0	417	

Note: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases.

SDM = Standard days method

LAM = Lactational amenorrhea method

¹ Women who have had sexual intercourse within 30 days preceding the survey

Table 7.4. Current use of contraception according to background characteristics

Percent distribution of currently married and sexually active unmarried women age 15-49 by contraceptive method currently used, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Modern method										Traditional method							Total	Number of women		
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	Emer-gency contra-ception			LAM	Any tradi-tional method	Rhythm	With-drawal			Other	Not currently using
											SDM	LAM	Any tradi-tional method								
CURRENTLY MARRIED WOMEN																					
Number of living children																					
0	2.8	2.8	0.0	0.0	0.0	0.0	0.3	1.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.2	100.0	363
1-2	66.8	62.3	0.2	0.0	7.0	2.4	17.5	31.0	2.8	0.0	0.0	1.0	0.2	4.4	2.1	2.1	0.3	33.2	100.0	2,782	
3-4	71.9	65.9	2.5	0.2	7.8	2.5	17.5	29.1	4.3	0.0	0.1	1.8	0.1	6.0	2.7	3.1	0.1	28.1	100.0	2,610	
5+	60.8	52.2	4.5	0.4	6.8	1.5	11.2	20.6	4.7	0.1	0.2	2.1	0.3	8.6	3.7	4.7	0.2	39.2	100.0	1,647	
Residence																					
Urban	60.5	55.0	3.1	0.0	8.3	6.1	12.8	17.4	4.5	0.0	0.3	2.1	0.4	5.5	2.8	2.3	0.4	39.5	100.0	1,288	
Rural	64.9	59.2	1.7	0.2	6.6	1.3	15.8	28.5	3.5	0.0	0.0	1.3	0.2	5.7	2.5	3.1	0.1	35.1	100.0	6,114	
Province																					
City of Kigali	60.6	54.9	2.5	0.0	8.4	6.9	15.1	14.7	4.7	0.0	0.2	1.9	0.5	5.7	2.5	2.6	0.6	39.4	100.0	1,006	
South	62.5	56.0	1.4	0.1	7.2	1.6	13.4	26.7	3.9	0.1	0.1	1.3	0.2	6.5	2.7	3.6	0.2	37.5	100.0	1,559	
West	61.5	54.4	3.2	0.1	4.7	1.0	14.4	26.3	3.0	0.0	0.1	1.5	0.2	7.1	3.4	3.7	0.0	38.5	100.0	1,628	
North	69.4	64.9	1.0	0.1	7.2	0.8	16.4	34.2	2.8	0.0	0.2	2.0	0.3	4.5	1.7	2.6	0.2	30.6	100.0	1,201	
East	66.1	61.5	1.7	0.5	7.5	1.8	16.8	28.1	4.0	0.0	0.0	1.1	0.0	4.7	2.4	2.3	0.1	33.9	100.0	2,007	
Education																					
No education	57.7	51.6	1.9	0.1	3.9	0.9	15.0	27.0	2.2	0.0	0.0	0.5	0.0	6.1	2.5	3.3	0.3	42.3	100.0	952	
Primary	66.4	60.4	2.0	0.2	7.5	0.9	16.2	28.2	3.7	0.0	0.0	1.5	0.2	5.9	2.6	3.1	0.1	33.6	100.0	4,834	
Secondary	61.8	57.3	1.6	0.0	6.9	4.0	14.2	24.1	4.3	0.0	0.2	1.6	0.4	4.5	2.0	2.3	0.2	38.2	100.0	1,250	
More than secondary	59.4	53.7	3.0	0.0	6.7	15.0	7.4	12.0	4.6	0.0	0.6	4.0	0.4	5.7	4.1	1.4	0.3	40.6	100.0	365	
Wealth quintile																					
Lowest	64.1	60.2	0.9	0.0	4.3	0.7	15.8	35.0	2.7	0.0	0.0	0.7	0.1	3.9	1.7	2.1	0.1	35.9	100.0	1,443	
Second	66.0	60.6	0.6	0.2	5.6	1.0	15.7	33.0	3.4	0.1	0.0	0.8	0.1	5.5	2.1	3.3	0.1	34.0	100.0	1,397	
Middle	66.8	60.8	1.9	0.2	7.1	1.0	18.2	28.4	2.7	0.1	0.0	0.9	0.2	6.0	2.7	3.3	0.0	33.2	100.0	1,509	
Fourth	65.4	59.2	3.1	0.3	9.1	1.3	15.4	23.8	4.5	0.0	0.0	1.3	0.3	6.2	2.7	3.1	0.4	34.6	100.0	1,520	
Highest	58.6	51.8	3.1	0.1	8.0	6.4	11.3	13.8	4.9	0.0	0.4	3.5	0.3	6.7	3.5	3.0	0.3	41.4	100.0	1,532	
Total	64.1	58.4	2.0	0.2	6.9	2.1	15.3	26.6	3.7	0.0	0.1	1.5	0.2	5.7	2.6	3.0	0.2	35.9	100.0	7,401	
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																					
Residence																					
Urban	49.1	47.4	0.0	0.0	5.7	1.2	16.3	15.4	7.7	0.0	0.0	1.2	0.0	1.7	0.2	1.5	0.0	50.9	100.0	110	
Rural	50.2	48.3	0.3	0.0	3.1	0.7	14.5	24.3	5.0	0.0	0.0	0.3	0.0	1.9	1.6	0.3	0.0	49.8	100.0	307	
Total	49.9	48.1	0.2	0.0	3.8	0.8	15.0	21.9	5.8	0.0	0.0	0.6	0.0	1.8	1.2	0.6	0.0	50.1	100.0	417	
Note: If more than one method is used, only the most effective method is considered in this tabulation.																					
SDM = Standard days method																					
LAM = Lactational amenorrhea method																					
¹ Women who have had sexual intercourse within 30 days preceding the survey																					

Note: If more than one method is used, only the most effective method is considered in this tabulation.

SDM = Standard days method

LAM = Lactational amenorrhea method

¹ Women who have had sexual intercourse within 30 days preceding the survey

Table 7.5 Knowledge of fertile period

Percent distribution of rhythm users, SDM users, and all women age 15-49 by knowledge of the fertile period during the ovulatory cycle, Rwanda DHS 2019-20

Perceived fertile period	Users of rhythm method	Users of SDM	All women
Just before her menstrual period begins	7.9	7.5	8.1
During her menstrual period	0.7	0.0	1.0
Right after her menstrual period has ended	21.3	28.8	18.8
Halfway between two menstrual periods	26.8	39.6	16.6
Other	0.6	0.0	0.1
No specific time	40.6	24.1	50.9
Don't know	2.2	0.0	4.5
Total	100.0	100.0	100.0
Number of women	270	112	14,634

SDM = Standard days method

Table 7.6 Knowledge of fertile period by age

Percentage of women age 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, Rwanda DHS 2019-20

Age	Percentage with correct knowledge of the fertile period	Number of women
15-19	10.2	3,258
20-24	17.4	2,414
25-29	19.9	2,073
30-34	18.2	2,118
35-39	17.6	2,072
40-44	20.3	1,488
45-49	17.3	1,211
Total	16.6	14,634

Note: Correct knowledge of the fertile period is defined as halfway between two menstrual periods.

Table 7.7 Timing of sterilization

Percent distribution of sterilized women age 15-49 by age at the time of sterilization and median age at sterilization, according to the number of years since the operation, Rwanda DHS 2019-20

Years since operation	Age at time of sterilization						Total	Number of women	Median age ¹
	<25	25-29	30-34	35-39	40-44	45-49			
<2	(0.0)	(6.1)	(19.9)	(48.1)	(23.6)	(2.3)	(100.0)	46	(35.8)
2-3	(0.0)	(2.4)	(36.1)	(41.3)	(17.7)	(2.5)	(100.0)	40	(35.2)
4-5	*	*	*	*	*	*	*	15	*
6-7	*	*	*	*	*	*	*	17	*
8-9	*	*	*	*	*	*	*	8	*
10+	(1.7)	(26.5)	(45.5)	(26.3)	(0.0)	(0.0)	(100.0)	30	a
Total	0.3	8.5	34.6	39.2	16.0	1.3	100.0	157	34.7

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

a = Not calculated due to censoring

¹ Median age at sterilization is calculated only for women sterilized before age 40 to avoid problems of censoring.

Table 7.8 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Rwanda DHS 2019-20

Source	Female sterili- zation	Male sterili- zation	IUD	Inject- ables	Implants	Pill	Male condom	Female condom	Emer- gency contra- ception	SDM	Total
Public sector	96.1	*	77.3	51.5	99.0	59.7	45.0	*	*	69.3	77.1
Referral hospital	19.0	*	12.2	0.1	1.8	0.2	0.6	*	*	1.4	2.0
Provincial/district hospital	70.7	*	24.7	0.3	8.4	1.3	0.6	*	*	1.0	7.3
Health center	6.4	*	39.8	44.4	84.2	53.9	39.0	*	*	65.9	62.9
Health post	0.0	*	0.3	5.4	2.3	2.7	2.8	*	*	0.0	3.0
Outreach	0.0	*	0.2	1.2	2.3	1.6	2.0	*	*	1.1	1.8
Private medical sector	3.9	*	21.8	10.3	0.7	13.1	10.6	*	*	6.5	6.3
Polyclinic	3.0	*	11.5	0.2	0.0	0.2	0.0	*	*	0.0	0.6
Clinic	0.6	*	7.6	4.5	0.4	1.5	0.0	*	*	1.6	1.8
Dispensary	0.0	*	0.0	3.7	0.0	0.7	0.0	*	*	0.0	1.1
Pharmacy	0.0	*	0.0	0.9	0.0	9.8	9.8	*	*	4.0	2.2
Family planning clinic	0.0	*	2.8	0.6	0.3	0.8	0.9	*	*	0.9	0.5
Other private medical	0.2	*	0.0	0.5	0.0	0.2	0.0	*	*	0.0	0.2
Other source	0.0	*	0.8	38.1	0.2	27.1	43.7	*	*	20.0	16.4
Shop/bar	0.0	*	0.0	0.0	0.0	0.2	24.8	*	*	0.1	1.7
Church	0.0	*	0.0	0.0	0.0	0.0	0.0	*	*	6.9	0.2
Friend/relative	0.0	*	0.0	0.0	0.0	0.1	5.0	*	*	6.9	0.5
Youth center	0.0	*	0.8	0.2	0.1	0.0	0.5	*	*	0.7	0.2
Community health worker	0.0	*	0.0	37.9	0.1	26.7	13.5	*	*	5.3	13.9
Other	0.0	*	0.0	0.0	0.0	0.0	0.3	*	*	4.2	0.1
Missing	0.0	*	0.0	0.0	0.0	0.2	0.3	*	*	0.0	0.0
Total	100.0	*	100.0	100.0	100.0	100.0	100.0	*	*	100.0	100.0
Number of women	157	13	173	1,339	2,419	552	349	3	9	112	5,126

Note: Total includes other modern methods but excludes lactational amenorrhea method (LAM). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

SDM = Standard days method

Table 7.9 Use of social marketing brand pills and condoms

Percentage of pill and condom users age 15-49 using a social marketing brand, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Among pill users				Among condom users ¹					
	Microgynon	Microlyte	Other	Number of women	Prudence Plus	Plaisir Plus	Generic	Love	Other	Number of women
Age										
15-19	*	*	*	8	*	*	*	*	*	11
20-24	(66.1)	(33.9)	(0.0)	38	(53.4)	(19.1)	(6.9)	(18.6)	(2.0)	48
25-29	77.5	22.5	0.0	88	(36.2)	(15.1)	(13.9)	(30.2)	(4.6)	42
30-34	77.3	21.9	0.8	126	48.3	6.0	0.0	42.4	3.3	72
35-39	80.8	19.2	0.0	141	45.0	8.1	3.5	39.2	4.2	79
40-44	84.6	15.4	0.0	99	35.4	11.9	4.1	45.7	3.0	52
45-49	(89.6)	(10.4)	(0.0)	42	(29.2)	(3.3)	(0.0)	(67.4)	(0.0)	37
Residence										
Urban	84.6	15.4	0.0	120	38.3	18.3	8.7	31.3	3.4	75
Rural	77.6	22.2	0.2	421	44.5	9.1	2.8	40.7	2.8	265
Province										
City of Kigali	85.7	14.3	0.0	94	36.8	16.5	9.3	31.3	6.1	58
South	76.4	22.8	0.9	121	35.0	15.2	5.2	41.1	3.5	76
West	69.5	30.5	0.0	83	57.8	6.8	1.0	33.5	1.0	64
North	87.5	12.5	0.0	85	(30.2)	(15.0)	(5.6)	(42.1)	(7.1)	44
East	77.9	22.1	0.0	159	49.7	6.0	1.5	42.8	0.0	98
Education										
No education	(80.2)	(19.8)	(0.0)	42	*	*	*	*	*	22
Primary	79.7	20.0	0.3	378	43.4	9.3	1.1	43.3	2.9	212
Secondary	76.6	23.4	0.0	96	45.6	10.7	10.5	31.5	1.7	77
More than secondary	(78.7)	(21.3)	(0.0)	25	(33.5)	(27.3)	(12.4)	(17.8)	(9.0)	28
Wealth quintile										
Lowest	67.3	32.7	0.0	74	48.2	9.3	2.6	40.0	0.0	53
Second	74.8	25.2	0.0	82	36.8	10.6	0.0	46.1	6.5	56
Middle	79.5	20.5	0.0	111	55.0	10.4	4.8	26.3	3.5	55
Fourth	80.4	19.6	0.0	145	32.7	7.7	5.8	53.0	0.8	83
Highest	87.0	12.2	0.8	128	46.5	16.0	5.5	27.9	4.1	94
Total	79.1	20.7	0.2	541	43.2	11.2	4.1	38.6	3.0	340

Note: Table excludes pill and condom users who do not know the brand name. Condom use is based on women's reports. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Among condom users not also using the pill

Table 7.10 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were informed about other methods they could use, and percentage who were informed of all three, according to method and initial source, Rwanda DHS 2019-20

Method/source	Among women who started last episode of modern contraceptive method within 5 years preceding the survey:				Number of women
	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if they experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Percentage who were informed of all three (method information index)	
Method					
Female sterilization	60.6	41.5	54.3	34.9	93
IUD	71.5	63.4	82.1	60.4	141
Injectables	60.5	56.8	80.3	53.6	1,136
Implants	61.6	58.2	76.5	53.6	2,313
Pill	59.4	55.0	78.0	52.3	487
Initial source of method¹					
Public sector	62.0	58.1	77.9	54.1	3,890
Referral hospital	61.3	48.9	60.9	45.2	80
Provincial/district hospital	57.4	50.3	71.5	44.9	326
Health center	62.7	59.6	79.1	55.6	3,263
Health post	59.3	52.4	75.3	50.2	142
Outreach	58.4	48.8	77.6	48.8	79
Private medical sector	51.7	43.3	69.9	40.2	214
Polyclinic	(55.7)	(46.8)	(75.3)	(42.3)	29
Clinic	65.6	57.1	74.5	53.3	74
Dispensary	(49.3)	(37.0)	(82.0)	(37.0)	34
Pharmacy	34.3	24.9	52.6	23.9	53
Family planning clinic	*	*	*	*	17
Other private medical	*	*	*	*	7
Other source	54.1	50.3	73.2	43.3	65
Friend/relative	*	*	*	*	2
Youth center	*	*	*	*	5
Community health worker	52.0	49.6	71.3	43.1	58
Other	*	*	*	*	1
Missing	*	*	*	*	1
Total	61.4	57.3	77.4	53.2	4,170

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Source at start of current episode of use

Table 7.11 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Rwanda DHS 2019-20

Method	Method failure	Desire to become pregnant	Other fertility-related reasons ¹	Side effects/health concerns	Wanted more effective method	Other method-related reasons ²	Other reasons	Any reason ³	Switched to another method ⁴	Number of episodes of use ⁵
IUD	(1.0)	(4.1)	(0.3)	(7.6)	(1.1)	(0.5)	(2.0)	(16.5)	(2.0)	212
Injectables	1.5	5.7	3.7	17.1	5.0	1.6	2.3	36.9	9.5	2,836
Implants	0.4	0.8	0.4	4.6	0.1	0.0	0.4	6.8	1.7	2,738
Pill	4.8	5.4	2.4	16.2	14.2	5.4	2.4	50.9	22.2	1,389
Male condom	2.8	8.8	3.8	0.7	12.7	7.1	7.7	43.6	15.7	588
Standard days method	(12.0)	(13.3)	(0.8)	(1.0)	(2.0)	(2.6)	(1.5)	(33.2)	(2.6)	202
Rhythm	10.7	6.6	0.9	0.4	3.4	2.5	1.5	26.1	3.3	384
Withdrawal	14.0	9.6	1.5	0.2	8.8	4.9	2.6	41.5	11.8	460
Other ⁶	(3.5)	(5.1)	(3.1)	(0.5)	(5.0)	(2.8)	(0.7)	(20.8)	(5.3)	184
All methods	3.1	4.8	2.2	9.7	5.5	2.3	2.0	29.7	9.0	8,992

Note: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey. Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation

² Includes lack of access/too far, costs too much, and inconvenient to use

³ Reasons for discontinuation are mutually exclusive and add to the total given in this column.

⁴ A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.

⁵ All episodes of use that occurred within the 5 years preceding the survey are included. Episodes of use include both episodes that were discontinued during the period of observation and episodes that were not discontinued during the period of observation.

⁶ Includes female sterilization, male sterilization, female condom, and emergency contraception

Table 7.12 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, Rwanda DHS 2019-20

Reason	IUD	Injectables	Implants	Pill	Male condom	SDM	Rhythm	Withdrawal	Other ¹	All methods
Became pregnant while using	9.0	5.3	4.4	12.6	9.5	37.9	30.1	39.4	18.1	10.9
Wanted to become pregnant	38.0	29.9	23.4	22.9	25.7	45.7	41.8	25.1	31.0	27.9
Husband/partner disapproved	1.5	0.6	1.2	0.5	10.7	1.3	2.9	4.9	0.0	1.7
Wanted a more effective method	8.9	10.6	15.0	18.3	26.5	5.0	10.7	17.2	18.0	14.2
Side effects/health concerns	33.4	38.3	45.6	28.4	2.1	1.3	0.6	0.7	1.6	30.1
Lack of access/too far	0.0	1.9	0.3	2.9	1.5	0.0	0.0	0.0	0.0	1.5
Cost too much	0.0	0.9	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.6
Inconvenient to use	0.8	1.2	0.6	5.1	10.3	5.5	4.8	7.5	8.5	3.2
Up to God/fatalistic	0.0	0.2	0.0	0.1	0.0	0.0	2.1	0.0	0.0	0.2
Difficult to get pregnant/ menopausal	0.0	0.4	0.6	0.5	0.0	0.0	0.8	0.4	0.0	0.4
Infrequent sex/husband away	2.0	6.0	4.7	4.2	9.1	1.1	3.7	2.6	11.0	5.2
Marital dissolution/separation	2.0	1.2	0.6	1.0	0.8	0.0	0.4	0.3	0.0	0.9
Other	4.2	3.5	3.1	3.0	3.9	2.2	2.0	2.0	11.7	3.3
Don't know	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	105	2,393	882	1,176	357	133	215	334	55	5,650

SDM = Standard days method

¹ Includes female sterilization, male sterilization, female condom, and emergency contraception

Table 7.13.1 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning ¹			Number of women	Percentage of demand satisfied ²	Percentage of demand satisfied by modern methods ³
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	7.6	0.0	7.6	50.4	2.3	52.7	58.0	2.3	60.3	73	87.4	87.4
20-24	7.6	0.3	7.8	55.6	8.9	64.5	63.1	9.1	72.3	750	89.2	85.7
25-29	9.4	1.6	11.0	48.3	18.3	66.6	57.7	19.9	77.6	1,297	85.8	81.2
30-34	9.6	3.6	13.2	36.6	33.2	69.8	46.1	36.8	82.9	1,642	84.1	78.6
35-39	6.1	10.1	16.1	20.5	46.5	66.9	26.5	56.5	83.0	1,690	80.6	73.7
40-44	2.5	14.5	17.0	6.2	56.2	62.4	8.7	70.7	79.4	1,139	78.6	68.0
45-49	1.3	13.5	14.8	0.9	45.0	46.0	2.2	58.6	60.8	809	75.6	58.0
Residence												
Urban	8.0	6.9	14.9	28.7	31.8	60.5	36.7	38.7	75.4	1,288	80.2	73.0
Rural	6.2	7.2	13.4	28.4	36.5	64.9	34.6	43.7	78.3	6,114	82.9	75.6
Province												
City of Kigali	7.4	8.3	15.7	27.5	33.1	60.6	34.8	41.4	76.3	1,006	79.5	72.0
South	6.0	7.6	13.6	25.6	36.9	62.5	31.6	44.5	76.1	1,559	82.1	73.7
West	9.9	6.5	16.4	25.1	36.4	61.5	35.0	42.9	77.9	1,628	78.9	69.8
North	4.6	5.2	9.8	35.4	34.0	69.4	40.0	39.2	79.2	1,201	87.6	81.9
East	4.8	7.9	12.7	29.7	36.4	66.1	34.5	44.3	78.8	2,007	83.9	78.0
Education												
No education	6.1	13.2	19.4	16.7	40.9	57.7	22.8	54.2	77.0	952	74.9	66.9
Primary	6.0	7.1	13.1	27.2	39.1	66.4	33.2	46.2	79.5	4,834	83.5	76.1
Secondary	7.8	3.9	11.6	41.2	20.6	61.8	49.0	24.4	73.4	1,250	84.1	78.0
More than secondary	9.8	2.7	12.6	31.3	28.1	59.4	41.1	30.9	72.0	365	82.5	74.6
Wealth quintile												
Lowest	6.7	8.8	15.5	26.7	37.4	64.1	33.4	46.2	79.5	1,443	80.5	75.7
Second	6.0	7.5	13.5	28.8	37.2	66.0	34.7	44.8	79.5	1,397	83.0	76.2
Middle	5.2	6.9	12.1	28.9	37.9	66.8	34.1	44.8	78.8	1,509	84.7	77.1
Fourth	6.6	6.6	13.3	30.4	35.0	65.4	37.1	41.6	78.7	1,520	83.1	75.2
Highest	8.0	5.9	14.0	27.4	31.2	58.6	35.4	37.1	72.5	1,532	80.8	71.5
Total	6.5	7.1	13.6	28.4	35.7	64.1	35.0	42.8	77.8	7,401	82.5	75.2

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.

¹ Total demand is the sum of unmet need and met need.

² Percentage of demand satisfied is met need divided by total demand.

³ Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods.

Table 7.13.2 Need and demand for family planning for all women and for sexually active unmarried women

Percentage of all women and sexually active unmarried women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning ¹			Number of women	Percentage of demand satisfied ²	Percentage of demand satisfied by modern methods ³
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
ALL WOMEN												
Age												
15-19	2.0	0.1	2.1	3.5	0.2	3.7	5.4	0.3	5.8	3,258	64.2	50.0
20-24	6.9	0.4	7.3	25.2	4.7	30.0	32.1	5.1	37.2	2,414	80.4	76.2
25-29	7.9	1.4	9.3	35.6	15.8	51.4	43.4	17.3	60.7	2,073	84.6	80.0
30-34	8.1	3.6	11.7	30.7	30.9	61.6	38.8	34.5	73.3	2,118	84.0	78.7
35-39	5.2	8.8	14.0	17.4	43.0	60.4	22.6	51.8	74.4	2,072	81.2	74.5
40-44	2.1	12.6	14.8	5.0	47.8	52.8	7.2	60.4	67.5	1,488	78.1	67.8
45-49	0.9	10.2	11.2	0.7	32.3	32.9	1.6	42.5	44.1	1,211	74.7	56.8
Residence												
Urban	5.3	3.6	8.9	16.1	17.0	33.1	21.4	20.6	42.0	2,909	78.8	72.3
Rural	4.8	4.4	9.1	17.8	22.2	40.0	22.6	26.5	49.1	11,725	81.4	74.0
Province												
City of Kigali	5.8	4.6	10.4	15.4	18.4	33.8	21.2	23.0	44.2	2,166	76.5	70.2
South	4.7	4.4	9.1	17.1	22.3	39.4	21.9	26.7	48.5	3,065	81.2	71.2
West	6.2	4.0	10.3	15.6	21.0	36.6	21.8	25.1	46.9	3,174	78.1	69.0
North	3.6	3.0	6.6	21.8	21.3	43.1	25.4	24.3	49.7	2,226	86.7	81.1
East	4.2	4.6	8.8	17.8	21.8	39.6	22.0	26.4	48.4	4,003	81.8	76.7
Education												
No education	5.0	10.1	15.1	13.0	32.5	45.5	18.0	42.6	60.6	1,377	75.1	67.3
Primary	5.0	4.8	9.8	18.3	25.8	44.2	23.3	30.6	54.0	8,529	81.8	74.6
Secondary	4.3	1.3	5.6	16.6	8.3	25.0	21.0	9.6	30.6	4,086	81.6	74.3
More than secondary	6.7	1.7	8.4	20.2	16.5	36.7	26.9	18.2	45.1	642	81.3	74.1
Wealth quintile												
Lowest	5.0	5.6	10.6	18.0	25.5	43.4	23.0	31.1	54.1	2,741	80.3	75.4
Second	4.7	4.8	9.5	17.9	22.5	40.4	22.6	27.2	49.9	2,756	80.9	73.6
Middle	4.4	4.2	8.5	18.4	23.4	41.7	22.7	27.5	50.3	2,757	83.0	75.6
Fourth	5.2	3.9	9.1	18.9	20.8	39.7	24.1	24.7	48.8	2,966	81.3	73.0
Highest	5.0	2.9	7.9	14.7	15.2	29.8	19.7	18.0	37.8	3,414	79.0	70.4
Total	4.9	4.2	9.1	17.4	21.2	38.6	22.3	25.4	47.7	14,634	81.0	73.7
SEXUALLY ACTIVE UNMARRIED WOMEN ⁴												
Age												
15-19	(59.1)	(0.0)	(59.1)	(19.7)	(0.0)	(19.7)	(78.8)	(0.0)	(78.8)	46	(25.0)	(23.0)
20-24	43.3	3.9	47.2	34.4	5.8	40.2	77.8	9.7	87.4	109	46.0	44.3
25-29	23.4	2.4	25.8	29.9	31.7	61.6	53.3	34.1	87.4	84	70.5	70.5
30-34	11.3	13.1	24.4	29.9	39.3	69.2	41.3	52.3	93.6	68	73.9	71.0
35-39	7.2	12.1	19.3	9.5	60.9	70.4	16.7	73.0	89.8	53	78.5	76.8
40-44	(0.7)	(43.0)	(43.7)	(0.0)	(45.6)	(45.6)	(0.7)	(88.6)	(89.3)	35	(51.0)	(45.7)
45-49	*	*	*	*	*	*	*	*	*	22	*	*
Residence												
Urban	31.8	11.6	43.4	30.9	18.2	49.1	62.7	29.9	92.6	110	53.1	51.3
Rural	23.3	11.8	35.1	20.5	29.7	50.2	43.9	41.4	85.3	307	58.8	56.6
Province												
City of Kigali	30.4	15.1	45.5	33.8	14.9	48.7	64.2	30.0	94.2	83	51.7	49.6
South	22.0	9.7	31.8	27.3	29.3	56.6	49.3	39.0	88.3	92	64.0	58.9
West	25.9	20.0	45.9	17.1	21.0	38.2	43.0	41.0	84.0	68	45.4	45.4
North	(25.2)	(6.8)	(32.0)	(13.6)	(43.0)	(56.6)	(38.8)	(49.8)	(88.6)	42	(63.9)	(63.2)
East	25.0	8.3	33.3	20.1	29.9	50.0	45.1	38.2	83.3	133	60.1	58.6
Education												
No education	(9.4)	(18.8)	(28.3)	(5.5)	(36.0)	(41.4)	(14.9)	(54.8)	(69.7)	38	(59.4)	(59.4)
Primary	22.8	13.8	36.6	21.5	29.3	50.8	44.3	43.1	87.4	272	58.2	55.6
Secondary	37.5	3.4	40.9	34.5	17.6	52.1	72.0	21.0	93.0	93	56.0	54.1
More than secondary	*	*	*	*	*	*	*	*	*	14	*	*
Wealth quintile												
Lowest	13.5	12.4	26.0	27.1	35.4	62.5	40.6	47.9	88.5	92	70.7	70.7
Second	23.6	18.0	41.6	13.5	25.7	39.2	37.1	43.7	80.8	79	48.5	44.4
Middle	20.5	13.0	33.4	23.6	29.3	53.0	44.1	42.3	86.4	69	61.3	60.1
Fourth	29.9	9.1	39.1	22.9	28.0	51.0	52.8	37.2	90.0	106	56.6	52.1
Highest	41.7	6.5	48.1	29.3	12.0	41.2	70.9	18.4	89.4	72	46.1	46.1
Total	25.6	11.7	37.3	23.3	26.6	49.9	48.9	38.4	87.2	417	57.2	55.1

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Total demand is the sum of unmet need and met need.

² Percentage of demand satisfied is met need divided by total demand.

³ Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods.

⁴ Women who have had sexual intercourse within 30 days preceding the survey

Table 7.14 Decision making about family planning

Among currently married women age 15-49 who are current users of family planning, percent distribution by who makes the decision to use family planning, and among currently married women who are not currently using family planning, percent distribution by who makes the decision not to use family planning, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among currently married women who are current users of family planning					Number of women	Among currently married women who are not currently using family planning					Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total		Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	
Age												
15-19	(10.6)	(84.6)	(4.9)	(0.0)	(100.0)	39	*	*	*	*	*	17
20-24	6.6	91.5	1.7	0.2	100.0	484	26.2	57.6	7.3	8.9	100.0	118
25-29	8.4	88.6	2.8	0.2	100.0	864	21.7	66.3	4.6	7.4	100.0	243
30-34	8.5	88.9	2.5	0.2	100.0	1,146	28.6	61.1	5.5	4.7	100.0	322
35-39	10.9	86.2	2.7	0.2	100.0	1,131	30.1	61.0	2.7	6.1	100.0	406
40-44	10.9	85.6	2.9	0.6	100.0	711	35.1	56.6	3.3	5.0	100.0	378
45-49	13.3	83.5	2.7	0.5	100.0	372	33.6	53.1	3.9	9.5	100.0	435
Number of living children												
0	*	*	*	*	*	10	13.8	64.1	4.3	17.7	100.0	183
1-2	7.8	89.7	2.3	0.2	100.0	1,858	25.7	64.6	3.7	6.1	100.0	581
3-4	9.4	87.9	2.6	0.1	100.0	1,876	34.8	57.3	3.9	4.0	100.0	572
5+	13.5	82.8	3.2	0.4	100.0	1,002	35.2	53.2	4.8	6.8	100.0	583
Residence												
Urban	10.5	86.2	3.0	0.4	100.0	778	30.6	55.3	5.5	8.6	100.0	368
Rural	9.4	87.8	2.6	0.2	100.0	3,967	30.1	59.8	3.8	6.3	100.0	1,551
Province												
City of Kigali	12.5	84.7	2.2	0.6	100.0	610	34.9	55.0	3.9	6.2	100.0	306
South	9.7	87.9	2.2	0.2	100.0	974	32.6	54.7	5.1	7.6	100.0	410
West	11.7	84.5	3.8	0.1	100.0	1,001	29.6	56.9	4.7	8.8	100.0	451
North	7.7	90.3	1.9	0.1	100.0	833	24.2	64.9	1.8	9.1	100.0	250
East	7.8	89.1	2.8	0.3	100.0	1,327	28.9	63.5	4.2	3.4	100.0	502
Education												
No education	14.2	82.0	3.4	0.4	100.0	549	33.3	54.2	6.6	5.8	100.0	342
Primary	9.3	87.6	2.7	0.3	100.0	3,208	32.1	58.0	3.4	6.5	100.0	1,187
Secondary	7.9	90.3	1.7	0.1	100.0	773	21.6	66.4	5.0	6.9	100.0	285
More than secondary	8.1	89.7	2.1	0.0	100.0	217	21.8	63.9	2.2	12.2	100.0	105
Wealth quintile												
Lowest	14.9	81.3	3.3	0.5	100.0	924	36.9	52.6	4.6	5.9	100.0	391
Second	11.2	86.7	2.0	0.0	100.0	923	32.2	54.9	6.6	6.4	100.0	338
Middle	8.5	89.3	2.1	0.1	100.0	1,007	31.0	60.2	3.4	5.3	100.0	353
Fourth	6.2	90.0	3.3	0.5	100.0	994	28.5	61.4	4.1	5.9	100.0	374
Highest	7.4	90.0	2.3	0.2	100.0	898	23.7	64.1	2.6	9.6	100.0	462
Total	9.6	87.5	2.6	0.3	100.0	4,746	30.2	58.9	4.2	6.8	100.0	1,919

Note: Table excludes women who are currently pregnant. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.15 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Rwanda DHS 2019-20

Intention to use in the future	Number of living children ¹					Total
	0	1	2	3	4+	
Intends to use	54.6	71.7	75.6	67.5	49.0	61.2
Unsure	1.7	0.4	0.0	0.0	0.7	0.4
Does not intend to use	43.7	28.0	24.4	32.5	50.3	38.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	183	446	490	451	1,086	2,656

¹ Includes current pregnancy

Table 7.16 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or on a mobile phone in the past few months, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women						Men					
	Radio	Television	News-paper/ magazine	Mobile phone	None of these four media sources	Number of women	Radio	Television	News-paper/ magazine	Mobile phone	None of these four media sources	Number of men
Age												
15-19	38.4	8.2	9.9	2.8	56.6	3,258	50.8	9.5	7.6	0.9	45.5	1,526
20-24	49.4	11.1	10.3	4.4	46.1	2,414	62.3	14.0	14.0	5.5	32.8	960
25-29	52.8	13.5	9.6	4.6	43.3	2,073	61.6	12.8	10.9	3.4	35.4	710
30-34	54.5	11.1	8.1	3.7	43.5	2,118	68.9	15.9	12.4	4.9	30.1	835
35-39	53.4	11.2	6.0	3.7	44.7	2,072	68.2	14.0	9.0	2.9	30.2	793
40-44	53.3	11.8	6.2	2.3	44.1	1,488	71.0	17.1	10.9	3.9	27.2	575
45-49	52.3	10.0	4.9	2.6	46.4	1,211	76.2	14.6	7.4	4.9	22.1	447
Residence												
Urban	56.0	25.3	12.9	4.6	37.2	2,909	66.9	29.8	18.2	3.2	27.5	1,115
Rural	47.7	7.2	7.2	3.2	49.8	11,725	61.9	9.4	8.4	3.4	35.9	4,731
Province												
City of Kigali	53.7	25.2	12.7	5.7	38.9	2,166	59.7	27.5	15.7	3.2	34.3	879
South	45.5	6.9	7.6	2.1	52.3	3,065	61.2	7.4	6.3	1.5	38.0	1,239
West	52.7	9.5	8.7	3.7	44.2	3,174	62.4	12.9	11.1	4.0	34.4	1,268
North	48.6	6.8	8.5	4.3	49.0	2,226	66.0	11.1	12.7	4.7	31.7	886
East	47.8	9.3	6.2	2.7	49.5	4,003	64.6	11.5	8.3	3.9	32.8	1,574
Education												
No education	40.2	4.8	0.9	1.3	59.1	1,377	53.1	3.7	0.2	1.1	45.8	420
Primary	47.1	6.6	4.3	2.6	51.2	8,529	61.3	9.2	5.1	3.1	36.7	3,569
Secondary	55.4	16.5	15.4	5.4	38.7	4,086	66.3	19.3	18.8	3.9	28.9	1,562
More than secondary	61.6	43.2	32.2	8.0	24.9	642	77.3	44.6	42.3	7.4	17.2	295
Wealth quintile												
Lowest	29.5	1.7	2.0	0.7	69.5	2,741	45.4	5.3	2.5	0.9	52.4	924
Second	42.3	2.1	4.5	2.5	55.9	2,756	57.4	5.6	4.7	2.9	40.8	1,076
Middle	52.2	3.5	6.3	2.8	46.5	2,757	66.0	6.1	7.9	2.4	32.3	1,227
Fourth	59.4	8.4	10.0	4.8	37.3	2,966	69.1	10.0	10.6	4.6	28.7	1,278
Highest	60.1	33.0	16.7	6.0	31.8	3,414	70.4	34.7	21.8	5.2	23.7	1,342
Total 15-49	49.4	10.8	8.3	3.5	47.3	14,634	62.9	13.3	10.2	3.4	34.3	5,846
50-59	na	na	na	na	na	na	67.7	14.4	9.1	3.3	30.6	667
Total 15-59	na	na	na	na	na	na	63.4	13.4	10.1	3.4	33.9	6,513

na = Not applicable

Table 7.17 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, percentage who during the past 12 months were visited by a fieldworker who discussed family planning, percentage who visited a health facility and discussed family planning, percentage who visited a health facility but did not discuss family planning, and percentage who did not discuss family planning either with a fieldworker or at a health facility, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of women who were visited by a fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with a fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	2.5	3.4	34.2	94.7	3,138
20-24	7.6	10.8	45.7	85.2	1,690
25-29	13.9	21.8	47.3	71.4	1,008
30-34	18.9	28.2	43.5	63.3	814
35-39	24.2	31.0	38.9	58.1	821
40-44	18.6	22.2	45.0	66.5	703
45-49	15.2	16.1	43.0	74.2	812
Residence					
Urban	7.2	13.8	41.3	82.1	1,946
Rural	11.6	14.4	40.6	79.5	7,039
Province					
City of Kigali	5.9	14.2	43.1	82.9	1,433
South	13.7	16.3	36.7	77.2	1,857
West	12.6	15.2	40.9	77.8	2,011
North	9.0	11.7	45.9	83.2	1,266
East	10.3	13.3	39.7	80.7	2,417
Education					
No education	18.7	18.0	34.8	70.9	750
Primary	12.3	16.0	38.2	77.5	4,763
Secondary	6.6	10.5	44.7	86.0	3,066
More than secondary	6.5	15.3	51.7	81.6	406
Wealth quintile					
Lowest	14.0	15.5	31.5	76.1	1,550
Second	12.4	13.8	39.0	79.4	1,644
Middle	10.8	15.0	42.1	79.5	1,607
Fourth	11.4	15.7	44.7	78.2	1,790
Highest	6.6	12.2	44.1	84.7	2,395
Total	10.6	14.3	40.7	80.0	8,986

INFANT AND CHILD MORTALITY

Key Findings

- **Current levels:** The infant mortality rate was 33 deaths per 1,000 live births for the 5-year period preceding the survey. Under-5 mortality was 45 deaths per 1,000 live births, and child mortality was 13 deaths per 1,000 live births. This implies that about 1 in 22 children in Rwanda die before their 5th birthday.
- **Trends:** The under-5 mortality rate has decreased since 2014-15 (from 50 to 45 deaths per 1,000 live births). However, there has been no noticeable change in infant mortality or neonatal mortality.
- **High-risk fertility behavior:** 75% of currently married women have the potential for a high-risk birth. In the 5 years preceding the survey, 45% of infants were at elevated odds of dying from avoidable risks: 24% fell into a single high-risk category, and 21% fell into a multiple high-risk category. About 1 in 3 births were not in any high-risk category.

Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socioeconomic development and quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under-5 mortality rates. It also examines biodemographic factors and fertility behaviors that increase mortality risks for infants and children. The information was collected as part of a retrospective birth history in which female respondents listed all of the children to whom they had given birth, along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from birth histories of those births that did not survive, which can result in underestimation of childhood mortality.
- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on her overall workload, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.
- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.

- Any method of measuring childhood mortality that relies on mothers' reports (e.g., birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality risks of mothers and those of their children.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, **Tables C.3-C.6**.

8.1 INFANT AND CHILD MORTALITY

Neonatal mortality: The probability of dying within the first month of life.

Postneonatal mortality: The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality).

Infant mortality: The probability of dying between birth and the first birthday.

Child mortality: The probability of dying between the first and the fifth birthday.

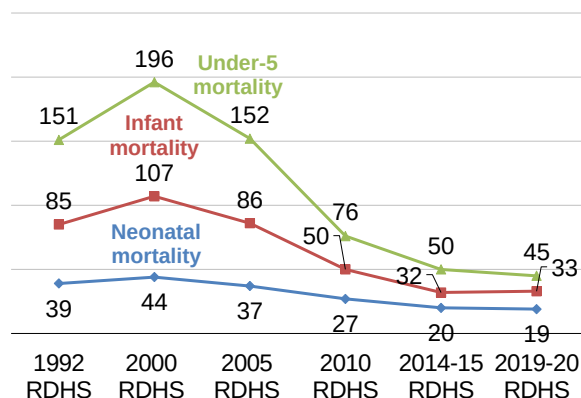
Under-5 mortality: The probability of dying between birth and the fifth birthday.

The 2019-20 RDHS results (**Table 8.1**) show that the infant mortality rate was 33 deaths per 1,000 live births for the 5 years preceding the survey. The child mortality rate was 13 deaths per 1,000 live births, while the under-5 mortality rate was 45 deaths per 1,000 live births. This implies that about 1 in 22 children in Rwanda die before their 5th birthday. With respect to other early childhood mortality rates, the neonatal mortality rate was 19 deaths per 1,000 live births and the postneonatal mortality rate was 14 deaths per 1,000.

Trends: Under-5 mortality declined from 196 deaths per 1,000 live births in 2000 to 45 deaths per 1,000 live births in 2019-20 (**Figure 8.1**). Over the same period, the infant mortality rate declined from 107 to 33 deaths per 1,000 live births and the neonatal mortality rate decreased from 44 to 19 deaths per 1,000 live births.

Figure 8.1 Trends in early childhood mortality rates

Deaths per 1,000 live births in the 5-year period before the survey



Patterns by demographic characteristics

- The under-5 mortality rate is lower in City of Kigali and West (31 and 44 deaths per 1,000 live births, respectively) than in the other three provinces (56-57 deaths per 1,000 live births) (Figure 8.2).
- Under-5 mortality declines with increasing mother's education, from 62 deaths per 1,000 live births among children whose mothers have no education to 17 deaths per 1,000 live births among children whose mothers have more than a secondary education (Figure 8.3).
- Under-5 mortality also decreases with increasing household wealth, from 72 deaths per 1,000 live births in the lowest wealth quintile to 30 deaths per 1,000 live births in the highest quintile.

8.2 BIODEMOGRAPHIC RISK FACTORS

The demographic characteristics of both mothers and children have been found to play an important role in the survival of children. Tables 8.2 and 8.3 present childhood mortality rates by demographic characteristics (sex of the child, residence, mother's age at birth, birth order, previous birth interval, and infant's size at birth).

Patterns by demographic characteristics

- Overall, boys are slightly more likely than girls to die in childhood. For example, the under-5 mortality rate among boys is 47 deaths per 1,000 live births, as compared with 43 deaths per 1,000 live births among girls (Table 8.2).
- The under-5 mortality rate is higher in rural areas (48 deaths per 1,000 live births) than in urban areas (35 deaths per 1,000 live births).
- During the 10-year period preceding the survey, under-5 mortality was higher among children of mothers who were less than age 20 and age 40-49 at the time of the birth (69 and 89 deaths per 1,000 live births, respectively) than among children of mothers who were age 20-29 and age 30-39 (47 deaths per 1,000 live births in each group) (Table 8.3).

Figure 8.2 Under-5 mortality by province

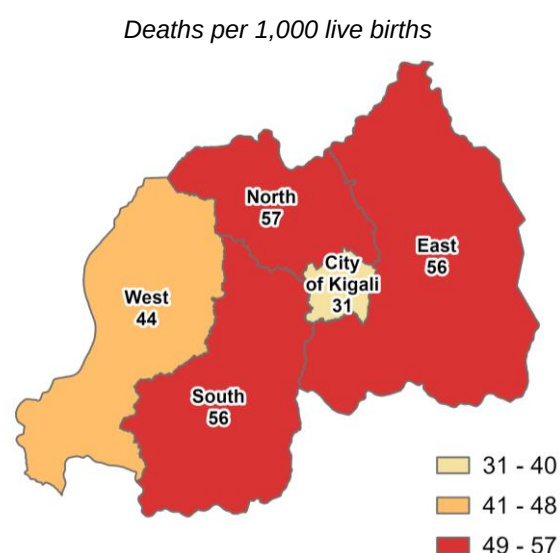
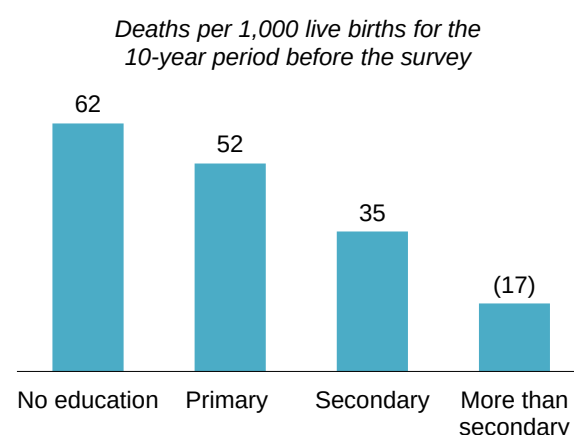


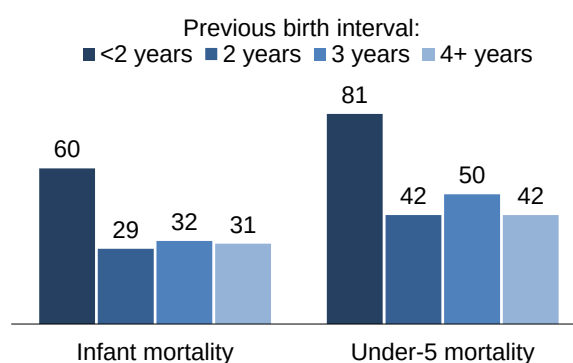
Figure 8.3 Under-5 mortality by mother's education



- Under-5 mortality is highest among children whose mothers have given birth to seven or more children (86 deaths per 1,000 live births).
- The under-5 mortality rate is highest among children with birth intervals of less than 2 years (81 deaths per 1,000 live births) (**Figure 8.4**).

Figure 8.4 Childhood mortality by previous birth interval

Deaths per 1,000 live births for the 10-year period before the survey



8.3 PERINATAL MORTALITY

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy losses occurring after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.

Sample: Number of pregnancies of 7 or more months' duration to women age 15-49 in the 5 years before the survey

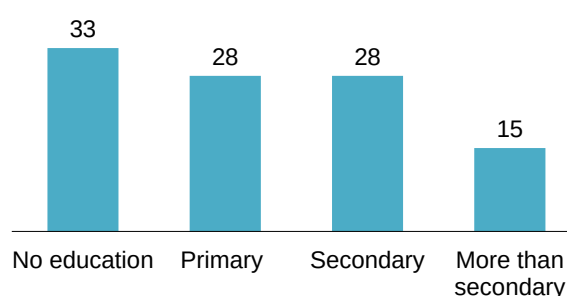
The causes of stillbirths and early neonatal deaths are closely linked, and it can be difficult to determine whether a death is attributable to one cause or the other. The perinatal mortality rate encompasses both stillbirths and early neonatal deaths and offers a better measure of the level of mortality and quality of antenatal care (ANC) services at delivery. During the 5 years before the survey, the perinatal mortality rate was 28 deaths per 1,000 pregnancies (**Table 8.4**).

Patterns by background characteristics

- Perinatal mortality is highest among children whose mothers were age 40-49 at the time of the birth (48 deaths per 1,000 pregnancies) (**Table 8.4**).
- The perinatal mortality rate is relatively high for first pregnancies (30 deaths per 1,000 pregnancies) and is highest among women with a pregnancy interval of less than 15 months (39 deaths per 1,000 pregnancies).
- The perinatal mortality rate is higher in rural areas than in urban areas (29 versus 24 deaths per 1,000 pregnancies).
- The perinatal mortality rate is highest for mothers with no education (33 deaths per 1,000 pregnancies) and lowest for mothers with more than a secondary education (15 deaths per 1,000 pregnancies) (**Figure 8.5**).

Figure 8.5 Perinatal mortality by mother's education

Deaths per 1,000 pregnancies of 7 or more months' duration in the 5-year period before the survey



8.4 HIGH-RISK FERTILITY BEHAVIOR

Findings from scientific studies have confirmed a strong relationship between a child's chance of dying and specific fertility behaviors, meaning that the survival of infants and children depends in part on the demographic and biological characteristics of their mothers. The probability of dying in infancy is much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). The risk is elevated when a child is born to a mother who has a combination of these risk characteristics.

Table 8.5 presents the percent distribution of children born in the 5 years preceding the survey who fall into different risk categories: not in any high-risk category, in an unavoidable risk category, in a single high-risk category, or in a multiple high-risk category.

In the 5 years before the survey, 45% of infants in Rwanda were at elevated odds of dying from avoidable risks: 24% were in a single high-risk category, and 21% were in a multiple high-risk category. Thirty-two percent of births were not in any high-risk category, while 24% were in the unavoidable risk category.

The risk ratio is higher for children in a multiple high-risk category than for children in a single high-risk category (1.37 versus 1.11). Risk ratios are highest for births in which the mother was younger than age 18 (1.83) and births in which the mother was older than age 34, the birth interval was less than 24 months, and the birth order was higher than three (1.79).

Overall, 75% of currently married women have the potential for a high-risk birth, with 25% falling into a single high-risk category and 50% falling into a multiple high-risk category.

LIST OF TABLES

For more information on infant and child mortality, see the following tables:

- **Table 8.1** **Early childhood mortality rates**
- **Table 8.2** **Five-year early childhood mortality rates according to background characteristics**
- **Table 8.3** **Ten-year early childhood mortality rates according to additional characteristics**
- **Table 8.4** **Perinatal mortality**
- **Table 8.5** **High-risk fertility behavior**

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Rwanda DHS 2019-20

Years preceding the survey	Neonatal mortality (NN)	Post-neonatal mortality (PNN) ¹	Infant mortality (₁ Q ₀)	Child mortality (₄ Q ₁)	Under-5 mortality (₅ Q ₀)
0-4	19	14	33	13	45
5-9	23	14	37	18	55
10-14	24	24	48	28	75

¹ Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Five-year early childhood mortality rates according to background characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN) ¹	Infant mortality (₁ Q ₀)	Child mortality (₄ Q ₁)	Under-5 mortality (₅ Q ₀)
Child's sex					
Male	21	15	35	12	47
Female	17	13	30	14	43
Residence					
Urban	15	13	28	7	35
Rural	20	14	34	15	48
Total	19	14	33	13	45

¹ Computed as the difference between the infant and neonatal mortality rates

Table 8.3 Ten-year early childhood mortality rates according to additional characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to additional characteristics, Rwanda DHS 2019-20

Characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN) ¹	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Mother's age at birth					
<20	23	21	45	25	69
20-29	19	13	33	15	47
30-39	21	12	33	15	47
40-49	34	27	61	(29)	(89)
Birth order					
1	20	14	33	16	49
2-3	19	12	31	13	43
4-6	22	12	35	17	51
7+	32	29	61	26	86
Previous birth interval²					
<2 years	37	23	60	22	81
2 years	17	12	29	13	42
3 years	19	13	32	18	50
4+ years	19	11	31	12	42
Birth size³					
Small/very small	39	21	60	na	na
Average or larger	13	12	25	na	na
Province					
City of Kigali	13	11	23	7	31
South	28	12	41	16	56
West	17	16	32	12	44
North	24	15	40	18	57
East	21	14	35	22	56
Mother's education					
No education	24	16	40	23	62
Primary	22	15	37	16	52
Secondary	17	11	28	7	35
More than secondary	6	3	9	(8)	(17)
Wealth quintile					
Lowest	25	20	45	28	72
Second	25	19	44	13	57
Middle	20	10	31	13	43
Fourth	19	10	29	11	40
Highest	13	8	21	9	30

Note: Figures in parentheses are based on 250-499 unweighted cases.

na = Not available

¹ Computed as the difference between the infant and neonatal mortality rates

² Excludes first-order births

³ Rates for the 5-year period before the survey

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Number of stillbirths ¹	Number of early neonatal deaths ²	Perinatal mortality rate ³	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	5	5	21	488
20-29	46	56	26	3,913
30-39	45	53	28	3,461
40-49	14	11	48	516
Previous pregnancy interval in months⁴				
First pregnancy	32	27	30	1,970
<15	22	24	39	1,168
15-26	16	14	22	1,377
27-38	11	19	25	1,211
39+	30	40	26	2,650
Residence				
Urban	20	14	24	1,456
Rural	90	110	29	6,921
Province				
City of Kigali	15	7	19	1,165
South	21	32	31	1,685
West	23	30	26	2,022
North	17	22	31	1,274
East	34	33	30	2,232
Mother's education				
No education	13	19	33	959
Primary	69	83	28	5,435
Secondary	26	19	28	1,626
More than secondary	2	3	15	357
Wealth quintile				
Lowest	24	34	29	1,972
Second	22	31	32	1,635
Middle	27	22	30	1,621
Fourth	15	24	25	1,613
Highest	22	13	23	1,536
Total	111	124	28	8,377

¹ Stillbirths are fetal deaths in pregnancies lasting 7 or more months.

² Early neonatal deaths are deaths at age 0-6 days among live-born children.

³ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000

⁴ Category cutoffs correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months assuming a pregnancy duration of 9 months.

Table 8.5 High-risk fertility behavior

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Rwanda DHS 2019-20

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women ¹
	Percentage of births	Risk ratio	
Not in any high-risk category	31.5	1.00	21.4 ^a
Unavoidable risk category			
First-order births between age 18 and age 34	23.5	1.02	3.7
In any avoidable high-risk category	45.0	1.23	74.9
Single high-risk category			
Mother's age <18 only	1.5	1.83	0.1
Mother's age >34 only	3.7	1.07	6.3
Birth interval <24 months only	5.8	1.18	9.5
Birth order >3 only	12.7	1.00	9.2
Subtotal	23.7	1.11	25.0
Multiple high-risk category			
Age <18 and birth interval <24 months ²	0.0	*	0.0
Age >34 and birth interval <24 months	0.2	*	0.5
Age >34 and birth order >3	16.1	1.29	36.3
Age >34 and birth interval <24 months and birth order >3	2.1	1.79	7.5
Birth interval <24 months and birth order >3	2.9	1.63	5.6
Subtotal	21.4	1.37	49.9
Total	100.0	na	100.0
Subtotals by individual avoidable high-risk category			
Mother's age <18	1.6	1.79	0.1
Mother's age >34	22.1	1.29	50.6
Birth interval <24 months	11.1	1.38	23.0
Birth order >3	33.8	1.24	58.6
Number of births/women	8,324	na	7,401

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

¹ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.

² Includes the category age <18 and birth order >3

^a Includes sterilized women

Key Findings

- **Antenatal care coverage:** 98% of women age 15-49 who gave birth in the 5 years preceding the survey received antenatal care (ANC) from a skilled provider during the pregnancy for their most recent birth. Forty-seven percent had at least four ANC visits.
- **Components of antenatal care:** High proportions of women who received antenatal care services had their blood pressure measured (89%), a urine sample taken (85%), and a blood sample taken (98%).
- **Protection against neonatal tetanus:** 79% of women who gave birth in the 5 years preceding the survey had a sufficient number of tetanus toxoid injections to ensure that their most recent birth was protected against neonatal tetanus.
- **Delivery:** 93% of live births in the 5 years preceding the survey took place in a health facility. Ninety-four percent of births were assisted by a skilled provider. Fifteen percent of health facility births in the 5 years before the survey were delivered via cesarean section.
- **Maternal postnatal check:** Among women who gave birth in the 2 years preceding the survey, 70% received a postnatal check in the first 2 days after birth.
- **Newborn postnatal check:** 75% of infants born in the 2 years preceding the survey received a postnatal check in the first 2 days after birth.

Health care services during pregnancy and childbirth and after delivery are important for the survival and well-being of both the mother and the infant. Ensuring access to a continuum of care for women during the antenatal, intrapartum, and postpartum periods is critical for maternal and newborn survival and is a priority of the Ministry of Health. The 2019-20 RDHS obtained information on key indicators of maternal and newborn care in Rwanda. These findings will help policymakers and program implementers in assessing current policies and programs as well as in decision making to improve maternal and newborn health care services in Rwanda.

9.1 ANTENATAL CARE COVERAGE AND CONTENT

9.1.1 Skilled Providers

Antenatal care (ANC) from a skilled provider

Pregnancy care received from skilled providers, such as doctors, nurses/midwives, and auxiliary nurses/midwives.

Sample: Women age 15-49 who had a live birth in the 5 years before the survey

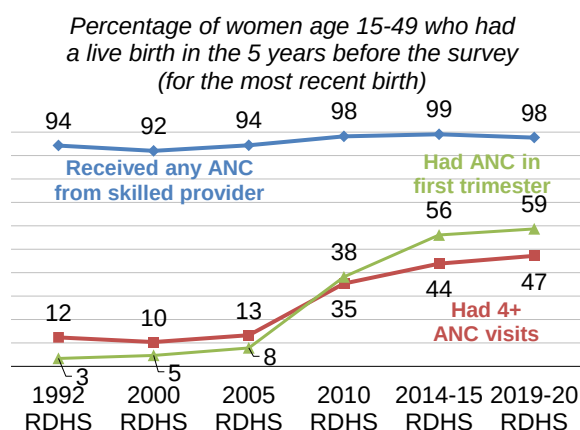
Access to quality ANC services during pregnancy can help prevent maternal deaths. ANC visits allow providers to identify and manage infections as well as obstetric complications and to provide preventive injections, medications, and supplements to women. During ANC visits, women receive education about health behaviors during pregnancy, counseling on pregnancy danger signs, and information on family planning. Ninety-eight percent of women age 15-49 received ANC from a skilled provider for their most recent birth (**Table 9.1**). The majority of women (93%) received ANC from nurses/midwives, while 5% received care from doctors.

Trends: Coverage of ANC from a skilled provider has remained nearly universal over the past decade (**Figure 9.1**).

Patterns by background characteristics

- The proportion of women receiving antenatal care services from a skilled provider decreases slightly with age.
- Use of ANC services increases slightly with increasing education and household wealth. Ninety-five percent of women with no education received ANC services from a skilled provider, as compared with more than 99% of women with more than a secondary education. Similarly, 96% of women in the lowest wealth quintile received ANC from a skilled provider, compared with more than 99% of women in the highest quintile.

Figure 9.1 Trends in antenatal care coverage



9.1.2 Timing and Number of ANC Visits

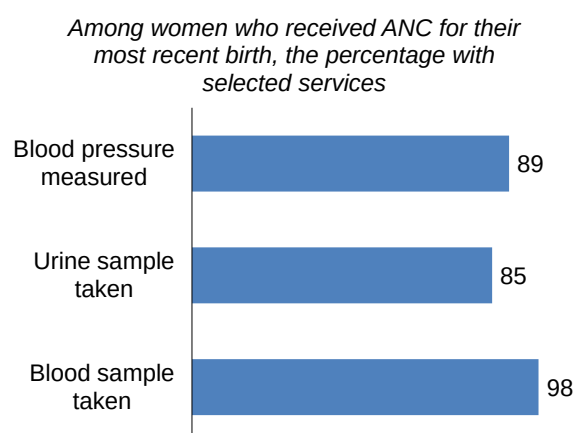
Forty-seven percent of women had at least four ANC visits for their most recent birth in the 5 years preceding the survey (**Table 9.2**). Urban women (49%) were slightly more likely than rural women (47%) to have four or more ANC visits. The majority of pregnant women (59%) had their first antenatal care visit in the first trimester. Twenty-seven percent of women started ANC in the fourth or fifth month of pregnancy, and 10% did not seek care until the sixth or seventh month. Urban women (60%) were more likely than rural women (58%) to seek ANC services in the first trimester.

Trends: The proportion of women with four or more ANC visits increased from 35% in 2010 to 47% in 2019-20 (**Figure 9.1**). Within the same time period, the proportion of women with an ANC visit in the first trimester of pregnancy increased from 38% to 59%.

9.2 COMPONENTS OF ANC VISITS

Eighty-one percent of women took iron tablets or syrup during their most recent pregnancy, while 43% took intestinal parasite drugs (Table 9.3). Among women who received ANC for their most recent birth, 89% had their blood pressure checked, 85% had a urine sample taken, and 98% had a blood sample taken (Figure 9.2). There was some variation by background characteristics in the components of ANC. Younger women were less likely than older women to have their blood pressure checked. In general, women living in urban areas, women at higher educational levels, and women in the higher wealth quintiles were more likely than their counterparts to have their blood pressure measured and blood and urine samples taken.

Figure 9.2 Components of antenatal care



Trends: The proportion of women who receive iron tablets or syrup has increased since 2010, from 73% to 81%. In contrast, the proportion of women receiving intestinal parasite drugs decreased from 49% in 2014-15 to 43% in 2019-20.

9.3 PROTECTION AGAINST NEONATAL TETANUS

Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during the pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Last live births in the 5 years before the survey to women age 15-49

Neonatal tetanus, a leading cause of death among neonates in developing countries, is often due to failure to observe hygienic procedures during delivery. Thirty-four percent of women with a live birth in the 5 years before the survey received two or more tetanus toxoid injections to protect their last live birth against neonatal tetanus. Seventy-nine percent of women's most recent live births were protected against neonatal tetanus (Table 9.4).

Trends: The proportion of mothers whose births were protected against neonatal tetanus has declined slightly since 2010, from 83% to 79%, while the proportion of women receiving two or more doses of tetanus toxoid has not changed (34%).

Patterns by background characteristics

- Urban women are more likely than rural women to have received two or more doses of tetanus toxoid (40% versus 32%).
- The proportion of women receiving two or more doses of tetanus toxoid increases with increasing education, from 24% among those with no education to 51% among those with more than a secondary education.

- Protection against neonatal tetanus increases with increasing wealth, from 76% among women in the lowest wealth quintile to 82% among women in the highest wealth quintile.

9.4 DELIVERY SERVICES

9.4.1 Institutional Deliveries

Institutional deliveries

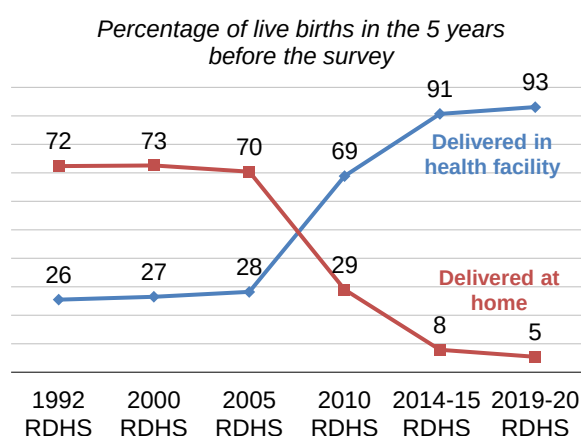
Deliveries that occur in a health facility.

Sample: All live births in the 5 years before the survey

In order to reduce maternal and newborn mortality, deliveries should occur in facilities where providers can manage obstetric and newborn complications that may arise during delivery. Ninety-three percent of women in Rwanda delivered their last live birth in a health facility (**Table 9.5**). Of these women, 91% delivered in a public facility and only 2% in a private facility. Five percent of women delivered at home.

Trends: The percentage of deliveries taking place at health facilities has increased over time, from 28% in 2005 and 69% in 2010 to 91% in 2014-15 and 93% in 2019-20 (**Figure 9.3**).

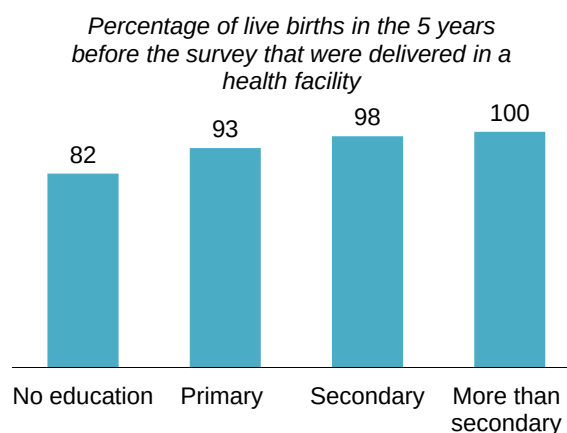
Figure 9.3 Trends in place of birth



Patterns by background characteristics

- Only 3% of births to mothers less than age 20 were delivered at home, as compared with 5% of births to mothers age 20-34 and 8% to mothers age 35-49.
- First-order births are more likely (98%) to occur in a health facility than sixth- and higher-order births (81%).
- Ninety-seven percent of most recent births to mothers with four or more ANC visits were delivered at a health facility, compared with only 39% of births to mothers with no ANC visits.
- Ninety-eight percent of urban births were delivered in a health facility, as compared with 92% of rural births.
- Births to mothers with more than a secondary education (100%) were more likely to be delivered at a facility than births to mothers with no education (82%) (**Figure 9.4**).
- Facility deliveries are higher in City of Kigali (97%) and North (96%) than in the other provinces (92% each).

Figure 9.4 Health facility births by mother's education



9.4.2 Skilled Assistance during Delivery

Skilled assistance during delivery

Births delivered with the assistance of doctors, nurses/midwives, and auxiliary nurses/midwives.

Sample: All live births in the 5 years before the survey

Assistance from a skilled birth attendant during delivery is considered a key factor in reducing maternal and neonatal mortality. In Rwanda, 94% of deliveries are assisted by a skilled provider (71% by nurses/midwives and 22% by doctors) (**Table 9.6**). Unskilled providers such as traditional birth attendants assist in only a small percentage of deliveries, and 3% of births receive no assistance. Relatives of pregnant women assist in 3% of deliveries (**Table 9.6** and **Figure 9.5**).

Trends: The proportion of births assisted by skilled birth attendants has increased since 2005, from 28% in 2005, 69% in 2010, and 91% in 2014-15 to 94% in 2019-20.

Patterns by background characteristics

- First-order births (99%) are more likely than sixth- and higher-order births (83%) to be delivered by a skilled provider (**Table 9.6**).
- Ninety-eight percent of most recent births to mothers with four or more ANC visits were delivered with the assistance of a skilled provider, as compared with only 43% of births to mothers with no ANC visits.
- Ninety-seven percent of births in City of Kigali and in North, each are attended by a skilled provider, compared with 93%-94% of births in the other provinces.
- The proportion of births attended by skilled providers increases with increasing mother's education, from 85% among births to mothers with no education to more than 99% among births to mothers with more than a secondary education.
- Skilled assistance at delivery also increases with increasing household wealth, from 89% among births to mothers in the lowest wealth quintile to 99% among births to mothers in the highest quintile (**Figure 9.6**).

Figure 9.5 Assistance during delivery

Percent distribution of births in the 5 years before the survey

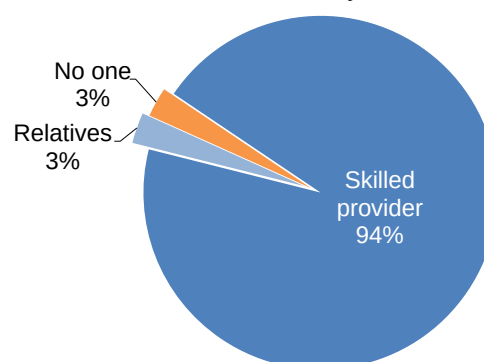
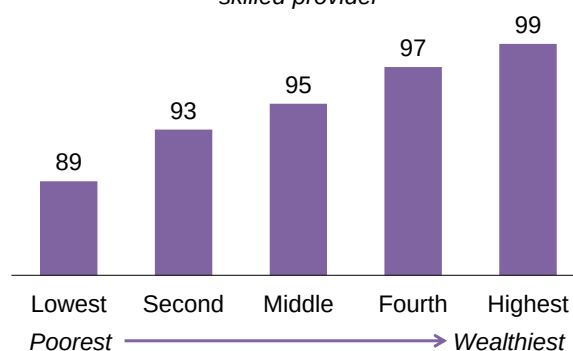


Figure 9.6 Skilled assistance at delivery by household wealth

Percentage of live births in the 5 years before the survey assisted by a skilled provider



9.4.3 Thermal Care for Newborns

To prevent hypothermia, newborns should be kept warm. Skin-to-skin contact immediately after birth can help newborns regulate their temperature. Among the most recent live births in the 5 years preceding the survey, 75% of newborns had skin-to-skin contact immediately after birth (**Table 9.6**).

Patterns by background characteristics

- There is only a small difference by residence in the percentage of newborns receiving skin-to-skin thermal care (74% in urban areas and 75% in rural areas).
- Eighty percent of live births delivered at health facilities receive skin-to-skin thermal care, compared with 11% of births delivered elsewhere.
- Seventy-seven percent of most recent births to mothers with four or more ANC visits received skin-to-skin thermal care, compared with only 34% of births to mothers with no ANC visits.

9.4.4 Delivery by Cesarean

Access to cesarean sections can reduce maternal and neonatal mortality and complications of labor. WHO advises that cesarean sections be done only when medically necessary and does not recommend a target rate for countries to achieve at the population level. Research conducted by WHO has shown that increases in countries' cesarean section rates up to 10% are associated with a decline in maternal and neonatal mortality. However, increases in cesarean section rates beyond 10% are not associated with reductions in maternal and newborn mortality rates (WHO 2015a). The cesarean section delivery rate in Rwanda is 15%. For 9% of total births, the decision to have a cesarean section was made after the onset of labor, while for 6% of births the decision was made before the onset of labor (**Table 9.7**).

Trends: There has been an increase over the years in the proportion of births delivered by cesarean section (2% in 1992 and 2000, 3% in 2005, 7% in 2010, 13% in 2014-15, and 15% in 2019-20).

Patterns by background characteristics

- Cesarean section deliveries are most common (19%) among first-order births and decrease as birth order increases.
- The proportion of cesarean section deliveries is higher in urban areas (25%) than in rural areas (13%).
- Nineteen percent of most recent births to mothers with four or more ANC visits were delivered via cesarean section, as compared with only 3% of births to mothers with no ANC visits.
- By province, the cesarean section rate is highest in City of Kigali (25%) and lowest in North (12%).
- The proportion of cesarean section deliveries increases with increasing education and wealth (**Table 9.7**).

Duration of Stay in Health Facility after Birth

Table 9.8 shows that about two-thirds (68%) of women who had a vaginal delivery in a health facility stayed in the health facility 1-2 days after delivery, and 27% stayed for 3 or more days. Eighty-seven percent of women who gave birth by cesarean section stayed at the health facility for 3 or more days.

9.5 POSTNATAL CARE

9.5.1 Postnatal Health Check for Mothers

Globally, approximately half of maternal deaths occur within the first 24 hours after delivery. In line with WHO guidelines, Rwanda's safe motherhood program recommends that women who deliver in a health facility receive a postnatal health care check within the first 24 hours after delivery, while those who give birth outside a health facility should be referred for postnatal checks in health facilities within 12 hours after delivery.

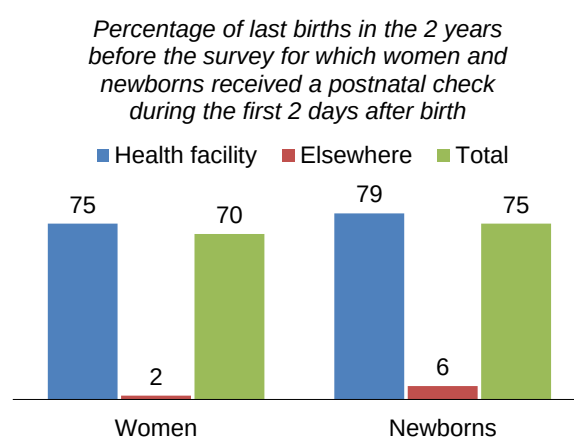
In Rwanda, 70% of mothers who gave birth in the 2 years preceding the survey reported seeing someone for a check within the first 2 days after birth, with 55% reporting that they were checked within 4 hours after giving birth (**Table 9.9**). Most women (70%) receiving postnatal care reported seeing a doctor, nurse, or midwife for their postnatal check; less than 1% reported seeing another type of skilled provider. Thirty percent of women received no postnatal check (**Table 9.10**).

Trends: The proportion of women age 15-49 with a live birth in the 2 years preceding the survey who received a postnatal check within 2 days after delivery has increased over the last decade, from 18% in 2010 and 43% in 2014-15 to 70% in 2019-20.

Patterns by background characteristics

- The higher the birth order, the less likely a woman will have a postnatal check during the first 2 days after birth.
- Women who deliver in a health facility (75%) are much more likely to receive a postnatal health check within 2 days of delivery than women who deliver elsewhere (2%) (**Figure 9.7**).
- The proportion of women with a postnatal check during the first 2 days after birth increases with increasing education and wealth.

Figure 9.7 Postnatal care by place of delivery



9.5.2 Postnatal Health Check for Newborns

Proper care for newborns is essential to reduce neonatal problems and death. According to WHO, postnatal care services for newborns should start immediately after birth because many neonatal deaths occur within the first 48 hours of life (WHO 2015b).

Seventy-five percent of infants born in the 2 years before the survey received a postnatal check during the first 2 days after birth; however, 25% did not receive a postnatal check (**Table 9.11**). The majority (74%) of babies who received a postnatal check were seen by a doctor, nurse, or midwife (**Table 9.12**). Eighty-five percent of newborns had at least two signal functions performed during the first 2 days after birth (**Table 9.13**).

Patterns by background characteristics

- Newborns delivered in a health facility were much more likely to receive a postnatal health check within 2 days of birth than those delivered elsewhere (79% versus 6%) (**Figure 9.7**).
- Only 64% of newborns in West received postnatal care during the first 2 days after birth, as compared with 83% of newborns in East.
- Socioeconomic disparities exist among women whose babies received a postnatal check. Eighty-seven percent of babies born to women with more than a secondary education received postnatal care within the first 2 days after birth, compared with only 67% of babies born to women with no education. Babies born to women in the lowest wealth quintile were less likely (70%) to receive postnatal care within 2 days of birth than babies born to women in the highest quintile (82%).
- The proportion of newborns with at least two signal functions performed increases with increasing mother's education and wealth but decreases with birth order and mother's age at birth (**Table 9.13**).

9.6 PROBLEMS IN ACCESSING HEALTH CARE

Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go to the doctor
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone

Sample: Women age 15-49

Nearly half of women (49%) in Rwanda report at least one problem associated with accessing health care for themselves. The least and most common problems women face in accessing health care are getting permission to go for treatment (4%) and getting money for treatment (40%), respectively (**Table 9.14**).

Patterns by background characteristics

- More women in rural areas (52%) than urban areas (35%) have problems in accessing health care.
- Women with five or more children more often reported getting money for treatment (52%) and distance to a health facility (25%) as problems than women with no children (33% and 19%, respectively).
- Overall, women from City of Kigali less often reported having at least one problem in accessing health care than those from the other provinces (36% versus 49%-53%) (**Table 9.14**).
- The proportion of women who reported at least one problem in accessing health care decreases with increasing education and wealth.

LIST OF TABLES

For more information on maternal health care, see the following tables:

- **Table 9.1** Antenatal care
- **Table 9.2** Number of antenatal care visits and timing of first visit
- **Table 9.3** Components of antenatal care
- **Table 9.4** Tetanus toxoid injections
- **Table 9.5** Place of delivery
- **Table 9.6** Assistance during delivery
- **Table 9.7** Cesarean section
- **Table 9.8** Duration of stay in health facility after birth
- **Table 9.9** Timing of first postnatal check for the mother
- **Table 9.10** Type of provider of first postnatal check for the mother
- **Table 9.11** Timing of first postnatal check for the newborn
- **Table 9.12** Type of provider of first postnatal check for the newborn
- **Table 9.13** Content of postnatal care for newborns
- **Table 9.14** Problems in accessing health care

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Antenatal care provider				Total	Percentage receiving antenatal care from a skilled provider ¹	Number of women
	Doctor	Nurse/midwife	Auxiliary midwife	No ANC			
Age at birth							
<20	1.4	97.3	0.3	1.1	100.0	98.9	354
20-34	4.6	92.8	0.4	2.2	100.0	97.8	4,423
35-49	4.9	92.1	0.3	2.7	100.0	97.3	1,525
Birth order							
1	5.8	92.5	0.4	1.4	100.0	98.6	1,518
2-3	4.9	92.9	0.4	1.8	100.0	98.2	2,617
4-5	3.6	93.7	0.2	2.5	100.0	97.5	1,328
6+	2.5	92.4	0.4	4.8	100.0	95.2	839
Residence							
Urban	14.6	83.0	0.3	2.1	100.0	97.9	1,123
Rural	2.3	95.0	0.4	2.3	100.0	97.7	5,179
Province							
City of Kigali	14.0	82.8	0.4	2.8	100.0	97.2	866
South	3.1	94.2	0.2	2.5	100.0	97.5	1,305
West	2.9	94.1	0.7	2.3	100.0	97.7	1,425
North	2.4	96.2	0.3	1.2	100.0	98.8	1,004
East	3.4	94.1	0.1	2.4	100.0	97.6	1,702
Education							
No education	0.7	93.5	0.6	5.2	100.0	94.8	698
Primary	1.8	95.7	0.2	2.3	100.0	97.7	4,071
Secondary	6.8	91.6	0.4	1.1	100.0	98.9	1,258
More than secondary	44.4	54.8	0.5	0.3	100.0	99.7	275
Wealth quintile							
Lowest	0.4	94.9	0.4	4.3	100.0	95.7	1,448
Second	1.0	95.9	0.3	2.8	100.0	97.2	1,217
Middle	1.7	96.3	0.2	1.9	100.0	98.1	1,224
Fourth	2.0	96.1	0.5	1.4	100.0	98.6	1,234
Highest	18.8	80.4	0.3	0.5	100.0	99.5	1,178
Total	4.5	92.9	0.3	2.3	100.0	97.7	6,302

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

¹ Skilled provider includes doctor, nurse/midwife, auxiliary midwife, community health worker, community health mother and child.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Rwanda DHS 2019-20

Number of ANC visits and timing of first visit	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	2.1	2.3	2.3
1	2.5	4.5	4.1
2-3	46.2	46.4	46.4
4+	49.2	46.8	47.2
Don't know/missing	0.0	0.0	0.0
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	2.1	2.3	2.3
<4	59.8	58.4	58.7
4-5	27.4	26.6	26.8
6-7	9.4	10.5	10.3
8+	1.2	2.1	2.0
Don't know/missing	0.1	0.0	0.0
Total	100.0	100.0	100.0
Number of women	1,123	5,179	6,302
Median months pregnant at first visit (for those with ANC)			
	3.7	3.8	3.8
Number of women with ANC	1,099	5,061	6,160

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the 5 years preceding the survey, percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent live birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among women with a live birth in the past 5 years, percentage who during the pregnancy of their most recent live birth:			Among women who received antenatal care for their most recent birth in the past 5 years, percentage with selected services				
	Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the past 5 years	Blood pressure measured	Urine sample taken	Blood sample taken	Arm circumference measured	Number of women with ANC for their most recent birth
Age at birth								
<20	76.3	40.6	354	88.2	84.5	97.7	70.7	350
20-34	81.5	43.5	4,423	88.8	85.3	97.6	70.1	4,325
35-49	79.0	42.2	1,525	91.5	82.3	98.2	67.9	1,484
Birth order								
1	80.1	41.2	1,518	88.6	88.5	98.0	69.9	1,497
2-3	82.8	44.7	2,617	89.4	85.6	97.7	70.3	2,570
4-5	80.6	43.7	1,328	89.4	81.3	97.8	69.8	1,294
6+	75.0	39.7	839	90.5	79.0	97.3	66.4	799
Residence								
Urban	80.0	41.4	1,123	95.6	90.6	98.4	66.6	1,099
Rural	80.8	43.3	5,179	88.0	83.3	97.6	70.2	5,061
Province								
City of Kigali	76.7	34.7	866	96.8	91.6	98.7	61.4	841
South	83.1	44.7	1,305	92.1	87.1	98.6	68.2	1,273
West	78.8	42.1	1,425	86.8	80.3	96.1	70.5	1,392
North	87.6	53.8	1,004	87.4	87.1	96.5	77.7	993
East	78.1	40.3	1,702	86.9	81.1	98.7	69.2	1,661
Education								
No education	76.7	43.9	698	87.5	76.0	97.4	68.8	661
Primary	80.3	42.9	4,071	88.0	83.2	97.5	69.6	3,979
Secondary	84.1	42.7	1,258	92.9	91.2	98.4	72.1	1,244
More than secondary	80.3	42.3	275	98.3	95.1	99.1	59.9	274
Wealth quintile								
Lowest	74.6	42.8	1,448	84.7	78.1	96.4	70.5	1,387
Second	82.3	43.2	1,217	88.3	82.5	97.7	70.3	1,183
Middle	80.7	43.8	1,224	86.7	85.0	97.9	69.0	1,201
Fourth	84.3	44.3	1,234	91.8	86.7	98.4	70.4	1,217
Highest	82.3	40.7	1,178	96.3	91.6	98.5	67.5	1,172
Total	80.6	43.0	6,302	89.4	84.6	97.7	69.6	6,160

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the 5 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage receiving two or more injections during the pregnancy for the last live birth	Percentage whose most recent live birth was protected against neonatal tetanus ¹	Number of mothers
Age at birth			
<20	52.8	60.2	354
20-34	37.8	79.9	4,423
35-49	16.8	81.8	1,525
Birth order			
1	60.5	62.5	1,518
2-3	33.1	85.2	2,617
4-5	19.4	86.0	1,328
6+	9.0	80.2	839
Residence			
Urban	39.7	80.6	1,123
Rural	32.3	78.9	5,179
Province			
City of Kigali	38.9	80.6	866
South	36.8	82.3	1,305
West	31.7	76.7	1,425
North	32.7	80.0	1,004
East	30.5	77.8	1,702
Education			
No education	23.5	79.8	698
Primary	30.3	79.4	4,071
Secondary	46.1	77.0	1,258
More than secondary	50.6	85.0	275
Wealth quintile			
Lowest	31.0	75.6	1,448
Second	32.8	78.8	1,217
Middle	27.9	79.9	1,224
Fourth	37.6	80.4	1,234
Highest	39.3	82.2	1,178
Total	33.6	79.2	6,302

¹ Includes mothers with two injections during the pregnancy of their most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the most recent birth.

Table 9.5 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Health facility		Home	Other	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector					
Mother's age at birth							
<20	95.7	0.9	2.5	1.0	100.0	96.5	485
20-34	92.1	2.1	4.6	1.2	100.0	94.2	6,004
35-49	86.2	2.6	8.4	2.7	100.0	88.9	1,836
Birth order							
1	95.7	2.6	1.3	0.3	100.0	98.4	2,118
2-3	91.8	2.5	4.3	1.3	100.0	94.4	3,391
4-5	90.0	1.5	6.5	2.0	100.0	91.6	1,749
6+	80.4	1.0	14.9	3.7	100.0	81.4	1,066
Antenatal care visits¹							
None	37.6	1.7	58.5	2.1	100.0	39.3	142
1-3	91.5	0.7	5.8	2.1	100.0	92.2	3,184
4+	93.4	3.9	1.9	0.8	100.0	97.3	2,975
Don't know/missing	*	*	*	*	*	*	1
Residence							
Urban	89.2	8.3	1.8	0.7	100.0	97.5	1,454
Rural	91.4	0.8	6.1	1.7	100.0	92.2	6,870
Province							
City of Kigali	88.2	8.7	2.1	0.9	100.0	97.0	1,164
South	90.4	1.1	6.7	1.8	100.0	91.6	1,672
West	90.9	1.0	6.2	1.8	100.0	91.9	2,009
North	95.0	0.5	2.6	1.9	100.0	95.5	1,267
East	90.7	1.4	6.8	1.1	100.0	92.1	2,212
Mother's education							
No education	82.0	0.3	14.8	2.9	100.0	82.3	957
Primary	92.6	0.5	5.2	1.7	100.0	93.1	5,401
Secondary	94.7	3.4	1.4	0.5	100.0	98.1	1,607
More than secondary	74.0	26.0	0.0	0.0	100.0	100.0	360
Wealth quintile							
Lowest	86.7	0.3	10.9	2.1	100.0	87.0	1,961
Second	91.1	0.1	6.6	2.2	100.0	91.2	1,624
Middle	93.5	0.1	5.0	1.4	100.0	93.6	1,607
Fourth	96.3	0.4	2.2	1.1	100.0	96.8	1,608
Highest	88.1	10.7	0.6	0.6	100.0	98.8	1,525
Total	91.0	2.2	5.4	1.5	100.0	93.1	8,324

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes only the most recent birth in the 5 years preceding the survey

Table 9.6 Assistance during delivery

Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage with skin-to-skin contact immediately after birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Person providing assistance during delivery							Total	Percentage delivered by a skilled provider ¹	Percentage with skin-to-skin contact immediately after birth	Number of births
	Doctor	Nurse/midwife	Auxiliary midwife	Community Health Worker	Community Health mother & child	Other ³	No one				
Mother's age at birth											
<20	20.9	76.0	0.6	0.2	0.0	1.7	0.6	100.0	97.7	79.8	485
20-34	22.8	71.3	0.5	0.2	0.3	2.7	2.2	100.0	95.1	75.7	6,004
35-49	19.9	68.9	0.4	0.4	0.8	4.5	5.1	100.0	90.4	72.2	1,836
Birth order											
1	29.5	68.6	0.6	0.0	0.1	0.9	0.3	100.0	98.8	76.7	2,118
2-3	23.0	71.4	0.5	0.4	0.3	2.7	1.9	100.0	95.5	76.6	3,391
4-5	16.5	75.1	0.3	0.3	0.6	4.0	3.1	100.0	92.9	74.5	1,749
6+	13.6	68.0	0.4	0.4	1.0	7.0	9.6	100.0	83.4	68.6	1,066
Antenatal care visits¹											
None	4.3	37.5	0.0	0.8	0.0	29.5	27.9	100.0	42.7	33.9	142
1-3	20.4	71.5	0.7	0.4	0.5	3.3	3.1	100.0	93.5	75.3	3,184
4+	26.4	70.8	0.3	0.1	0.2	1.3	0.9	100.0	97.8	77.0	2,975
Don't know/missing	*	*	*	*	*	*	*	*	*	*	1
Place of delivery											
Health facility	23.7	75.7	0.5	0.0	0.0	0.0	0.0	100.0	100.0	79.9	7,754
Public facility	22.3	77.1	0.5	0.0	0.0	0.0	0.0	100.0	99.9	80.5	7,575
Private facility	84.5	15.4	0.1	0.0	0.0	0.0	0.0	100.0	100.0	52.6	179
Elsewhere	0.0	6.8	0.0	3.7	5.9	44.5	39.1	100.0	16.4	11.0	571
Residence											
Urban	38.0	59.3	0.5	0.1	0.1	1.2	0.8	100.0	98.0	74.0	1,454
Rural	18.7	73.5	0.5	0.3	0.5	3.4	3.1	100.0	93.4	75.4	6,870
Province											
City of Kigali	36.6	60.2	0.4	0.0	0.1	1.2	1.6	100.0	97.2	73.7	1,164
South	22.9	68.8	0.4	0.2	0.5	3.3	3.8	100.0	92.9	71.5	1,672
West	19.0	72.4	1.0	0.5	0.8	3.6	2.7	100.0	93.7	75.1	2,009
North	16.5	79.6	0.4	0.2	0.1	1.9	1.4	100.0	96.7	78.0	1,267
East	19.9	72.1	0.1	0.3	0.3	4.1	3.2	100.0	92.7	77.1	2,212
Mother's education											
No education	12.3	70.6	0.3	0.4	1.0	6.9	8.5	100.0	84.6	70.6	957
Primary	18.6	74.6	0.5	0.3	0.4	3.2	2.5	100.0	94.3	76.0	5,401
Secondary	30.5	67.0	0.5	0.1	0.1	1.0	0.7	100.0	98.3	78.3	1,607
More than secondary	63.4	36.0	0.5	0.0	0.0	0.1	0.0	100.0	99.9	61.9	360
Wealth quintile											
Lowest	14.0	73.1	0.4	0.7	0.6	5.3	5.8	100.0	88.9	72.0	1,961
Second	15.4	76.1	0.3	0.2	0.6	4.1	3.2	100.0	92.7	75.6	1,624
Middle	17.4	76.2	0.6	0.1	0.3	2.9	2.4	100.0	94.6	77.4	1,607
Fourth	25.5	70.7	0.5	0.2	0.4	1.5	1.2	100.0	97.3	77.7	1,608
Highest	40.9	57.6	0.4	0.0	0.0	0.8	0.2	100.0	99.0	73.8	1,525
Total	22.1	71.0	0.5	0.3	0.4	3.1	2.7	100.0	94.2	75.2	8,324

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

¹ Skilled provider includes doctor, nurse/midwife, auxiliary midwife, community health worker, community health mother and child.

² Includes only the most recent birth in the 5 years preceding the survey

³ TBA and relatives

Table 9.7 Cesarean section

Percentage of live births in the 5 years preceding the survey delivered by cesarean section (C-section), percentage delivered by C-section planned before the onset of labor pains, and percentage delivered by C-section decided on after the onset of labor pains, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section		Number of births
		Before onset of labor pains	After onset of labor pains	
Mother's age at birth				
<20	12.8	3.3	9.5	485
20-34	15.6	6.1	9.6	6,004
35-49	13.3	7.7	5.6	1,836
Birth order				
1	19.4	4.3	15.1	2,118
2-3	16.4	8.2	8.2	3,391
4-5	11.4	6.4	5.0	1,749
6+	7.2	3.8	3.4	1,066
Antenatal care visits¹				
None	2.9	2.2	0.8	142
1-3	13.8	5.4	8.5	3,184
4+	18.5	8.2	10.3	2,975
Don't know/missing	*	*	*	1
Place of delivery				
Health facility	16.0	6.7	9.3	7,754
Public facility	15.1	5.9	9.2	7,575
Private facility	55.5	38.9	16.6	179
Residence				
Urban	25.0	13.9	11.1	1,454
Rural	12.8	4.6	8.2	6,870
Province				
City of Kigali	25.1	14.3	10.8	1,164
South	15.6	6.0	9.6	1,672
West	12.6	5.1	7.5	2,009
North	12.1	4.1	8.0	1,267
East	12.8	4.5	8.3	2,212
Mother's education				
No education	8.7	3.5	5.2	957
Primary	12.6	5.0	7.7	5,401
Secondary	19.7	8.0	11.8	1,607
More than secondary	45.1	25.3	19.7	360
Wealth quintile				
Lowest	10.4	3.2	7.2	1,961
Second	10.9	3.6	7.2	1,624
Middle	11.6	3.9	7.6	1,607
Fourth	16.2	7.6	8.6	1,608
Highest	27.3	13.9	13.4	1,525
Total	14.9	6.2	8.7	8,324

Note: The question on C-section was asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in a health facility did not receive a C-section. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes only the most recent birth in the 5 years preceding the survey

Table 9.8 Duration of stay in health facility after birth

Among women with a birth in the 5 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, Rwanda DHS 2019-20

Type of delivery	<6 hours	6-11 hours	12-23 hours	1-2 days	3+ days	Total	Number of women
Vaginal birth	1.8	1.0	2.0	68.2	27.0	100.0	4,891
Cesarean section	0.2	0.0	0.0	12.4	87.4	100.0	994

Table 9.9 Timing of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth by time after delivery, and percentage of women with a live birth during the 2 years preceding the survey who received a postnatal check in the first 2 days after giving birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Time after delivery of mother's first postnatal check ¹						No postnatal check ²	Total	Percentage of women with a postnatal check during the first 2 days after birth ¹	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing				
Age at birth										
<20	58.2	8.2	4.9	1.3	0.5	0.0	26.7	100.0	71.4	185
20-34	55.0	11.9	4.3	0.5	0.5	0.2	27.7	100.0	71.1	2,237
35-49	53.9	11.7	2.7	0.6	0.5	0.3	30.3	100.0	68.3	813
Birth order										
1	58.0	12.2	4.8	0.4	0.4	0.1	24.2	100.0	75.0	834
2-3	55.8	11.5	3.9	0.7	0.8	0.2	27.2	100.0	71.2	1,295
4-5	55.2	11.3	3.9	0.4	0.4	0.6	28.2	100.0	70.4	689
6+	45.5	11.4	2.4	0.7	0.2	0.0	40.0	100.0	59.2	418
Place of delivery										
Health facility	58.3	12.3	4.1	0.5	0.5	0.2	24.0	100.0	74.8	3,042
Elsewhere	0.6	0.5	0.5	1.3	0.9	0.0	96.2	100.0	1.6	193
Residence										
Urban	57.3	13.5	2.1	0.6	0.3	0.3	25.8	100.0	72.9	526
Rural	54.4	11.2	4.3	0.5	0.6	0.2	28.8	100.0	70.0	2,710
Province										
City of Kigali	55.0	15.5	2.5	0.8	0.5	0.4	25.3	100.0	73.0	422
South	59.9	10.4	3.4	0.8	0.9	0.1	24.6	100.0	73.6	689
West	41.2	13.0	4.3	0.1	0.6	0.1	40.6	100.0	58.5	775
North	47.8	11.7	7.5	0.4	0.2	0.7	31.7	100.0	67.0	477
East	66.9	9.5	2.8	0.7	0.3	0.0	19.8	100.0	79.1	873
Education										
No education	50.6	8.8	3.0	0.6	0.2	0.4	36.4	100.0	62.4	326
Primary	53.7	11.7	4.3	0.4	0.5	0.2	29.1	100.0	69.8	2,047
Secondary	58.9	11.2	3.5	1.1	0.6	0.2	24.6	100.0	73.6	708
More than secondary	60.7	17.6	2.8	0.0	0.9	0.0	17.9	100.0	81.2	155
Wealth quintile										
Lowest	51.8	8.6	4.9	0.5	0.7	0.2	33.3	100.0	65.3	754
Second	50.4	12.0	4.2	0.6	0.5	0.0	32.2	100.0	66.6	657
Middle	57.2	10.8	3.3	0.4	0.6	0.2	27.5	100.0	71.3	613
Fourth	57.8	13.2	2.7	0.2	0.1	0.3	25.6	100.0	73.7	641
Highest	58.3	14.2	4.3	1.1	0.5	0.5	21.0	100.0	76.9	571
Total	54.9	11.6	3.9	0.6	0.5	0.2	28.3	100.0	70.4	3,236

¹ Includes women who received a check from a doctor, midwife, nurse, community health worker, community health worker, and community health mother and child

² Includes women who received a check after 41 days

Table 9.10 Type of provider of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Type of health provider of mother's first postnatal check			No postnatal check during the first 2 days after birth	Total	Number of women
	Doctor/nurse/midwife	Auxiliary midwife	Community health worker/ community health mother and child			
Age at birth						
<20	71.4	0.0	0.0	28.6	100.0	185
20-34	71.0	0.1	0.0	28.9	100.0	2,237
35-49	68.0	0.1	0.2	31.7	100.0	813
Birth order						
1	75.0	0.0	0.0	25.0	100.0	834
2-3	71.1	0.0	0.1	28.8	100.0	1,295
4-5	70.0	0.4	0.0	29.6	100.0	689
6+	58.8	0.0	0.4	40.8	100.0	418
Place of delivery						
Health facility	74.7	0.1	0.1	25.2	100.0	3,042
Elsewhere	1.1	0.0	0.5	98.4	100.0	193
Residence						
Urban	72.9	0.0	0.0	27.1	100.0	526
Rural	69.8	0.1	0.1	30.0	100.0	2,710
Province						
City of Kigali	73.0	0.0	0.0	27.0	100.0	422
South	73.5	0.0	0.1	26.4	100.0	689
West	58.4	0.0	0.1	41.5	100.0	775
North	66.7	0.0	0.2	33.0	100.0	477
East	78.9	0.3	0.0	20.9	100.0	873
Education						
No education	62.1	0.3	0.0	37.6	100.0	326
Primary	69.7	0.0	0.1	30.2	100.0	2,047
Secondary	73.4	0.2	0.0	26.4	100.0	708
More than secondary	81.2	0.0	0.0	18.8	100.0	155
Wealth quintile						
Lowest	65.3	0.0	0.0	34.7	100.0	754
Second	66.2	0.1	0.3	33.4	100.0	657
Middle	71.1	0.0	0.2	28.7	100.0	613
Fourth	73.5	0.2	0.0	26.3	100.0	641
Highest	76.9	0.0	0.0	23.1	100.0	571
Total	70.3	0.1	0.1	29.6	100.0	3,236

Table 9.11 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Time after delivery of newborn's first postnatal check ¹						No postnatal check ²	Total	Percentage of births with a postnatal check during the first 2 days after birth ¹	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know				
Mother's age at birth										
<20	44.0	19.7	6.5	5.3	0.8	0.0	23.7	100.0	75.5	185
20-34	38.2	23.9	9.1	4.2	0.5	0.4	23.8	100.0	75.4	2,237
35-49	35.7	23.6	10.4	3.3	0.2	0.0	26.8	100.0	73.0	813
Birth order										
1	42.3	25.7	8.4	4.2	0.5	0.3	18.5	100.0	80.7	834
2-3	39.2	21.7	9.6	4.2	0.5	0.2	24.5	100.0	74.8	1,295
4-5	34.0	26.4	8.5	4.1	0.3	0.4	26.2	100.0	73.1	689
6+	31.2	20.6	11.1	3.1	0.2	0.0	33.8	100.0	66.0	418
Place of delivery										
Health facility	40.2	24.9	9.8	4.1	0.3	0.3	20.2	100.0	79.2	3,042
Elsewhere	0.7	2.6	0.0	2.4	2.0	0.0	92.3	100.0	5.7	193
Residence										
Urban	34.7	28.5	10.4	3.7	0.4	0.5	21.9	100.0	77.3	526
Rural	38.5	22.7	9.0	4.1	0.4	0.2	25.0	100.0	74.3	2,710
Province										
City of Kigali	33.2	24.6	13.0	3.5	0.4	1.0	24.4	100.0	74.2	422
South	38.8	25.4	9.8	4.0	0.9	0.1	20.9	100.0	78.1	689
West	24.2	26.3	10.1	3.8	0.6	0.3	34.8	100.0	64.4	775
North	34.4	24.9	7.3	5.7	0.2	0.3	27.3	100.0	72.3	477
East	53.5	18.6	7.4	3.6	0.0	0.0	16.9	100.0	83.1	873
Mother's education										
No education	28.0	27.2	7.7	4.1	0.0	0.0	33.0	100.0	67.0	326
Primary	38.2	22.1	9.5	4.3	0.5	0.2	25.0	100.0	74.2	2,047
Secondary	41.1	24.2	8.8	3.5	0.4	0.3	21.7	100.0	77.5	708
More than secondary	39.1	32.8	11.2	3.4	0.1	0.6	12.7	100.0	86.5	155
Wealth quintile										
Lowest	37.8	21.3	6.6	3.9	0.3	0.1	30.0	100.0	69.5	754
Second	32.4	24.2	9.8	4.3	0.0	0.2	29.2	100.0	70.6	657
Middle	42.5	21.6	8.5	3.9	1.2	0.4	21.8	100.0	76.5	613
Fourth	38.5	24.5	10.5	4.1	0.2	0.0	22.2	100.0	77.6	641
Highest	38.7	27.2	11.6	4.2	0.4	0.7	17.3	100.0	81.6	571
Total	37.9	23.6	9.3	4.0	0.4	0.3	24.5	100.0	74.8	3,236

¹ Includes newborns who received a check from a doctor, midwife, nurse, community health worker, or community health mother and child

² Includes newborns who received a check after the first week of life

Table 9.12 Type of provider of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Type of health provider of newborn's first postnatal check					Total	Number of births
	Doctor/nurse/midwife	Auxiliary midwife	Community health worker/health mother and child	Traditional birth attendant	No postnatal check during the first 2 days after birth		
Mother's age at birth							
<20	75.5	0.0	0.0	0.0	24.5	100.0	185
20-34	74.9	0.3	0.1	0.1	24.6	100.0	2,237
35-49	72.4	0.1	0.5	0.0	27.0	100.0	813
Birth order							
1	80.7	0.0	0.0	0.0	19.3	100.0	834
2-3	74.4	0.3	0.1	0.0	25.2	100.0	1,295
4-5	72.2	0.3	0.3	0.3	26.9	100.0	689
6+	64.9	0.2	0.9	0.0	34.0	100.0	418
Place of delivery							
Health facility	78.8	0.2	0.1	0.0	20.8	100.0	3,042
Elsewhere	2.8	0.0	1.6	1.2	94.3	100.0	193
Residence							
Urban	76.8	0.4	0.0	0.0	22.7	100.0	526
Rural	73.8	0.2	0.2	0.1	25.7	100.0	2,710
Province							
City of Kigali	73.7	0.5	0.0	0.0	25.8	100.0	422
South	77.4	0.3	0.4	0.0	21.9	100.0	689
West	63.7	0.2	0.3	0.1	35.6	100.0	775
North	72.1	0.2	0.0	0.0	27.7	100.0	477
East	82.8	0.0	0.2	0.2	16.9	100.0	873
Mother's education							
No education	65.7	0.0	1.0	0.3	33.0	100.0	326
Primary	73.7	0.3	0.1	0.1	25.8	100.0	2,047
Secondary	77.3	0.1	0.1	0.0	22.5	100.0	708
More than secondary	86.5	0.0	0.0	0.0	13.5	100.0	155
Wealth quintile							
Lowest	68.4	0.5	0.4	0.1	30.5	100.0	754
Second	69.9	0.1	0.5	0.0	29.4	100.0	657
Middle	76.1	0.2	0.0	0.2	23.5	100.0	613
Fourth	77.4	0.2	0.0	0.0	22.4	100.0	641
Highest	81.6	0.0	0.0	0.0	18.4	100.0	571
Total	74.3	0.2	0.2	0.1	25.2	100.0	3,236

Table 9.13 Content of postnatal care for newborns

Among most recent live births in the 2 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after birth and percentage with at least two signal functions performed during the first 2 days after birth, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among most recent live births in the 2 years preceding the survey, percentage for whom the selected function was performed during the first 2 days after birth:						Percentage with at least two signal functions performed during the first 2 days after birth	Number of births
	Cord examined	Temperature measured	Counseling on danger signs	Counseling on breastfeeding	Observation of breastfeeding	Weighed ¹		
Mother's age at birth								
<20	66.0	57.2	42.8	72.0	82.3	96.4	89.6	185
20-34	64.1	51.1	46.8	70.4	79.1	96.0	85.7	2,237
35-49	62.5	47.8	47.9	70.2	76.0	92.3	83.5	813
Birth order								
1	64.6	54.6	46.0	71.4	83.5	98.7	88.9	834
2-3	64.7	51.4	46.9	71.7	79.1	96.8	86.4	1,295
4-5	64.4	49.2	49.6	70.4	76.3	94.2	83.5	689
6+	58.8	42.3	44.0	64.9	70.7	84.4	78.2	418
Place of delivery								
Health facility	66.3	52.5	48.8	73.4	81.9	98.7	89.0	3,042
Elsewhere	24.2	20.8	16.8	23.8	25.5	39.2	28.4	193
Residence								
Urban	68.3	56.0	49.2	73.0	82.7	98.6	89.7	526
Rural	63.0	49.5	46.4	70.0	77.7	94.5	84.5	2,710
Province								
City of Kigali	62.9	52.7	44.5	72.3	79.6	98.0	87.2	422
South	64.7	54.0	51.0	73.2	79.8	94.5	84.2	689
West	61.6	44.4	44.1	67.4	72.5	95.2	82.1	775
North	59.5	44.0	43.3	67.9	77.6	96.4	84.0	477
East	67.8	56.0	49.1	71.6	82.9	93.5	89.0	873
Mother's education								
No education	55.2	44.4	45.2	61.9	71.4	87.2	77.0	326
Primary	63.5	49.6	45.6	70.3	77.5	95.0	84.9	2,047
Secondary	66.9	54.3	49.2	74.9	83.8	98.0	89.2	708
More than secondary	71.8	59.4	55.6	70.6	83.2	100.0	91.3	155
Wealth quintile								
Lowest	61.1	48.4	43.7	66.9	74.5	91.0	80.8	754
Second	60.0	44.5	44.8	67.4	76.4	94.4	83.0	657
Middle	63.8	49.3	46.4	71.2	78.4	96.4	86.6	613
Fourth	64.8	55.4	49.3	73.8	81.1	95.7	87.4	641
Highest	70.8	56.5	51.1	74.3	83.5	99.4	90.4	571
Total	63.8	50.6	46.9	70.5	78.5	95.1	85.4	3,236

¹ Captures newborns who were weighed "at birth." May exclude some newborns who were weighed during the 2 days after birth.

Table 9.14 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Problems in accessing health care					Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
Age						
15-19	4.5	33.2	18.7	18.0	43.1	3,258
20-34	4.0	40.4	21.3	13.4	48.9	6,604
35-49	3.3	44.7	22.8	12.3	52.0	4,771
Number of living children						
0	4.5	32.9	18.7	16.6	42.8	5,368
1-2	3.6	41.7	20.6	12.4	49.4	4,150
3-4	3.3	43.6	24.1	12.9	51.3	3,184
5+	3.5	51.6	24.5	12.6	58.6	1,932
Marital status						
Never married	4.4	35.2	19.0	16.3	44.4	5,914
Married or living together	3.2	40.6	22.2	12.1	49.0	7,401
Divorced/separated/ widowed	4.9	59.9	25.7	15.7	65.6	1,318
Employed last 12 months						
Not employed	3.9	33.5	17.9	15.1	41.9	3,908
Employed for cash	3.9	43.7	22.2	13.8	51.6	7,588
Employed not for cash	3.7	40.0	22.7	13.5	49.8	3,138
Residence						
Urban	4.7	28.2	7.8	9.8	34.5	2,909
Rural	3.7	43.2	24.5	15.1	52.1	11,725
Province						
City of Kigali	4.1	28.1	11.3	10.4	35.7	2,166
South	3.5	44.8	20.9	11.6	51.8	3,065
West	5.6	44.1	21.6	17.5	52.9	3,174
North	4.3	39.5	22.7	15.3	50.7	2,226
East	2.4	40.5	25.6	14.6	48.6	4,003
Education						
No education	5.9	58.8	28.4	15.3	66.0	1,377
Primary	3.8	44.9	23.3	15.2	53.3	8,529
Secondary	3.5	29.3	17.1	12.5	38.5	4,086
More than secondary	2.0	6.9	4.2	6.3	14.1	642
Wealth quintile						
Lowest	5.9	66.7	31.0	19.4	73.1	2,741
Second	4.0	51.1	26.6	17.0	59.9	2,756
Middle	3.2	39.8	24.4	15.0	50.0	2,757
Fourth	3.2	32.3	18.0	11.6	41.5	2,966
Highest	3.2	17.2	9.1	8.8	25.0	3,414
Total	3.9	40.2	21.2	14.1	48.6	14,634

Key Findings

- **Vaccinations:** 96% of children age 12-23 months had received all basic vaccinations by the time of the survey, while 84% had received all age-appropriate vaccinations.
- **Symptoms of acute respiratory infection (ARI):** Advice or treatment was sought for 73% of children under age 5 who had symptoms of ARI in the 2 weeks before the survey. For 33% of these children, advice or treatment was sought the same or next day.
- **Fever:** Advice or treatment was sought for 62% of children under age 5 who had a fever in the 2 weeks before the survey. For 34% of these children, advice or treatment was sought the same or next day.
- **Diarrhea:** Advice or treatment was sought for 52% of children under age 5 who had diarrhea in the 2 weeks before the survey; 42% of children with diarrhea received oral rehydration therapy (ORT), while 27% received no treatment.

Information on child health and survival can help policymakers and program managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in Rwanda.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and treatment practices for, three common childhood illnesses: symptoms of acute respiratory infection (ARI), fever, and diarrhea. Because appropriate sanitary practices can help prevent and reduce the severity of diarrheal disease, information is also provided on the disposal of children's fecal matter.

10.1 BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below 2.5 kilograms regardless of gestational age.

Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or the mother's report

Low birth weight is closely associated with fetal and neonatal morbidity, inhibited growth and cognitive development, and chronic diseases later in life (Negrato et al. 2013). Birth weight is a good summary measure of multifaceted public health problems including long-term maternal malnutrition, ill health, and poor health care during pregnancy. In this survey, information on birth weight was collected through either a written record or the mother's report. The mother's assessment of her child's weight was necessary because information on birth weight was rarely available for home deliveries. Children are considered to have a low birth weight if they weigh less than 2.5 kilograms (kg) at birth. Although mothers' estimates of

their child's birth weight are subjective and findings must be interpreted with caution, these estimates are a useful proxy for a child's birth weight.

Information on birth weight was obtained for 95% of births (**Table 10.1**). Of the children with known birth weights, 7% weighed less than 2.5 kg at birth (**Table 10.1**). Mothers also provided estimates of their baby's size at birth. According to mothers' reports, 3% of births were very small, 15% were smaller than average, and 81% were average or larger.

Patterns by background characteristics

- Babies born to mothers under age 20 are more likely to be of low birth weight (10%) than babies born to mothers age 20-34 or 35-49 (7% each).
- First-order births (10%) are more likely than second- or higher-order births (6%-7%) to have a low birth weight.
- Children born to mothers in the lowest wealth quintile are more likely to have a low birth weight (9%) than children born to mothers in the highest wealth quintile (4%).

10.2 VACCINATION OF CHILDREN

All basic vaccinations coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis.
- Three doses of DPT-containing vaccine, which protects against diphtheria, pertussis (whooping cough), and tetanus.
- Three doses of oral polio vaccine (excluding polio vaccine given at birth).
- One dose of measles-containing vaccine.

Sample: Living children age 12-23 months

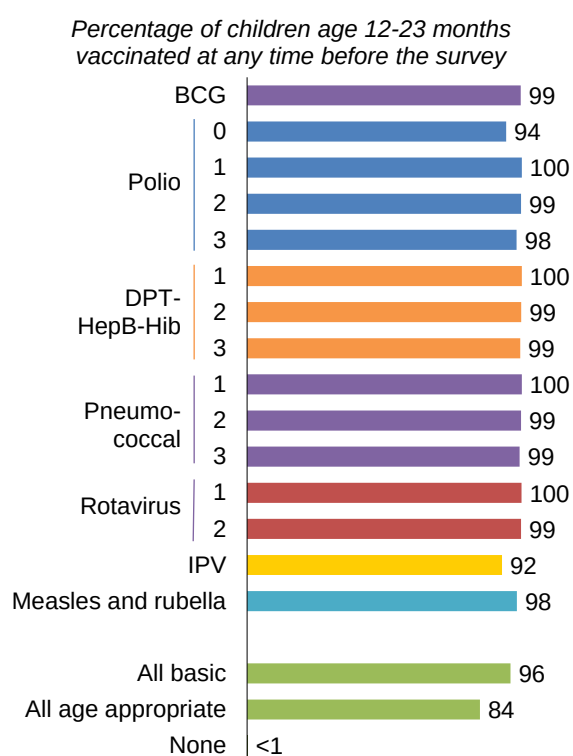
Immunization coverage is one of the indicators used to monitor progress toward reductions in child morbidity and mortality, as it is one of the most cost-effective public health interventions. In Rwanda, routine childhood vaccines include BCG (tuberculosis), DPT-HepB-Hib or pentavalent (diphtheria, tetanus, pertussis, hepatitis B, and Haemophilus influenzae type b), oral polio vaccine or OPV (poliomyelitis), inactivated polio vaccine or IPV (poliomyelitis), pneumococcal conjugate vaccine or PCV, rotavirus or RV, and measles and rubella (MR). In the 5 years preceding the survey, Rwanda continued to intensify its focus on polio eradication and strengthening routine immunization. Several supplemental vaccination campaigns were conducted to rapidly increase coverage of specific vaccines and preempt or respond to potential disease outbreaks. The inactivated polio vaccine, which serves as a booster for oral polio vaccine, was introduced in Rwanda in 2018. The aim was to boost children's immunity against type 1 and type 3 wild poliovirus (WPV) and tackle the risk of circulating vaccine-derived poliovirus (cVDPV).

The 2019-20 RDHS collected information on vaccination coverage in two ways: from vaccination cards shown to the interviewer and from mothers' verbal reports. If the cards were available, the interviewer copied the vaccination dates directly into the questionnaire. When there was no vaccination card for the child or if a vaccine had not been recorded on the vaccination card as being given, the respondent was asked to recall the vaccines given to her child. In the 2019-20 RDHS, the large majority of vaccination dates were directly copied from vaccination cards (97% among children age 12-23 months and 93% among children age 24-35 months).

Based on data collected by vaccination card or mother's report, **Table 10.2** shows that 96% of children age 12-23 months received all basic vaccinations at any time before the survey, while 93% received the basic vaccinations by the appropriate age of 12 months.

With respect to coverage of specific vaccines among children age 12-23 months, 99% received the BCG vaccine, 100% received the first dose of DPT-HepB-Hib, and 99% received the third dose of DPT-HepB-Hib, reflecting a dropout rate of 1%. In addition, 98% of children received the measles and rubella vaccine, 94% received the recommended polio 0 dose at birth, 100% received the first dose of oral polio vaccine, and 98% received the third dose of oral polio vaccine. Ninety-two percent of children received a dose of IPV. Nearly all children (99%) received the third dose of the pneumococcal conjugate vaccine and the second dose of the rotavirus vaccine. Overall, 84% of children received all of the vaccinations for which they were eligible by age (Figure 10.1).

Figure 10.1 Childhood vaccinations

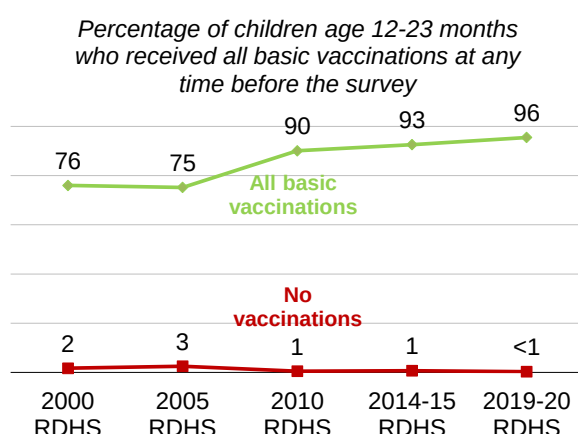


Trends: Vaccination coverage in Rwanda has improved over the years. The percentage of children age 12-23 months who received all basic vaccinations increased from 75% in 2005 to 96% in 2019-20 (Figure 10.2). The percentage of children who received no vaccinations declined from 3% to less than 1% during the same period.

Patterns by background characteristics

- Because of nearly universal vaccination coverage, variations by background characteristics among children age 12-23 months are minimal (Table 10.3).
- Urban children age 12-23 months are slightly more likely to receive all basic vaccinations than rural children (97% versus 95%).

Figure 10.2 Trends in childhood vaccinations

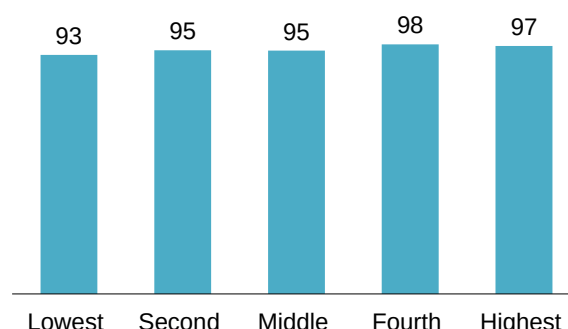


- Children from households in the highest and fourth wealth quintiles are slightly more likely to receive all basic vaccinations than those from households in the lowest wealth quintile (97%-98% and 93%, respectively) (**Figure 10.3**).
- By province, vaccination coverage among children age 12-23 months is highest in City of Kigali and South (97% each) and lowest in North (94%).

Among children age 24-35 months, nearly 7 in 10 (69%) received all age-appropriate vaccinations. This includes 94% who received a second dose of measles and rubella. Rwanda has now surpassed 90% for three targets that are part of Sustainable Development Goal 3.b.1: coverage exceeds 90% for the third dose of DPT-containing vaccine and the third dose of pneumococcal conjugate vaccine among children age 12-23 months, and the second dose of measles-containing vaccine among children age 24-35 months (see SDG table).

Figure 10.3 Vaccination coverage by household wealth

Percentage of children age 12-23 months who received all basic vaccines at any time before the survey



Vaccination Card Ownership and Availability

Vaccination cards are critical tools in ensuring that children receive all recommended vaccinations according to schedule. **Table 10.4** shows that nearly all children age 12-23 months and 24-35 months were reported to have ever had a vaccination card. However, not all mothers were able to produce their child's vaccination card at the time of the interview; overall, interviewers were able to see a vaccination card for 97% of children age 12-23 months and 93% of children age 24-35 months.

Since there are high percentages of vaccination card ownership and availability, there are only minimal variations by background characteristics.

10.3 SYMPTOMS OF ACUTE RESPIRATORY INFECTION

Treatment of symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Acute respiratory infection (ARI) is among the leading causes of childhood morbidity and mortality in Rwanda and throughout the world. Pneumonia is the most serious outcome of ARI in young children.

Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by pneumonia. Rwanda is engaging in substantial efforts to reduce pneumonia morbidity and mortality. Integrated management of childhood illness (IMCI) and integrated community case management of childhood illness (ICCMCI) are among the initiatives that have been implemented by the Rwandan government to address common childhood illnesses.

The prevalence of ARI symptoms was estimated by asking mothers whether their children under age 5 had been ill with a cough accompanied by short or rapid breathing in the 2 weeks preceding the survey. The data gathered were based on perceptions of illness by mothers.

Table 10.5 shows that 2% of children under age 5 had ARI symptoms in the 2 weeks preceding the survey. Advice or treatment was sought for 73% of children with ARI symptoms; however, advice or treatment was sought the same or next day for only one-third (33%) of children. Almost two-thirds (63%) of children with ARI symptoms were taken to a public sector health facility for advice or treatment, while 8% were taken to a private medical sector provider; advice or treatment was sought from other sources for 3% of children (**Table 10.6**).

10.4 FEVER

Treatment of fever

Children with fever for whom advice or treatment was sought.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Fever is a major manifestation of malaria and other acute infections in children. Malaria contributes to high levels of morbidity and mortality in young children. While fever can occur year-round, malaria is more prevalent after the end of the rainy season. Rwanda has changed its policy from presumptive treatment of fever as malaria to confirming malaria with a rapid diagnostic test before treatment with artemisinin-based combination therapy (ACT).

Table 10.7 shows the percentage of children under age 5 with a fever during the 2 weeks preceding the survey and the percentage receiving various treatments, by selected background characteristics. Among children under age 5, 19% had a fever in the 2 weeks preceding the survey. Advice or treatment was sought the same or next day for 34% of these children, while 40% took antibiotic drugs.¹

Patterns by background characteristics

- The prevalence of fever varies by age, increasing from 14% among children less than age 6 months to 25% among children age 6-11 months, peaking at 27% among children age 12-23 months, and then declining among older children.
- There is no difference in fever prevalence by sex of the child.
- Advice or treatment was more likely to be sought for children in urban areas (69%) than for children in rural areas (61%). Similarly, urban children were more likely than rural children to be taken for advice or treatment the same day or the next day (44% versus 32%).
- By province, the prevalence of fever varies from a low of 15% in City of Kigali to a high of 23% in West. Among children with fever, the percentage of children for whom advice or treatment was sought was highest in City of Kigali (72%) and lowest in North (53%).
- Care seeking for children with fever increases with increasing household wealth. For example, 52% of children in the lowest wealth quintile were taken for advice or treatment, as compared with 77% of children in the highest wealth quintile. Similarly, the likelihood of a child receiving an antibiotic increases with increasing household wealth.

10.5 DIARRHEAL DISEASE

10.5.1 Prevalence of Diarrhea and Treatment-seeking Behavior

Diarrhea remains a leading cause of childhood morbidity and mortality in developing countries, including Rwanda. Dehydration caused by diarrhea is a major cause of illness and death among young children, even though the condition can be easily treated with oral rehydration therapy (ORT). Exposure to diarrhea-

¹ For details on rapid diagnostic testing for malaria, please see Chapter 12.

causing pathogens is frequently related to consumption of contaminated water and to unhygienic practices in food preparation and disposal of excreta. The combination of high cause-specific mortality and the existence of an effective remedy makes diarrhea and its treatment a priority concern for health services.

Table 10.8 shows that 14% of children under age 5 were reported to have had diarrhea in the 2-week period before the survey. Advice or treatment was sought for 52% of children who had diarrhea in the 2 weeks before the survey.

Patterns by background characteristics

- Children age 6-11 months (23%) and 12-23 months (25%) were more likely than younger children (less than age 6 months) and older children (age 24-59 months) to have had diarrhea in the 2 weeks preceding the survey.
- The prevalence of diarrhea is slightly higher in rural areas than in urban areas (15% versus 12%).
- By province, diarrhea prevalence is highest in West (18%) and lowest in East (11%).
- Children of mothers with no education were almost three times as likely as children of mothers with more than a secondary education to have had diarrhea in the 2 weeks before the survey (17% versus 6%).

10.5.2 Feeding Practices

Appropriate feeding practices

Children with diarrhea are given more liquids than usual and as much food or more than usual.

Sample: Children under age 5 with diarrhea in the 2 weeks before the survey

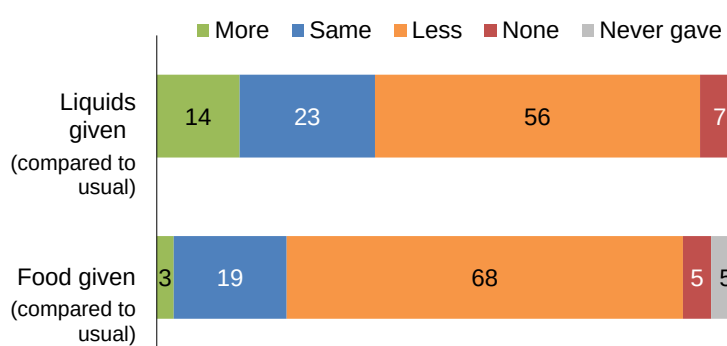
To reduce dehydration and minimize the effects of diarrhea on nutritional status, mothers are encouraged to continue normal feeding of children with diarrhea and to increase the amount of fluids given.

Table 10.9 shows the percent distribution of children under age 5 who had diarrhea in the 2 weeks preceding the survey by feeding practices. Only 14% of children were given more liquids than usual, as recommended. Twenty-three percent received the same amount of liquids. It is of concern that 56% were given somewhat less or much less liquid than usual, and 7% were given no liquids.

Twenty-two percent of children with diarrhea were fed according to the recommended practice of giving the same amount of food or more food than usual. However, 68% were given much less or somewhat less food than usual and 5% were given no food (**Figure 10.4**).

Figure 10.4 Feeding practices during diarrhea

Percentage of children under age 5 with diarrhea in the 2 weeks before the survey



10.5.3 Oral Rehydration Therapy and Other Treatments

Deaths from diarrhea can easily be averted with early and proper treatment. Oral rehydration therapy (ORT) is the most common and simplest treatment for diarrhea. Depending on illness severity, treatment

may involve administration of antibiotics, oral rehydration therapy, and intravenous solutions. Zinc supplementation, which helps reduce the severity, frequency, and duration of diarrhea episodes, was introduced in Rwanda in 2010.

Oral rehydration therapy

Children with diarrhea are given increased fluids, a fluid made from a special packet of oral rehydration salts (ORS), or government-recommended homemade fluids (RHF).

Sample: Children under age 5 with diarrhea in the 2 weeks before the survey

Table 10.10 shows that 42% of children under age 5 with diarrhea in the 2 weeks before the survey received some form of ORT (ORS packets, recommended home fluids, or increased fluids). Thirty-seven percent of children with diarrhea were given zinc, and 19% received a combination of ORS and zinc. Antibiotics were given to 4% of children with diarrhea. Twenty-seven percent of children with diarrhea did not receive any treatment (**Figure 10.5**).

Among children with diarrhea for whom advice or treatment was sought, 80% were taken to a public sector health facility for advice or treatment, and 16% were taken to a private health sector provider; advice or treatment was sought from other sources for 4% of children (**Table 10.11**).

Trends: The percentage of children under age 5 with diarrhea for whom advice or treatment was sought changed held steady between 2014-15 and 2019-20 (53% and 52%, respectively).

Patterns by background characteristics

- Children in rural areas were more likely to be treated with ORT than those in urban areas (43% versus 36%).
- Children living in City of Kigali were less likely to receive continued feeding and ORT (10%) than those living in the other provinces (19%-23%).

10.5.4 Knowledge of ORS Packets

ORS is a simple and effective way to reduce dehydration caused by diarrhea. **Table 10.12** presents information on the percentage of women who know about ORS packets. In Rwanda, 81% of women know about ORS packets for treatment of diarrhea.

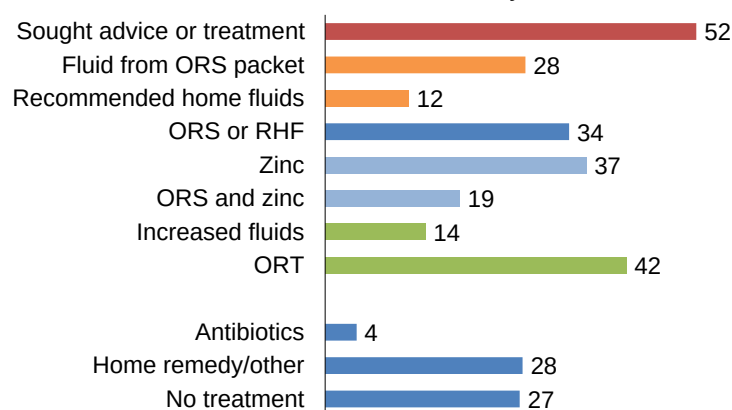
Trends: The percentage of women who know about ORS packets for treatment of diarrhea has decreased from 91% in 2010 to 80% in 2019-20.

Patterns by background characteristics

- The percentage of women who know of ORS packets rises with age, from 54% among women age 15-19 to 85% among women age 35-49.

Figure 10.5 Treatment of diarrhea

Percentage of children under age 5 with diarrhea in the 2 weeks before the survey

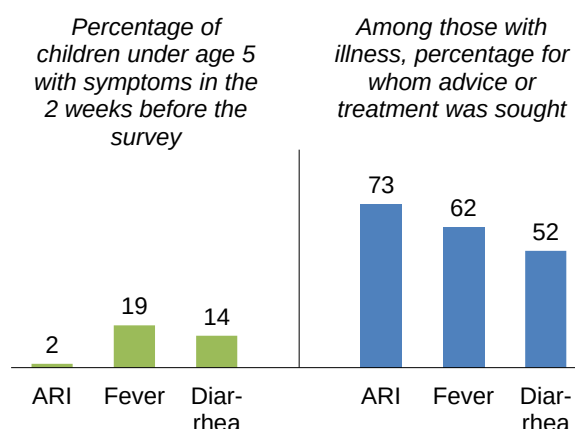


- Knowledge of ORS packets is higher among urban women (86%) than among women in rural areas (80%).
- The percentage of women with knowledge of ORS packets increases with increasing education and household wealth.

10.6 TREATMENT OF CHILDHOOD ILLNESS

During the 2 weeks before the survey, 2% of children under age 5 had symptoms of ARI, while 19% had a fever and 14% had diarrhea. Advice or treatment was sought for 73% of children with ARI, 62% of children with a fever, and 52% of children with diarrhea (**Figure 10.6**).

Figure 10.6 Prevalence and treatment of childhood illness



10.7 DISPOSAL OF CHILDREN'S STOOLS

Appropriate disposal of children's stools

The child's last stools were put or rinsed into a toilet or latrine or buried, or the child used a toilet or latrine.

Sample: Youngest children under age 2 living with their mother

Globally, nearly 90% of the diarrheal disease burden is estimated to be linked to poor water, sanitation, and hygiene provision. Proper disposal of children's feces is important in preventing the spread of diseases. If feces are left uncontained, diseases may spread by direct contact or animal contact (WHO/UNICEF 2013).

Table 10.13 presents the percent distribution of youngest children under age 2 living with their mother by the manner of disposal of the child's last fecal matter.

Eighty-four percent of children's stools were disposed of appropriately; 3% of children used a toilet or latrine, 79% of children's stools were put or rinsed into the toilet or latrine, and 2% were buried. Five percent of children's stools were thrown into the garbage, 6% were in the clothes and washed, 2% were left in the open, and 3% were put or rinsed into a drain or ditch.

Patterns by background characteristics

- Eighty-five percent of children in households with improved sanitation facilities have their stools disposed of appropriately, as compared with only 67% of children in households practicing open defecation.
- The percentage of children whose stools are disposed of appropriately is lower in North (76%) than in the other provinces (83%-88%).
- Children from households in the fourth and highest wealth quintiles (88% and 85%, respectively) are more likely than those from households in the lowest and second quintiles (81% and 82%, respectively) to have their stools disposed of appropriately.

LIST OF TABLES

For more information on low birth weight, vaccinations, childhood illness, and disposal of children's stools, see the following tables:

- **Table 10.1** **Child's size and weight at birth**
- **Table 10.2** **Vaccinations by source of information**
- **Table 10.3** **Vaccinations by background characteristics**
- **Table 10.4** **Possession and observation of vaccination cards, according to background characteristics**
- **Table 10.5** **Prevalence and treatment of symptoms of ARI**
- **Table 10.6** **Source of advice or treatment for children with symptoms of ARI**
- **Table 10.7** **Prevalence and treatment of fever**
- **Table 10.8** **Prevalence and treatment of diarrhea**
- **Table 10.9** **Feeding practices during diarrhea**
- **Table 10.10** **Oral rehydration therapy, zinc, and other treatments for diarrhea**
- **Table 10.11** **Source of advice or treatment for children with diarrhea**
- **Table 10.12** **Knowledge of ORS packets or pre-packaged liquids**
- **Table 10.13** **Disposal of children's stools**

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percent distribution of births by size of baby at birth					Percentage of births that have a reported birth weight ¹	Number of births	Among births with a reported birth weight ¹	
	Very small	Smaller than average	Average or larger	Don't know	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	3.0	20.7	75.5	0.8	100.0	96.8	485	10.0	469
20-34	2.4	15.2	81.8	0.6	100.0	95.5	6,004	6.8	5,733
35-49	3.3	14.6	81.2	0.9	100.0	91.3	1,836	6.6	1,676
Birth order									
1	2.9	20.6	76.0	0.4	100.0	97.9	2,118	9.5	2,075
2-3	2.4	13.5	83.7	0.4	100.0	96.2	3,391	5.9	3,262
4-5	2.7	13.3	83.2	0.8	100.0	93.8	1,749	6.0	1,641
6+	3.0	14.5	80.8	1.8	100.0	84.6	1,066	6.5	901
Mother's smoking status									
Smokes cigarettes/tobacco	(8.2)	(4.5)	(87.3)	(0.0)	100.0	(89.8)	42	(9.2)	38
Does not smoke	2.6	15.5	81.2	0.6	100.0	94.7	8,282	6.9	7,841
Residence									
Urban	2.8	13.7	83.2	0.3	100.0	98.0	1,454	6.2	1,425
Rural	2.6	15.8	80.9	0.7	100.0	93.9	6,870	7.1	6,453
Province									
City of Kigali	3.3	15.0	81.3	0.4	100.0	97.7	1,164	7.3	1,137
South	3.2	17.1	79.4	0.3	100.0	93.3	1,672	7.6	1,560
West	2.1	15.2	82.3	0.4	100.0	94.8	2,009	6.2	1,904
North	2.9	16.2	80.6	0.3	100.0	96.3	1,267	6.8	1,220
East	2.3	14.0	82.2	1.4	100.0	93.0	2,212	7.0	2,058
Mother's education									
No education	2.7	15.0	81.0	1.4	100.0	86.4	957	7.3	827
Primary	2.8	15.7	80.9	0.7	100.0	94.7	5,401	7.6	5,116
Secondary	2.6	15.6	81.5	0.3	100.0	98.1	1,607	5.4	1,577
More than secondary	1.6	11.2	87.2	0.0	100.0	99.9	360	3.0	359
Wealth quintile									
Lowest	2.9	16.9	79.4	0.8	100.0	90.3	1,961	8.7	1,771
Second	3.3	18.3	77.6	0.7	100.0	92.8	1,624	7.8	1,507
Middle	2.8	14.5	82.3	0.4	100.0	95.9	1,607	8.0	1,541
Fourth	2.3	14.6	82.2	1.0	100.0	96.5	1,608	5.9	1,552
Highest	2.1	12.2	85.6	0.2	100.0	98.9	1,525	3.9	1,508
Total	2.7	15.4	81.3	0.6	100.0	94.6	8,324	6.9	7,879

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Based on either a written record or the mother's recall

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, Rwanda DHS 2019-20

Vaccine	Children age 12-23 months:				Children age 24-35 months:			
	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age ^{2,3,4}	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age ^{2,3,4}
	Vaccination card ¹	Mother's report	Either source		Vaccination card ¹	Mother's report	Either source	
BCG	96.7	2.6	99.2	99.1	92.4	6.9	99.2	98.6
DPT-HepB-Hib								
1	97.1	2.5	99.6	99.6	92.7	6.7	99.5	99.3
2	97.0	2.4	99.4	99.4	92.7	6.3	99.0	98.8
3	96.7	2.3	99.0	98.8	92.6	6.1	98.7	97.9
Polio								
OPV 0 (birth dose)	91.5	2.5	93.9	93.6	87.9	6.3	94.2	93.6
OPV 1	97.1	2.5	99.6	99.6	92.7	6.5	99.3	99.1
OPV 2	97.0	2.3	99.3	99.3	92.7	5.9	98.5	98.3
OPV 3	96.4	1.3	97.7	97.6	92.5	3.5	95.9	95.7
IPV	90.1	2.3	92.4	92.2	75.1	4.7	79.8	79.4
Pneumococcal								
1	97.1	2.5	99.6	99.6	92.7	6.8	99.4	99.3
2	97.0	2.3	99.3	99.3	92.6	6.7	99.3	99.1
3	96.6	2.3	98.8	98.6	92.3	6.3	98.6	97.9
Rotavirus								
1	96.9	2.6	99.5	99.4	92.3	6.7	99.0	98.8
2	96.8	2.5	99.3	98.7	92.2	6.5	98.8	97.8
Measles and Rubella								
1	95.2	2.5	97.8	95.5	91.9	6.4	98.3	95.4
2	na	na	na	na	88.1	5.7	93.8	92.4
All basic vaccinations⁵	94.3	1.2	95.5	92.9	91.2	3.2	94.3	91.1
All age-appropriate vaccinations⁶	83.4	1.1	84.4	81.3	67.5	1.8	69.4	66.0
No vaccinations	0.1	0.2	0.3	na	0.1	0.2	0.3	na
Number of children	1,588	45	1,633	1,633	1,516	115	1,631	1,631

na = Not applicable

BCG = Bacille Calmette-Guérin

DPT = Diphtheria-pertussis-tetanus

HepB = Hepatitis B

Hib = *Haemophilus influenzae* type b

IPV = Inactivated polio vaccine

OPV = Oral polio vaccine

¹ Vaccination card, booklet, or other home-based record

² Received by age 12 months

³ For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.

⁴ Received by age 12 months for all vaccines except measles and rubella vaccine 2 which should be received by age 24 months

⁵ BCG, three doses of DPT-HepB-Hib (pentavalent), three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles and rubella

⁶ For children age 12-23 months: BCG, three doses of DPT-HepB-Hib (pentavalent), four doses of oral polio vaccine, one dose of IPV, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles and rubella vaccine. For children age 24-35 months, all of the just-mentioned vaccinations plus a second dose of measles and rubella vaccine.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Children age 12-23 months:														Children age 24-35 months:			
	All age-appropriate vaccinations ³														All age-appropriate vaccinations ⁴			
	DPT-HepB-Hib			OPV ¹			IPV			Pneumococcal			Rotavirus		Measles and rubella 1	All basic vaccinations ²	No vaccinations	Measles and rubella 2
	1	2	3	0	1	2	3			1	2	3	1	2				
Sex																		
Male	99.1	99.6	99.2	98.7	92.8	99.6	99.0	97.6	92.2	99.6	99.0	98.5	99.5	99.1	97.3	94.7	83.2	93.1
Female	99.4	99.6	99.3	99.3	95.1	99.6	99.6	97.8	92.7	99.6	99.6	99.2	99.5	99.5	98.3	96.4	85.7	94.5
Birth order																		
1	99.6	99.6	99.5	99.2	96.4	99.9	99.4	98.0	91.4	99.7	99.2	98.9	99.9	99.4	98.6	96.1	85.3	96.3
2-3	99.5	99.6	99.3	98.8	94.5	99.5	99.3	97.6	93.5	99.6	99.3	98.7	99.6	99.4	98.5	96.7	86.6	94.8
4-5	98.7	99.7	99.3	99.3	92.1	99.7	99.2	98.1	93.0	99.7	99.7	99.3	99.7	99.7	97.1	94.8	83.0	90.5
6+	98.5	99.3	99.3	98.3	90.1	99.3	99.3	96.8	90.6	99.3	99.3	98.2	98.2	98.2	94.9	92.0	78.3	89.7
Vaccination card⁵																		
Seen	99.4	99.9	99.7	99.4	94.1	99.9	99.7	99.1	92.7	99.9	99.7	99.3	99.7	99.5	97.9	97.0	85.7	94.8
Not seen/no card	(93.1)	(90.9)	(87.4)	(82.7)	(89.8)	(91.3)	(83.4)	(46.4)	(84.0)	(91.0)	(84.7)	(81.2)	(93.1)	(91.4)	(91.4)	(44.2)	(38.8)	80.4
Residence																		
Urban	99.2	98.9	98.9	98.9	96.8	99.2	99.2	98.3	91.7	99.2	99.2	99.1	99.2	99.2	98.3	97.0	88.1	93.3
Rural	99.2	99.8	99.5	99.0	93.4	99.7	99.3	97.6	92.6	99.7	99.4	98.8	99.6	99.3	97.7	95.2	83.7	93.9
Province																		
City of Kigali	99.0	99.0	99.0	99.0	95.7	99.0	99.0	98.6	95.5	99.0	99.0	99.0	99.0	99.0	97.5	97.1	91.2	92.2
South	99.2	100.0	99.3	99.0	92.1	99.8	99.3	98.6	93.9	100.0	99.3	99.3	100.0	99.5	99.1	97.3	85.3	97.6
West	98.9	99.7	99.7	99.1	95.1	99.7	99.7	97.3	97.2	99.7	99.7	99.1	99.7	99.7	97.3	94.6	89.1	92.6
North	99.7	99.3	99.3	98.1	97.7	99.7	99.2	97.2	78.5	99.3	98.8	97.1	98.8	98.3	96.8	93.8	73.4	94.0
East	99.4	99.7	99.5	99.2	91.3	99.7	99.1	97.1	94.1	99.7	99.5	99.2	99.7	99.5	97.8	95.2	83.1	92.8
Mother's education																		
No education	98.5	99.1	98.5	98.5	90.3	99.1	98.5	96.2	93.4	99.1	98.5	97.7	99.1	98.5	97.8	95.0	83.6	89.2
Primary	99.2	99.7	99.5	98.9	93.1	99.7	99.3	98.1	92.6	99.7	99.4	98.8	99.6	99.3	97.4	95.3	83.5	93.9
Secondary	99.8	99.8	99.8	99.5	97.3	99.8	99.8	97.6	92.3	99.8	99.8	99.7	99.8	99.8	98.7	96.5	87.2	95.5
More than secondary	98.1	98.1	98.1	98.1	98.1	98.1	98.1	95.8	89.4	98.1	98.1	98.1	98.1	98.1	98.1	95.8	87.1	95.0
Wealth quintile																		
Lowest	99.0	100.0	99.3	98.5	92.5	100.0	99.0	96.2	90.9	99.7	98.7	97.8	100.0	99.3	97.3	93.4	80.2	92.5
Second	98.7	99.3	99.1	98.4	91.6	99.1	98.7	97.3	90.6	99.3	99.1	98.4	99.3	99.0	97.9	95.2	81.2	94.0
Middle	100.0	100.0	100.0	99.7	93.5	100.0	100.0	98.2	95.5	100.0	100.0	99.5	99.6	99.6	96.9	95.1	84.3	92.3
Fourth	99.4	99.7	99.7	99.4	96.1	99.7	99.7	99.1	95.8	99.7	99.7	99.4	99.4	99.4	98.2	97.5	91.2	95.9
Highest	99.2	98.9	98.9	98.9	96.8	99.2	99.2	97.8	89.0	99.2	99.2	99.2	99.2	99.2	98.7	96.9	85.8	94.5
Total	99.2	99.6	99.4	99.0	93.9	99.6	99.3	97.7	92.4	99.6	99.3	98.8	99.5	99.3	97.8	95.5	84.4	93.8

Notes: Children are considered to have received the vaccine if it was either written on their vaccination card or reported by their mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25-49 unweighted cases.

BCG = Bacille Calmette-Guérin

DPT = Diphtheria-pertussis-tetanus

HepB = Hepatitis B

Hib = *Haemophilus influenzae* type b

IPV = Inactivated polio vaccine

OPV = Oral polio vaccine

¹ Polio 0 is the polio vaccination given at birth.

² BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles and rubella vaccine

³ BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, one dose of IPV, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles and rubella vaccine

⁴ BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, one dose of IPV, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of measles and rubella vaccine

⁵ Vaccination card, booklet or other home-based record

Table 10.4 Possession and observation of vaccination cards, according to background characteristics

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card ¹	Percentage with a vaccination card seen ¹	Number of children	Percentage who ever had a vaccination card ¹	Percentage with a vaccination card seen ¹	Number of children
Sex						
Male	99.8	97.2	835	99.5	91.8	851
Female	99.8	97.2	797	99.5	94.2	780
Birth order						
1	99.9	96.8	439	100.0	91.8	425
2-3	100.0	97.2	652	99.3	93.9	689
4-5	99.7	98.0	323	100.0	92.8	325
6+	99.3	97.2	219	98.2	92.4	192
Residence						
Urban	99.8	98.4	269	99.8	92.8	319
Rural	99.8	97.0	1,364	99.4	93.0	1,312
Province						
City of Kigali	99.7	98.4	209	99.7	94.0	244
South	100.0	98.3	346	99.8	96.3	311
West	100.0	98.0	385	100.0	94.4	387
North	100.0	96.1	262	99.6	89.3	247
East	99.4	95.8	431	98.7	90.8	442
Mother's education						
No education	99.1	97.2	159	98.2	91.7	180
Primary	100.0	97.8	1,058	99.9	93.8	1,059
Secondary	99.8	95.4	340	98.8	90.7	314
More than secondary	98.8	97.7	75	100.0	93.2	78
Wealth quintile						
Lowest	100.0	96.4	357	98.9	91.2	403
Second	99.6	97.1	351	100.0	95.8	280
Middle	100.0	97.2	323	99.6	94.1	323
Fourth	100.0	98.1	338	100.0	92.1	286
Highest	99.4	97.4	264	99.3	92.3	339
Total	99.8	97.2	1,633	99.5	92.9	1,631

¹ Vaccination card, booklet, or other home-based record

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
	Percentage with symptoms of ARI ¹	Number of children	Percentage for whom advice or treatment was sought ²	Percentage for whom treatment was sought same or next day	Number of children
Age in months					
<6	2.4	791	*	*	19
6-11	2.4	836	*	*	20
12-23	2.3	1,633	(79.1)	(39.4)	37
24-35	1.4	1,631	*	*	23
36-47	1.3	1,594	*	*	21
48-59	1.0	1,535	*	*	16
Sex					
Male	1.8	4,046	66.7	29.4	74
Female	1.6	3,974	79.7	36.3	62
Mother's smoking status					
Smokes cigarettes/tobacco	(5.1)	37	*	*	2
Does not smoke	1.7	7,983	72.3	32.4	135
Cooking fuel					
Electricity or gas	0.3	238	*	*	1
Charcoal	1.2	1,466	*	*	18
Wood/straw ³	1.9	6,308	73.8	31.0	118
Residence					
Urban	1.0	1,411	*	*	14
Rural	1.9	6,608	71.1	27.1	123
Province					
City of Kigali	1.2	1,133	*	*	13
South	1.2	1,610	*	*	19
West	2.6	1,940	67.2	40.3	51
North	1.6	1,214	*	*	19
East	1.6	2,123	(82.2)	(20.5)	34
Mother's education					
No education	2.1	913	*	*	19
Primary	1.9	5,197	69.0	26.4	99
Secondary	1.0	1,555	*	*	16
More than secondary	0.9	354	*	*	3
Wealth quintile					
Lowest	2.1	1,866	(66.8)	(35.7)	40
Second	2.5	1,542	(63.8)	(29.2)	38
Middle	1.9	1,560	*	*	30
Fourth	0.9	1,560	*	*	13
Highest	1.0	1,491	*	*	15
Total	1.7	8,020	72.7	32.5	137

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

² Includes advice or treatment from the following sources: public sector, private medical sector, kiosk/shop. Excludes advice or treatment from a traditional practitioner

³ Includes grass, shrubs, and crop residues

Table 10.6 Source of advice or treatment for children with symptoms of ARI

Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Rwanda DHS 2019-20

Source	Percentage for whom advice or treatment was sought from each source:	
	Among children with symptoms of ARI ¹	Among children with symptoms of ARI for whom advice or treatment was sought ¹
Public sector	63.2	85.7
Government referral hospital	1.5	2.1
Provincial/district hospital	3.8	5.2
Health center	40.9	55.5
Health post	8.0	10.8
Community health worker	11.8	16.0
Private sector	8.1	11.0
Polyclinic	0.7	1.0
Pharmacy	5.3	7.2
Private clinic	1.0	1.4
Dispensary	1.0	1.4
Other sources	3.1	4.2
Traditional practitioner	1.0	1.4
Church	0.8	1.0
Friend/relative	1.3	1.8
Number of children	137	101

¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Table 10.7 Prevalence and treatment of fever

Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage who received antibiotics as treatment, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among children under age 5:		Among children under age 5 with fever:			
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought ¹	Percentage for whom advice or treatment was sought same or next day	Percentage who took antibiotic drugs	Number of children with fever
Age in months						
<6	14.0	791	54.1	25.4	38.4	111
6-11	24.9	836	64.0	30.6	43.6	208
12-23	26.8	1,633	65.6	35.6	37.4	437
24-35	18.6	1,631	61.3	33.1	42.8	304
36-47	16.4	1,594	58.8	35.0	39.0	261
48-59	12.1	1,535	64.3	36.0	37.6	186
Sex						
Male	19.0	4,046	63.6	32.0	40.9	770
Female	18.5	3,974	61.0	35.2	38.5	736
Residence						
Urban	15.0	1,411	68.9	43.6	43.3	212
Rural	19.6	6,608	61.2	32.0	39.1	1,295
Province						
City of Kigali	15.4	1,133	71.8	43.7	50.0	175
South	16.2	1,610	61.6	30.1	38.1	260
West	22.8	1,940	63.3	36.6	32.7	443
North	21.1	1,214	53.3	29.8	36.9	257
East	17.5	2,123	63.4	30.4	46.2	372
Mother's education						
No education	17.9	913	57.1	29.9	39.1	164
Primary	19.3	5,197	59.0	30.7	35.0	1,005
Secondary	18.9	1,555	72.6	40.9	52.5	294
More than secondary	12.2	354	(89.3)	(65.9)	(63.1)	43
Wealth quintile						
Lowest	19.5	1,866	52.3	24.5	29.1	364
Second	21.6	1,542	56.5	28.1	31.5	333
Middle	20.3	1,560	62.3	33.8	41.5	316
Fourth	17.6	1,560	70.5	36.9	48.2	275
Highest	14.7	1,491	77.4	52.6	56.6	219
Total	18.8	8,020	62.3	33.6	39.7	1,507

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes advice or treatment from the following sources: public sector, private medical sector, kiosk/shop. Excludes advice or treatment from a traditional practitioner

Table 10.8 Prevalence and treatment of diarrhea

Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey, and among children with diarrhea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage with diarrhea	Number of children	Among children under age 5 with diarrhea:	
			Percentage for whom advice or treatment was sought ¹	Number of children with diarrhea
Age in months				
<6	6.7	791	(42.5)	53
6-11	22.9	836	46.8	191
12-23	25.0	1,633	58.6	408
24-35	14.6	1,631	50.5	238
36-47	9.5	1,594	45.1	151
48-59	6.5	1,535	52.8	99
Sex				
Male	14.8	4,046	51.9	600
Female	13.6	3,974	51.9	541
Source of drinking water²				
Improved	13.9	6,309	51.8	878
Unimproved	15.4	1,711	52.1	263
Type of toilet facility³				
Improved sanitation facility	13.5	5,721	55.3	772
Unimproved facility	16.2	2,057	44.8	334
Open defecation	14.4	242	(45.7)	35
Residence				
Urban	11.5	1,411	46.0	163
Rural	14.8	6,608	52.9	978
Province				
City of Kigali	11.7	1,133	42.8	133
South	13.1	1,610	52.4	211
West	18.4	1,940	53.3	358
North	16.2	1,214	50.7	197
East	11.4	2,123	55.3	242
Mother's education				
No education	16.9	913	44.4	154
Primary	14.7	5,197	51.5	762
Secondary	13.0	1,555	59.4	202
More than secondary	6.3	354	*	22
Wealth quintile				
Lowest	16.7	1,866	46.6	311
Second	16.5	1,542	45.9	255
Middle	15.3	1,560	54.2	239
Fourth	12.9	1,560	63.0	201
Highest	9.0	1,491	55.0	135
Total	14.2	8,020	51.9	1,141

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes advice or treatment from the following sources: public sector, private medical sector, kiosk/shop. Excludes advice or treatment from a traditional practitioner

² See Table 2.1.1 for definition of categories.

³ See Table 2.2.1 for definition of categories.

Table 10.9 Feeding practices during diarrhea

Percent distribution of children under age 5 who had diarrhea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Amount of liquids given							Amount of food given							Total	Number of children with diarrhea
	More	Same as usual	Some-what less	Much less	None	Don't know	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know	Total	
Age in months																
<6	(12.9)	(44.8)	(7.8)	(7.8)	(26.7)	(0.0)	100.0	(0.0)	(7.6)	(4.0)	(7.6)	(0.0)	(80.8)	(0.0)	100.0	53
6-11	7.5	22.9	23.6	36.8	9.3	0.0	100.0	2.8	16.4	19.0	47.7	8.1	6.1	0.0	100.0	191
12-23	11.1	21.0	29.6	31.3	7.1	0.0	100.0	2.4	19.6	23.0	48.3	5.9	0.7	0.0	100.0	408
24-35	19.0	21.6	28.5	26.5	4.1	0.3	100.0	2.8	21.5	30.4	40.1	4.4	0.6	0.3	100.0	238
36-47	19.9	19.5	31.0	24.4	4.6	0.7	100.0	3.5	20.5	32.6	40.8	1.8	0.0	0.7	100.0	151
48-59	20.2	30.3	31.7	17.7	0.0	0.0	100.0	6.4	22.7	37.3	31.8	1.8	0.0	0.0	100.0	99
Sex																
Male	13.6	22.7	28.3	28.6	6.5	0.2	100.0	3.1	20.0	24.8	42.0	4.1	5.7	0.2	100.0	600
Female	14.8	23.7	27.0	27.3	7.1	0.1	100.0	2.8	18.5	26.2	42.4	5.5	4.5	0.1	100.0	541
Breastfeeding status																
Breastfeeding	10.9	22.6	25.5	31.8	9.3	0.0	100.0	2.5	17.2	20.5	45.5	6.1	8.1	0.0	100.0	696
Not breastfeeding	19.3	24.0	31.2	22.1	2.9	0.4	100.0	3.6	22.5	33.3	37.0	2.8	0.5	0.4	100.0	445
Residence																
Urban	13.9	27.1	31.1	25.6	2.0	0.4	100.0	6.1	24.2	27.7	37.3	2.0	2.4	0.4	100.0	163
Rural	14.2	22.5	27.2	28.4	7.6	0.1	100.0	2.4	18.5	25.1	43.0	5.2	5.6	0.1	100.0	978
Province																
City of Kigali	9.6	24.0	31.3	29.9	3.8	1.3	100.0	0.0	22.2	24.8	45.7	4.0	2.0	1.3	100.0	133
South	14.7	28.0	24.4	25.4	7.4	0.0	100.0	3.4	22.4	27.6	36.5	4.5	5.6	0.0	100.0	211
West	14.8	18.3	31.7	29.8	5.4	0.0	100.0	4.5	16.2	25.9	45.0	5.1	3.3	0.0	100.0	358
North	17.3	24.6	24.0	27.0	7.1	0.0	100.0	3.3	20.1	25.2	41.8	2.2	7.3	0.0	100.0	197
East	12.7	24.5	25.8	27.4	9.7	0.0	100.0	1.5	18.9	23.8	41.3	7.1	7.3	0.0	100.0	242
Mother's education																
No education	15.8	25.1	28.7	26.2	4.3	0.0	100.0	2.8	20.7	28.7	42.1	2.2	3.5	0.0	100.0	154
Primary	13.4	21.7	28.3	29.4	7.1	0.1	100.0	2.8	17.5	24.8	45.1	4.8	4.8	0.1	100.0	762
Secondary	16.4	26.9	22.7	25.4	8.3	0.3	100.0	3.6	24.3	25.9	32.9	7.1	5.9	0.3	100.0	202
More than secondary	*	*	*	*	*	*	100.0	*	*	*	*	*	*	*	100.0	22
Wealth quintile																
Lowest	14.8	20.6	26.4	29.9	8.4	0.0	100.0	1.3	16.5	24.8	46.3	5.3	5.7	0.0	100.0	311
Second	11.6	21.1	30.8	29.9	6.5	0.0	100.0	3.2	18.4	27.6	42.0	6.2	2.6	0.0	100.0	255
Middle	12.7	23.3	30.6	28.0	5.3	0.0	100.0	4.2	18.4	27.7	42.4	3.5	3.8	0.0	100.0	239
Fourth	16.6	25.7	23.7	24.7	8.7	0.6	100.0	3.1	20.0	24.0	39.7	5.5	7.1	0.6	100.0	201
Highest	16.4	29.0	25.8	25.1	3.3	0.5	100.0	3.8	28.1	21.5	36.2	1.9	8.0	0.5	100.0	135
Total	14.2	23.2	27.7	28.0	6.8	0.2	100.0	2.9	19.3	25.5	42.2	4.8	5.1	0.2	100.0	1,141

Notes: It is recommended that children be given more liquids to drink during diarrhea and that food not be reduced. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.10 Oral rehydration therapy, zinc, and other treatments for diarrhea

Among children under age 5 who had diarrhea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet or pre-packaged ORS fluid, recommended homemade fluids (RHF), ORS or RHF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT), continued feeding and ORT, and other treatments, and percentage given no treatment, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of children with diarrhea who were given:													Number of children with diarrhea
	Fluid from ORS packets or pre-packaged ORS liquid	Recommended home fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT ¹	Anti-biotic drugs	Anti-motility drugs	Intra-venous solution	Home remedy/ other	No treatment	
Age in months														
<6	(13.3)	(6.2)	(16.9)	(16.0)	(1.9)	(26.2)	(29.7)	(2.8)	(1.9)	(0.0)	(0.0)	(9.1)	(52.5)	53
6-11	23.4	9.6	28.4	27.9	13.1	27.0	31.0	10.6	5.3	0.8	0.5	29.1	34.8	191
12-23	32.8	12.9	39.5	41.3	22.6	38.6	45.1	20.1	5.9	0.6	0.0	27.6	22.7	408
24-35	28.7	11.6	35.2	38.3	19.6	40.8	46.4	21.6	4.1	0.9	0.0	27.8	25.5	238
36-47	21.0	13.9	29.4	38.6	16.6	35.9	41.9	22.2	2.3	0.0	0.0	34.9	23.2	151
48-59	33.5	10.3	37.2	36.9	24.7	44.8	47.4	31.3	1.8	1.7	0.0	23.3	27.6	99
Sex														
Male	28.1	10.2	34.0	35.5	18.6	36.6	41.7	19.0	4.2	1.0	0.2	30.0	26.0	600
Female	27.8	13.3	34.4	37.7	19.0	36.9	42.6	19.6	4.7	0.3	0.0	24.9	28.5	541
Residence														
Urban	23.2	3.8	26.0	27.6	14.3	33.4	35.8	22.8	5.9	2.0	0.0	28.8	33.4	163
Rural	28.8	13.0	35.5	38.0	19.6	37.3	43.2	18.7	4.1	0.4	0.1	27.4	26.1	978
Province														
City of Kigali	19.7	3.5	21.4	20.3	7.2	25.0	26.6	10.4	5.6	1.2	0.0	35.2	34.4	133
South	29.9	10.6	34.0	34.3	20.2	39.3	43.4	23.2	4.0	1.1	0.0	31.7	26.3	211
West	30.0	14.3	38.1	42.3	22.2	38.1	45.1	18.8	4.5	1.0	0.0	21.5	26.2	358
North	24.5	13.9	32.3	37.3	15.3	37.6	43.6	20.2	5.7	0.0	0.0	20.1	29.7	197
East	30.7	11.4	36.9	38.2	21.9	38.2	43.8	20.7	2.9	0.0	0.4	35.0	23.4	242
Mother's education														
No education	24.5	14.1	33.1	29.4	14.2	37.2	42.0	19.4	1.0	1.0	0.0	27.1	30.4	154
Primary	27.7	11.4	34.1	36.8	18.7	35.9	41.9	18.5	4.4	0.3	0.1	28.6	26.5	762
Secondary	31.5	9.8	34.8	43.2	24.1	40.0	43.2	21.7	5.6	0.9	0.0	25.7	26.3	202
More than secondary	*	*	*	*	*	*	*	*	*	*	*	*	*	22
Wealth quintile														
Lowest	25.9	10.4	31.1	32.2	16.8	35.3	39.6	14.1	2.9	0.0	0.0	27.1	28.5	311
Second	25.0	13.8	33.5	34.6	18.0	33.9	41.5	19.3	2.3	0.4	0.4	27.5	31.3	255
Middle	30.8	11.8	38.4	41.1	22.0	38.0	44.7	24.4	5.6	0.3	0.0	27.6	25.9	239
Fourth	31.9	11.9	37.5	43.5	21.3	40.0	44.8	17.9	6.5	1.7	0.0	24.1	22.0	201
Highest	27.5	9.9	29.9	31.8	15.6	38.2	40.5	24.4	6.5	1.8	0.0	34.0	26.3	135
Total	28.0	11.7	34.1	36.5	18.8	36.7	42.1	19.3	4.4	0.7	0.1	27.6	27.2	1,141

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

ORS = Oral rehydration salts

¹ Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhea episode.

Table 10.11 Source of advice or treatment for children with diarrhea

Percentage of children under age 5 with diarrhea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhea who received ORS, percentage for whom advice or treatment was sought from specific sources, Rwanda DHS 2019-20

Source	Percentage for whom advice or treatment was sought from each source:		
	Among children with diarrhea	Among children with diarrhea for whom advice or treatment was sought	Among children with diarrhea who received ORS ¹
Public sector	42.5	80.0	86.0
Provincial/district hospital	0.9	1.8	2.3
Health center	28.2	53.2	61.7
Health post	6.8	12.9	10.4
Community health worker	7.5	14.1	15.0
Private sector	8.6	16.2	7.5
Polyclinic	0.2	0.3	0.6
Pharmacy	7.0	13.1	5.0
Private clinic	1.2	2.3	1.6
Dispensary	0.3	0.5	0.3
Other sector	2.2	4.1	0.7
Kiosk/shop	0.1	0.1	0.0
Traditional practitioner	1.4	2.6	0.4
Friend/relative	0.7	1.3	0.3
Other	0.3	0.5	0.5
Number of children	1,141	606	319

ORS = Oral rehydration salts

¹ Fluid from ORS packet or pre-packaged ORS fluid

Table 10.12 Knowledge of ORS packets or pre-packaged liquids

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who know about ORS packets or ORS pre-packaged liquids for treatment of diarrhea, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
Age		
15-19	53.9	125
20-24	68.6	968
25-34	82.2	3,002
35-49	85.8	2,207
Residence		
Urban	86.0	1,123
Rural	79.7	5,179
Province		
City of Kigali	84.9	866
South	82.7	1,305
West	80.7	1,425
North	71.0	1,004
East	83.2	1,702
Education		
No education	77.5	698
Primary	80.3	4,071
Secondary	82.1	1,258
More than secondary	90.5	275
Wealth quintile		
Lowest	72.6	1,448
Second	79.2	1,217
Middle	79.8	1,224
Fourth	86.1	1,234
Highest	88.2	1,178
Total	80.8	6,302

ORS = Oral rehydration salts

Table 10.13 Disposal of children's stools

Percent distribution of youngest children under age 2 living with their mother by the manner of disposal of the child's last fecal matter, and percentage of children whose stools are disposed of appropriately, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Manner of disposal of children's stools								Total	Percentage of children whose stools are disposed of appropriately ¹	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	In the clothes and washed	Other			
Age of child in months											
0-1	0.5	48.6	2.4	10.9	15.3	3.9	17.5	1.0	100.0	51.4	238
2-3	0.3	56.5	2.3	8.8	10.8	3.3	17.5	0.5	100.0	59.2	265
4-5	0.6	65.4	2.2	4.3	10.6	2.8	13.8	0.3	100.0	68.2	278
6-8	3.1	77.8	1.6	3.6	4.8	2.6	6.3	0.3	100.0	82.5	412
9-11	4.5	83.5	1.3	1.3	2.1	2.0	5.1	0.3	100.0	89.3	405
12-17	3.2	88.2	1.5	1.4	1.9	2.1	1.7	0.0	100.0	92.9	797
18-23	5.0	90.5	1.0	0.6	1.1	1.2	0.5	0.2	100.0	96.4	750
6-23	4.0	86.3	1.3	1.5	2.2	1.9	2.7	0.2	100.0	91.6	2,363
Type of toilet facility²											
Improved sanitation facility	3.2	80.6	0.9	3.1	5.1	1.5	5.4	0.2	100.0	84.7	2,223
Unimproved facility	3.2	77.6	2.4	2.0	2.9	3.7	7.8	0.3	100.0	83.2	826
Open defecation	0.9	57.2	9.0	11.6	9.5	6.0	4.9	0.8	100.0	67.2	96
Residence											
Urban	3.6	81.7	1.0	1.5	9.1	0.7	2.2	0.2	100.0	86.3	510
Rural	3.0	78.6	1.7	3.4	3.8	2.5	6.8	0.3	100.0	83.3	2,635
Province											
City of Kigali	3.1	79.8	0.6	3.3	10.6	0.3	2.2	0.3	100.0	83.4	412
South	3.1	83.2	1.9	3.1	4.6	1.8	2.0	0.2	100.0	88.3	669
West	5.9	75.0	2.3	4.3	2.0	2.8	7.1	0.6	100.0	83.1	759
North	1.6	72.5	2.1	1.4	2.6	4.0	15.8	0.0	100.0	76.3	455
East	1.4	82.7	0.8	2.8	5.3	2.0	4.9	0.2	100.0	84.9	849
Mother's education											
No education	2.3	78.6	1.7	3.4	4.3	2.6	6.8	0.2	100.0	82.6	317
Primary	3.1	79.1	1.9	3.5	3.5	2.4	6.2	0.3	100.0	84.1	1,985
Secondary	2.8	79.7	0.8	2.5	6.0	2.1	6.0	0.1	100.0	83.3	689
More than secondary	5.9	77.0	0.0	0.0	14.4	0.0	2.0	0.7	100.0	82.9	154
Wealth quintile											
Lowest	2.4	75.2	3.0	4.9	3.5	3.6	7.1	0.4	100.0	80.6	729
Second	2.9	77.1	2.0	3.6	3.5	2.8	8.0	0.2	100.0	81.9	633
Middle	3.8	78.8	1.1	2.4	3.2	2.3	8.3	0.1	100.0	83.7	602
Fourth	2.7	84.6	0.7	1.8	3.6	1.9	4.3	0.4	100.0	88.1	626
Highest	3.9	80.6	0.6	2.3	10.2	0.2	2.0	0.2	100.0	85.1	555
Total	3.1	79.1	1.6	3.1	4.6	2.2	6.0	0.3	100.0	83.8	3,145

¹ Children's stools are considered to be disposed of appropriately if the child used a toilet or latrine, if the fecal matter was put/rinsed into a toilet or latrine, or if it was buried.

² See Table 2.2.1 for definition of categories.

Key Findings

- **Nutritional status of children:** 33% of Rwandan children age 6-59 months are stunted (short for their age), 1% are wasted (thin for their height), 8% are underweight (thin for their age), and 6% are overweight (heavy for their height).
- **Breastfeeding:** Nearly all (99%) children born in the 2 years before the survey were breastfed at some point; 81% of children under age 6 months are exclusively breastfed.
- **Minimum acceptable diet:** Only 22% of children age 6-23 months were fed a minimum acceptable diet during the previous day.
- **Anemia:** 37% of children age 6-59 months and 13% of women age 15-49 are anemic.
- **Nutritional status of women:** 6% of women age 15-49 are thin (a body mass index [BMI] below 18.5), while 26% are overweight or obese (BMI $\geq$ 25.0).

This chapter focuses on nutritional status and anemia among children and adults. It also reports on infant and young child feeding practices, including breastfeeding and complementary feeding, as well as micronutrient supplementation and deworming for children and pregnant women.

11.1 NUTRITIONAL STATUS OF CHILDREN

The distribution of height and weight among children under age 5 was compared against the WHO Child Growth Standards reference population (WHO 2006). A well-nourished population will be similar to the reference population, while a poorly nourished population will differ from the reference population. Three indices—height-for-age, weight-for-height, and weight-for-age—can be expressed in standard deviation units (Z-scores) from the median of the reference population, with values greater than two standard deviations from the median of the WHO Child Growth Standards used to define malnutrition.

Stunting, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period of time. The most direct causes of stunting are inadequate nutrition (not eating enough or eating foods that lack growth-promoting nutrients) and recurrent infections or chronic diseases that cause poor nutrient intake and absorption.

Wasting, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness or infection causing weight loss.

Overweight, or high weight-for-height, is a measure of overnutrition and results from an imbalance between energy consumed (too much) and energy expended (too little).

Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age reflecting both acute (wasting) and chronic (stunting) undernutrition.

Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely stunted.

Sample: Children under age 5

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose weight-for-height Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely wasted.

Sample: Children under age 5

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

Sample: Children under age 5

Overweight (assessed via weight-for-height)

Children whose weight-for-height Z-score is more than two standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cutoff point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0, the higher the prevalence of malnutrition.

11.1.1 Anthropometry Training and Data Collection

Laboratory technicians and nurses were trained to measure the height and weight of children and adults. Training on child height measurement included a standardization exercise although not all that participated in the exercise collected anthropometric data in the field; results of these exercises are provided in **Appendix Table C.7**.

Children younger than age 24 months were measured lying down (recumbent length); older children and adults were measured standing up (height). Weight measurements were taken using SECA scales with a digital display (model number SECA 878U). Height and length were measured with a Shorr Board® measuring board.

Height and weight measurements were obtained for 4,052 (unweighted) children under age 5 who were eligible to be measured in the 2019-20 RDHS subsample households. The analysis of anthropometric indices (height-for-age, weight-for-height, and weight-for-age) included valid dates of birth and measures of both height and weight. Valid height-for-age measurements were taken for 99.7% of eligible children. Valid weight-for-height measurements were taken for 99.7% of eligible children. Valid weight-for-age measurements were taken for 99.7% of eligible children. **Appendix Table C.8** provide additional information on the completeness and quality of anthropometry data for children.

To assess precision of measurements, one child per cluster was randomly selected to be measured a second time. A difference of 1 centimeter or less between the two height measurements was defined as an acceptable level of precision. Children with a Z-score of less than -3 or more than 3 for height-for-age, weight-for-height, or weight-for-age were flagged and measured a second time. Re-measurement of flagged cases was performed to ensure accurate reporting of height and weight measurements.

Calculation of Z-scores was based on the first measurement among children randomly selected for re-measurement and on the second measurement among children flagged for re-measurement. The re-measurement completion rate was 99% for both children randomly selected for re-measurement and those flagged for re-measurement. **Appendix Table C.9** provides additional information on re-measurement data.

11.1.2 Levels of Child Malnutrition

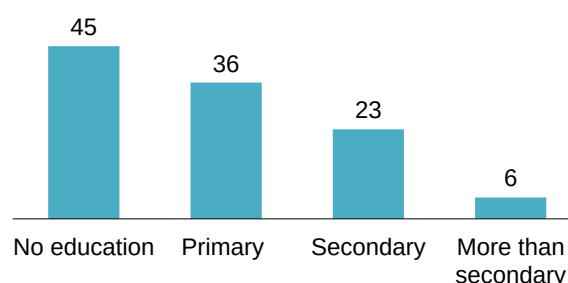
Table 11.1 shows that 33% of children under age 5 are stunted (too short for their age) and 9% are severely stunted. One percent are wasted (too thin for their height), and less than 1% are severely wasted. Eight percent of children are underweight (too thin for their age), with 1% being severely underweight. Six percent of children are overweight.

Patterns by background characteristics

- The prevalence of stunting generally increases from 16% among children less than age 6 months to a peak of 40% among children age 24-35 months. This represents the impact of undernutrition in the first 1,000 days of life. Wasting, on the other hand, is most prevalent (3%) among children age 6-8 months.
- The proportions of children who are stunted and underweight declined substantially with increasing mother's educational level. For instance, the prevalence of stunting among children whose mothers have no education is 45% compared with 6% among those whose mothers have more than a secondary education (**Figure 11.1**).
- Stunting and underweight are inversely related to household wealth. For example, 49% of children in the lowest wealth quintile are stunted, as compared with 11% of children in the highest quintile. Similarly, 12% of children in the lowest wealth quintile are underweight, as compared with only 2% of children in the highest quintile.

Figure 11.1 Stunting in children by mother's education

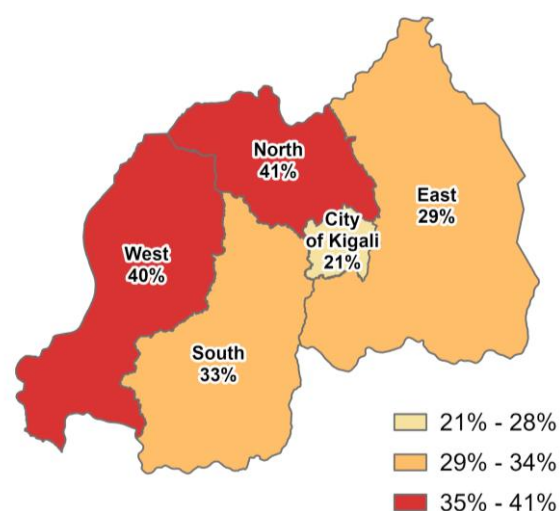
Percentage of children under age 5 who are stunted



- By province, the proportion of children who are stunted is highest in West and North (40% and 41%, respectively) (**Figure 11.2**). City of Kigali and South have the highest prevalence of wasted children (2% each), whereas South has the highest prevalence of underweight children (10%).
- Children reported to be small or very small at birth have a higher prevalence of stunting, wasting, and underweight than children reported to be average or larger at birth. For example, 60% of children reported to be very small at birth are stunted, as compared with 30% of children reported to be average or larger at birth. Children reported to be very small at birth have nearly a five times higher prevalence of underweight as those reported to be average or larger at birth (29% versus 6%).
- Children whose mothers are thin (a body mass index [BMI] below 18.5) have a higher prevalence of wasting and underweight than children whose mothers have a normal BMI and children whose mothers are overweight or obese. Six percent of children whose mothers are thin are wasted, while 18% are underweight. The corresponding percentages among children whose mothers have a normal BMI are 1% and 8%.
- A higher proportion of children in rural areas than urban areas are stunted (36% versus 20%) and underweight (9% versus 4%).

Figure 11.2 Stunting in children by province

Percentage of children under age 5 who are stunted



11.2 INFANT AND YOUNG CHILD FEEDING PRACTICES

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding (within the first hour of life), exclusive breastfeeding in the first 6 months of life, continued breastfeeding for 2 years or more, and introduction of safe, appropriate, and adequate complementary foods at age 6 months (WHO 2008).

11.2.1 Early Initiation of Breastfeeding

Initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk.

Early initiation of breastfeeding

Initiation of breastfeeding within 1 hour of birth.

Sample: Last-born children who were born in the 2 years before the survey

Table 11.2 shows that 99% of last-born children born in the 2 years before the survey were breastfed at some point. Nearly 9 in 10 children (85%) children were breastfed within 1 hour of birth, and 97% were breastfed within 1 day of birth. Only a small proportion of children (4%) received a prelacteal feed.

Trends: The percentage of children ever breastfed has remained at 99% since 2010. The percentage of children who started breastfeeding within 1 hour of birth increased from 71% in 2010 to 81% in 2014-15 and 85% in 2019-20. The percentage of children receiving a prelacteal feed has consistently decreased over time, from 37% in 2005 to only 4% in 2019-20.

Patterns by background characteristics

- Early initiation of breastfeeding is more common among children whose deliveries were assisted by health personnel (86%) than among those whose deliveries were assisted by no one (82%) or by others (72%). Early initiation of breastfeeding is also more common among children delivered in a health facility (86%) than those delivered at home (79%).
- A higher proportion of infants in rural areas started breastfeeding within 1 hour of birth (86%) and a lower proportion received a prelacteal feed (3%) than infants in urban areas (81% and 8%, respectively).
- City of Kigali has the highest proportion of children receiving a prelacteal feed (9%).
- Early initiation of breastfeeding is most common among children in the lowest wealth quintile (88%) and least common among those in the highest quintile (80%). In contrast, 9% of children in the highest quintile received a prelacteal feed, as compared with only 2% of children in each of the other four quintiles.

11.2.2 Exclusive Breastfeeding and Continued Breastfeeding

Breast milk contains all of the nutrients needed by children during their first 6 months of life. It is recommended that children be exclusively breastfed in the first 6 months of their life; that is, they should be given nothing but breast milk. Exclusive breastfeeding for 6 months prevents infections such as diarrhea and respiratory illnesses and provides all of the nutrients an infant requires for optimal growth and development. Feeding complementary foods within the first 6 months will have the adverse effect of reducing breast milk output because the production and release of breast milk are modulated by the frequency and intensity of suckling. Breastfeeding should continue for the first 2 years of life.

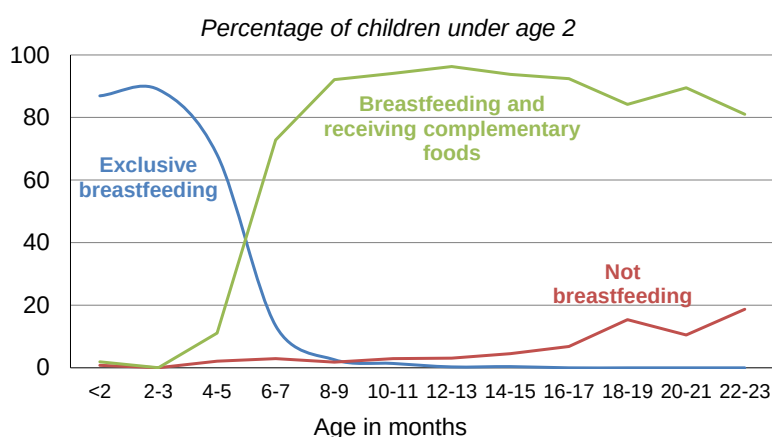
Exclusive breastfeeding

Proportion of children age 0-5 months who are fed exclusively with breast milk.

Sample: Last-born children who were born in the 2 years before the survey

Breastfeeding status was ascertained for last-born children under age 2 who are currently living with their mother. More than 4 in 5 children (81%) under age 6 months are exclusively breastfed. Exclusive breastfeeding declines with age, from 87% and 89%, respectively, among children age 0-1 months and 2-3 months to 68% among those age 4-5 months. Only 2% of children age 0-5 months are breastfeeding and consuming plain water only, 8% are consuming non-milk liquids and 4% are consuming other milk; these practices tends to decrease the practice of exclusive breastfeeding. The proportion of children who are breastfeeding and consuming complementary foods generally first increases with age (peaking at 94% among children age 9-11 months) and then falls to 85% among children age 18-23 months (as older children stop breastfeeding). Ninety percent of children age 12-23 months are breastfeeding. The proportions of children less than age 1 who are not breastfeeding are very small (0%-3%). Only 5% of children age 12-17 months and 15% of those age 18-23 months are not breastfed (Table 11.3, Table 11.4, and Figure 11.3).

Figure 11.3 Breastfeeding practices by age



Trends: The percentage of children age 0-5 months who are exclusively breastfed has remained above 80% since 1992.

11.2.3 Median Duration of Breastfeeding

The median duration of any breastfeeding among children born in the 3 years before the survey is 26.2 months, while the median duration of predominant breastfeeding (either exclusively breastfed or breastfed and receiving plain water and/or non-milk liquids) is 5.9 months (**Table 11.5**). The median duration of exclusive breastfeeding is 5.4 months.

Trends: The median duration of any breastfeeding has decreased slightly since 2014-15, from 28.3 months to 26.2 months, while the median durations of exclusive breastfeeding and predominant breastfeeding have remained unchanged.

Patterns by background characteristics

- The median duration of any breastfeeding is 26.7 months among children in rural areas, as compared with 24.4 months among children in urban areas.
- By province, the median duration of any breastfeeding is longest among children in South (30.3 months) and shortest among children in City of Kigali (24.4 months).
- The median duration of any breastfeeding decreases with increasing mother's education, from 27.4 months among children whose mothers have no education to 23.9 months among those whose mothers have more than a secondary education. A similar pattern is observed for median duration of exclusive breastfeeding and median duration of predominant breastfeeding.
- The median duration of any breastfeeding does not show a linear pattern with household wealth.

11.2.4 Bottle Feeding

The nipple on a feeding bottle is susceptible to contamination and increases disease risk among children. Thus, bottle feeding is not recommended for children under age 2 (WHO 2005).

Bottle feeding

Proportion of children age 0-23 months who are fed from a bottle with a nipple.

Sample: Last-born children who were born in the 2 years before the survey

Three percent of children age 0-1 months are fed using a bottle with a nipple. The proportion of children using a bottle with a nipple peaks at age 6-8 months (13%) before dropping to 4% at age 18-23 months. Overall, 7% of children age 0-23 months are fed from a bottle with a nipple (**Table 11.3** and **Table 11.4**).

11.2.5 Introduction of Complementary Foods

After the first 6 months, breast milk alone is no longer sufficient to meet the nutritional needs of an infant. After 6 months, appropriate complementary foods should be introduced while breastfeeding is continued until age 2 or older. The transition from exclusive breastfeeding to complementing breastfeeding with family foods is when children are most vulnerable to becoming undernourished, and during this time it is important that they receive solid, semisolid, or soft foods.

Appropriate complementary feeding should include feeding children a variety of foods to ensure that nutrient requirements are met. Fruits and vegetables rich in vitamin A should be consumed daily. Eating a range of fruits and vegetables, in addition to those rich in vitamin A, is also important. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain

micronutrients. Therefore, it has been recommended that meat, poultry, fish, or eggs be part of the daily diet or eaten as often as possible (WHO 2003).

Eighty one percent of children age 6-8 months are fed solid, semisolid, or soft foods (**Table 11.4**). **Table 11.6** indicates the types of foods and liquids consumed by children under age 2 during the day and night before the interview by their age and breastfeeding status.

The most common foods given to children age 6 to 23 months are fruits and vegetables rich in vitamin A (82% among breastfeeding children and 84% among nonbreastfeeding children). Children less often consume meat, fish, and poultry (19% among breastfeeding children and 27% among nonbreastfeeding children). Forty-seven percent of breastfeeding children are given food made from grains, as compared with 62% of nonbreastfeeding children. In addition, 47% of breastfeeding children and 49% of nonbreastfeeding children are given food made from roots and tubers. However, only 8% of breastfeeding children and 9% of nonbreastfeeding children are fed eggs.

11.2.6 Minimum Dietary Diversity, Minimum Meal Frequency, and Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality. The WHO minimum acceptable diet recommendation is a combination of minimum dietary diversity and minimum meal frequency. The indicators are defined in the box below.

Minimum dietary diversity is a proxy for adequate micronutrient density of foods. Consumption of food from at least five groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food such as grains, roots, or tubers (WHO 2008). The five groups should come from a list of eight food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for meeting energy requirements. Breastfed children age 6-8 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day. Breastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Nonbreastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods or milk feeds at least four times a day and if at least one of the feeds is a solid, semisolid, or soft food.

Minimum dietary diversity

Proportion of children age 6-23 months who received a minimum of five out of eight food groups during the previous day.

Minimum meal frequency

Proportion of children age 6-23 months who received solid, semisolid, or soft food (including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day.

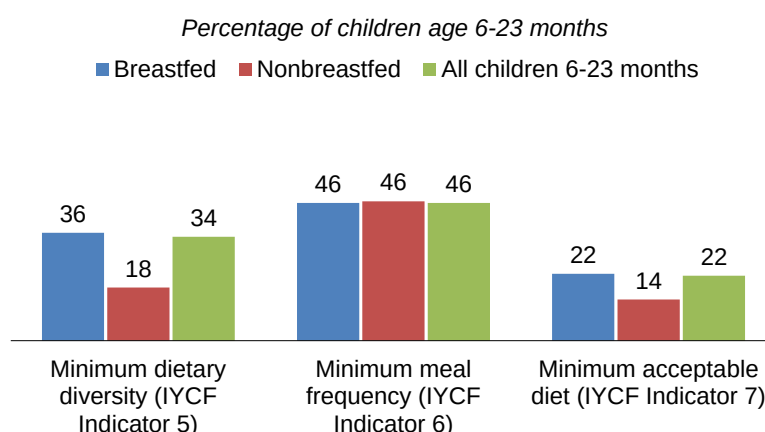
Minimum acceptable diet

Proportion of children age 6-23 months who receive a minimum acceptable diet. This indicator is a composite of children fed with a minimum dietary diversity and a minimum meal frequency.

Sample: Youngest children age 6-23 months living with their mother

Minimum dietary diversity, minimum meal frequency, and appropriate milk feeds together constitute a child's minimum acceptable diet. Twenty-two percent of children age 6-23 months living with their mother were fed a minimum acceptable diet during the previous day. Thirty-four percent of children had an adequately diverse diet in which they had been given foods from at least five food groups, and 46% had been fed the minimum number of times appropriate for their age (Table 11.7 and Figure 11.4).

Figure 11.4 IYCF indicators on minimum acceptable diet



Patterns by background characteristics

- More breastfed children are fed a minimum acceptable diet than nonbreastfed children (22% versus 14%).
- The proportion of children in urban areas (32%) fed according to the minimum acceptable dietary standards is higher in urban areas than in rural areas (19%).
- The proportion of children fed a minimum acceptable diet ranges from 14% in North to 31% in City of Kigali.
- The proportion of children fed a minimum acceptable diet rises with increasing mother's education (from 9% among children whose mothers have no education to 43% among children whose mothers have more than a secondary education) and increasing household wealth (from 10% among children in the lowest quintile to 39% among children in the highest quintile).

11.3 ANEMIA PREVALENCE IN CHILDREN

Anemia in children

Anemia status	Hemoglobin level in grams/deciliter*
Anemic	<11.0
Mildly anemic	10.0-10.9
Moderately anemic	7.0-9.9
Severely anemic	<7.0
Not anemic	11.0 or higher
*Hemoglobin levels are adjusted for altitude in enumeration areas that are above 1,000 meters.	

Sample: Children age 6-59 months

Anemia is a condition that is marked by low levels of hemoglobin in the blood. Iron deficiency is a common cause of anemia and is estimated to be responsible for half of all anemia cases in women and children globally. Other causes of anemia include malaria, hookworm and other helminths, other nutritional deficiencies, chronic infections, and genetic conditions such as thalassemia. Anemia is a serious concern for children because it can impair cognitive development and is associated with long-term health and economic consequences (Balarajan et al. 2011). Severe anemia leads to increased mortality. The

HemoCue® Hb 201+ device was used to measure hemoglobin levels from a finger-stick blood sample, which was then used to determine anemia levels in the population.

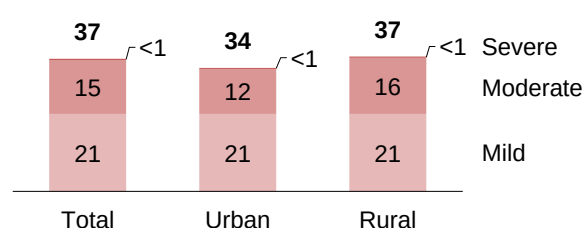
In the 2019-20 RDHS, hemoglobin testing was performed for children age 6-59 months using the methodology described in Chapter 1. The testing was successfully completed for nearly all eligible children (99.8%). Thirty-seven percent of children had anemia, with 21% having mild anemia, 15% having moderate anemia, and less than 1% having severe anemia (**Table 11.8**).

Patterns by background characteristics

- The prevalence of anemia declines gradually with age, from 70% among children age 6-8 months to 24% among those age 48-59 months.
- Children in rural areas (37%) have a slightly higher prevalence of anemia than those in urban areas (34%) (**Figure 11.5**).
- The prevalence of anemia is highest in North and West (41% each) and lowest in South (32%).
- The prevalence of anemia decreases with increasing mother's education and household wealth.

Figure 11.5 Childhood anemia by residence

Percentage of children age 6-59 months



11.4 MICRONUTRIENT INTAKE AND SUPPLEMENTATION AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation.

The information collected on food consumption among children age 6-23 months is useful in assessing the extent to which children are consuming food groups rich in two key micronutrients in their daily diet: iron and vitamin A. Iron plays an important role in numerous biological systems and iron deficiency is one of the primary causes of anemia, which has serious health consequences for children. Vitamin A supports the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrheal disease and slows recovery from illness.

Table 11.9 presents information on consumption of foods rich in vitamin A and iron during the previous day among children age 6-23 months who are living with their mother. It also provides information on micronutrient supplementation and deworming among children age 6-59 months. Overall, 84% of children age 6-23 months consumed foods rich in vitamin A during the previous day, and 24% consumed foods rich in iron. Eighteen percent of children age 6-23 months were given Ongera intungamubiri (multiple micronutrient powders). Eighty-seven percent of children age 6-59 months were given vitamin A supplements in the past 6 months, and 82% were given deworming medication in the past 6 months.

Trends: The percentage of children age 6-23 months who consumed foods rich in vitamin A increased from 74% in 2014-15 to 84% in 2019-20. Similarly, the percentage of children consuming foods rich in iron increased from 20% to 24% in the same period.

Patterns by background characteristics

- Fewer children age 6-8 months received a vitamin A supplement than those age 9-59 months (62% versus 80%-90%).

- The proportion of children in City of Kigali given vitamin A supplements and deworming medication is lower than children in the other provinces.
- The proportions of children consuming foods rich in vitamin A and iron increase with increasing mother's education and household wealth. For example, only 11% of children whose mothers have no education consumed foods rich in iron, as compared with 50% of children whose mothers have more than a secondary education. Similarly, 9% of children in the lowest wealth quintile consumed foods rich in iron, compared with 47% of children in the highest quintile.

11.5 WOMEN'S NUTRITIONAL STATUS

Chronic energy deficiency is caused by eating too little or having an unbalanced diet that lacks adequate nutrients. Women of reproductive age are especially vulnerable to chronic energy deficiency and malnutrition due to low dietary intakes, inequitable distribution of food within the household, improper food storage and preparation, dietary taboos, infectious diseases, and inadequate care practices. It is well known that chronic energy deficiency leads to low productivity among adults and is related to heightened morbidity and mortality. In addition, chronic undernutrition among women is a major risk factor for adverse birth outcomes. Overnutrition has adverse health outcomes as well. Overweight and obesity are major risk factors for a number of chronic diseases, including diabetes, cardiovascular diseases, and cancer.

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in meters squared (kg/m^2).

Status	BMI
Too thin for height	Less than 18.5
Normal	Between 18.5 and 24.9
Overweight	Between 25.0 and 29.9
Obese	Greater than or equal to 30.0

Sample: Women age 15-49 who are not pregnant and who have not had a birth in the 2 months before the survey

Short stature

Proportion of women with height under 145 cm.

Sample: Women age 15-49

The 2019-20 RDHS collected anthropometric data on height and weight among women age 15-49. These data were used to calculate measures of nutritional status such as maternal height and body mass index (BMI). The results showed that 68% of women have a normal BMI, while 6% are thin and 26% are overweight or obese; the mean BMI among women is 23.3. Three percent of women are of short stature (**Table 11.10**).

Trends: The proportion of women age 15-49 who are thin has declined slightly over the past 15 years, from 10% in 2005 to 7% each in 2010 and 2014-15 and 6% in 2019-20. The proportion of women who are overweight or obese has increased during that period, from 12% in 2005 and 16% in 2010 to 21% in 2014-15 and 26% in 2019-20.

Patterns by background characteristics

- The prevalence of short stature decreases with increasing education and wealth, while the prevalence of overweight or obesity rises with increasing education and wealth. For example, 22% of women with no education are overweight or obese, as compared with 52% of those with more than a secondary

education. Similarly, 13% of women in the lowest wealth quintile are overweight or obese, compared with 44% of women in the highest quintile.

- The proportion of women who are of normal weight declines with age, from 75% among those age 15-19 to 60% among those age 40-49. More younger women (age 15-19) than older women (age 40-49) are thin (11% versus 7%).
- The percentage of women who are overweight or obese is higher in urban than rural areas (42% versus 22%). Women in City of Kigali are more likely to be overweight or obese than women in the other provinces (43% versus 20%-27%).

11.6 ANEMIA PREVALENCE IN WOMEN

Hemoglobin levels below which women are considered anemic

Respondents	Hemoglobin level in grams/deciliter*
Non-pregnant women age 15-49	Less than 12.0
Pregnant women age 15-49	Less than 11.0
*Hemoglobin levels are adjusted for cigarette smoking and for altitude in enumeration areas that are above 1,000 meters.	

The procedure used to measure anemia among women age 15-49 was similar to that used for children age 6-59 months except that capillary blood was collected exclusively from a finger prick. The methodology employed for hemoglobin testing is described in detail in Chapter 1.

Anemia is a major concern among women, leading to increased maternal mortality and poor birth outcomes as well as reductions in work productivity. Thirteen percent (13%) of women age 15-49 have some degree of anemia. Nine percent are mildly anemic, 4% are moderately anemic, and less than 1% are severely anemic (**Table 11.11**).

Patterns by background characteristics

- Anemia prevalence is higher among pregnant women (25%) than among breastfeeding women (12%) and women who are neither pregnant nor breastfeeding (13%).
- The prevalence of anemia is 19% among IUD users and 13% among nonusers.
- There is no clear relationship between anemia and education or household wealth.

11.7 MICRONUTRIENT SUPPLEMENTATION AND DEWORMING DURING PREGNANCY

During pregnancy, women are at a higher risk of anemia due to an increase in blood volume. Severe anemia can place both the mother and the baby in danger through increased risk of blood loss during labor and can raise the risk of preterm delivery, low birth weight, and perinatal mortality. To prevent anemia, pregnant women are advised to take iron folate supplements, eat iron-rich foods, and prevent intestinal worms.

The 2019-20 RDHS asked women age 15-49 who gave birth in the 5 years before the survey whether they took iron supplements and/or deworming medication during their most recent pregnancy. Twenty percent of women with a child born in the last 5 years did not take any iron tablets during their most recent pregnancy. Also, only 16% of women took iron tablets for 90 days or more during their most recent pregnancy. Forty-three percent of women took deworming medication (**Table 11.12**).

Trends: The percentage of women taking iron supplements for 90 days or more increased from 1% in 2010 and 3% in 2014-15 to 16% in 2019-20. The percentage of women who did not take any iron supplements did not change between 2014-15 and 2019-2020 (20%). Finally, the percentage of women taking deworming medication during pregnancy increased from 39% in 2010 to 49% in 2014-15 before dropping to 43% in 2019-20.

Patterns by background characteristics

- By province, the percentages of women who took iron supplements for at least 90 days and who took deworming medication are lowest in City of Kigali (10% and 35%, respectively) and highest in North (21% and 54%, respectively).
- The proportion of women taking iron tablets for 90 days or more increases with increasing education, from 13% among those with no education to 22% among those with more than a secondary education.
- The proportion of women taking iron tablets for 90 days or more and deworming medication during pregnancy does not have a clear relationship with household wealth.

11.8 FORTHCOMING MICRONUTRIENT AND RELATED DATA

As noted in Chapter 1, micronutrient testing of women age 15-49 and children age 6-59 months was collected in a subsample. This included anthropometry measurements, anemia testing (using venous blood), malaria RDTs, salt iodization, and micronutrient status data. These results will be made available in a supplemental report.

LIST OF TABLES

For more information on nutrition of children and women, see the following tables:

- **Table 11.1** **Nutritional status of children**
- **Table 11.2** **Initial breastfeeding**
- **Table 11.3** **Breastfeeding status by age**
- **Table 11.4** **Infant and young child feeding (IYCF) indicators on breastfeeding status**
- **Table 11.5** **Median duration of breastfeeding**
- **Table 11.6** **Foods and liquids consumed by children in the day or night preceding the interview**
- **Table 11.7** **Minimum acceptable diet**
- **Table 11.8** **Prevalence of anemia in children**
- **Table 11.9** **Micronutrient intake among children**
- **Table 11.10** **Nutritional status of women**
- **Table 11.11** **Prevalence of anemia in women**
- **Table 11.12** **Micronutrient intake among mothers**

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Height-for-age ¹				Weight-for-height					Weight-for-age				
	Percent-age below -3 SD	Percent-age below -2 SD ²	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD ²	Percent-age above +2 SD	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD ²	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Age in months														
<6	4.5	16.2	-0.9	397	0.6	1.5	11.4	0.7	395	2.4	5.1	1.8	-0.2	396
6-8	5.7	22.7	-1.1	219	0.3	2.7	9.2	0.3	218	2.9	10.2	2.9	-0.4	219
9-11	5.2	19.8	-1.2	222	0.9	1.3	5.5	0.2	222	2.7	8.3	1.4	-0.5	222
12-17	7.3	32.8	-1.5	409	0.5	2.2	4.0	0.3	410	1.2	7.2	0.2	-0.5	410
18-23	10.9	39.0	-1.7	411	0.0	0.7	5.4	0.4	411	0.2	5.8	0.4	-0.5	411
24-35	11.8	40.4	-1.7	854	0.1	1.7	6.2	0.5	854	1.2	9.3	0.4	-0.6	854
36-47	9.5	37.9	-1.7	818	0.0	0.0	4.7	0.5	820	0.8	6.7	0.3	-0.6	818
48-59	10.7	32.5	-1.6	827	0.0	0.7	3.2	0.3	828	1.2	8.5	0.3	-0.8	829
Sex														
Male	11.0	37.0	-1.6	2,084	0.0	0.9	5.8	0.5	2,083	1.6	9.0	0.7	-0.6	2,085
Female	7.5	29.2	-1.4	2,074	0.3	1.4	5.4	0.4	2,075	1.1	6.3	0.6	-0.5	2,075
Birth interval in months³														
First birth ⁴	7.0	30.5	-1.4	932	0.0	1.1	6.6	0.4	932	0.9	5.9	0.9	-0.5	932
<24	12.9	36.9	-1.6	425	0.0	0.0	4.2	0.5	423	1.3	6.4	0.0	-0.6	425
24-47	10.7	35.1	-1.6	1,391	0.1	1.5	4.8	0.4	1,392	1.6	9.2	0.4	-0.7	1,391
48+	7.1	31.2	-1.4	1,160	0.5	1.2	6.6	0.4	1,159	1.2	7.2	1.1	-0.5	1,160
Size at birth³														
Very small	26.1	59.6	-2.4	85	3.2	5.6	0.0	-0.1	84	5.9	28.5	0.0	-1.4	84
Small	14.9	44.9	-1.9	579	0.3	1.2	2.8	0.1	576	2.6	15.2	0.2	-1.0	578
Average or larger	7.5	30.2	-1.4	3,218	0.1	1.0	6.4	0.5	3,221	0.9	5.6	0.8	-0.5	3,222
Missing	*	*	*	25	*	*	*	*	25	*	*	*	*	25
Mother's interview status														
Interviewed	9.0	33.1	-1.5	3,908	0.2	1.2	5.7	0.4	3,906	1.3	7.5	0.7	-0.6	3,909
Not interviewed but in household	*	*	*	18	*	*	*	*	18	*	*	*	*	18
Not interviewed and not in the household ⁵	13.2	33.2	-1.6	232	0.0	0.5	4.5	0.5	234	1.7	10.3	0.0	-0.6	232
Mother's nutritional status⁶														
Thin (BMI <18.5)	9.9	37.8	-1.7	128	0.5	6.3	3.5	-0.2	128	1.2	17.6	0.0	-1.1	128
Normal (BMI 18.5-24.9)	9.7	36.3	-1.6	2,371	0.1	1.0	4.6	0.3	2,371	1.4	8.4	0.3	-0.7	2,372
Overweight/obese (BMI ≥25)	6.0	24.2	-1.2	966	0.2	0.7	7.8	0.6	967	1.0	4.3	1.6	-0.3	967
Residence														
Urban	4.9	19.8	-1.0	694	0.4	1.6	6.7	0.4	693	0.3	3.7	1.1	-0.2	696
Rural	10.1	35.8	-1.6	3,464	0.2	1.0	5.4	0.4	3,466	1.5	8.5	0.6	-0.6	3,464
Province														
City of Kigali	5.9	21.3	-1.1	561	0.4	1.8	6.3	0.3	559	1.0	4.8	1.6	-0.3	562
South	9.1	32.7	-1.6	835	0.1	2.2	3.1	0.2	834	2.1	10.4	0.1	-0.7	835
West	13.2	40.2	-1.7	997	0.3	0.6	6.2	0.5	996	1.2	8.1	0.7	-0.7	996
North	11.7	40.5	-1.8	635	0.0	0.5	7.7	0.7	636	1.7	7.3	0.2	-0.5	637
East	6.0	28.8	-1.4	1,130	0.2	0.8	5.5	0.4	1,133	0.8	6.9	0.8	-0.5	1,130
Mother's education⁷														
No education	14.5	45.1	-1.9	473	0.2	0.8	5.6	0.4	473	2.8	10.5	0.6	-0.8	474
Primary	10.0	35.6	-1.6	2,520	0.2	1.3	5.3	0.4	2,519	1.3	8.3	0.6	-0.7	2,519
Secondary	3.8	23.4	-1.2	775	0.0	0.7	5.9	0.4	775	0.7	4.6	0.6	-0.4	775
More than secondary	1.9	5.6	-0.3	158	1.2	3.2	11.5	0.6	158	0.0	0.2	3.1	0.3	159
Wealth quintile														
Lowest	15.9	48.5	-1.9	948	0.2	1.4	5.5	0.4	949	2.0	12.2	0.3	-0.9	950
Second	11.8	40.5	-1.8	850	0.2	1.1	3.6	0.4	850	1.3	10.1	0.0	-0.8	850
Middle	8.4	32.8	-1.5	799	0.3	1.2	5.5	0.4	800	2.0	6.7	0.2	-0.6	797
Fourth	6.6	28.6	-1.4	798	0.0	0.8	6.3	0.4	798	0.6	6.1	1.2	-0.5	798
Highest	1.7	10.7	-0.8	763	0.3	1.1	7.4	0.5	762	0.5	1.9	1.7	-0.0	765
Total	9.2	33.1	-1.5	4,158	0.2	1.1	5.6	0.4	4,158	1.3	7.7	0.6	-0.6	4,160

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Recumbent length is measured for children under age 2; standing height is measured for all other children.

² Includes children who are below -3 standard deviations (SD) from the WHO Child Growth Standards population median

³ Excludes children whose mothers were not interviewed

⁴ First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

⁵ Includes children whose mothers are deceased

⁶ Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.10.

⁷ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among last-born children born in the past 2 years:				Among last-born children born in the past 2 years who were ever breastfed:	
	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth ¹	Number of last-born children	Percentage who received a prelacteal feed ²	Number of last-born children ever breastfed
Sex						
Male	98.2	84.0	96.1	1,645	3.8	1,615
Female	98.9	86.8	97.0	1,591	3.2	1,573
Assistance at delivery						
Health personnel ³	98.6	85.9	96.6	3,050	3.4	3,008
Traditional birth attendant	*	*	*	2	*	2
Other	96.5	72.1	94.5	108	6.8	104
No one	96.8	82.4	96.8	76	4.5	73
Place of delivery						
Health facility	98.6	85.9	96.6	3,042	3.4	3,000
At home	96.8	78.5	95.4	148	5.4	143
Other	(100.0)	(70.9)	(97.5)	45	(5.7)	45
Residence						
Urban	98.4	80.9	95.8	526	8.3	517
Rural	98.6	86.2	96.7	2,710	2.6	2,671
Province						
City of Kigali	98.1	84.6	95.1	422	8.9	414
South	98.1	87.6	96.5	689	3.4	676
West	99.3	83.6	97.4	775	1.2	770
North	98.3	80.7	95.9	477	3.0	469
East	98.5	88.0	96.8	873	3.3	860
Mother's education						
No education	98.1	84.7	96.2	326	3.5	319
Primary	98.7	87.1	97.3	2,047	2.3	2,021
Secondary	98.3	82.0	94.9	708	3.7	696
More than secondary	98.2	78.6	95.1	155	18.6	152
Wealth quintile						
Lowest	98.8	87.9	96.7	754	2.1	745
Second	98.6	86.4	96.8	657	2.3	647
Middle	98.7	86.6	97.1	613	2.3	605
Fourth	98.6	84.9	97.7	641	2.4	632
Highest	97.8	79.9	94.1	571	9.3	558
Total	98.5	85.3	96.5	3,236	3.5	3,188

Note: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes children who started breastfeeding within 1 hour of birth

² Children given something other than breast milk during the first 3 days of life

³ Doctor, nurse/midwife, or auxiliary midwife

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and percentage currently breastfeeding, and percentage of all children under age 2 using a bottle with a nipple, according to age in months, Rwanda DHS 2019-20

Age in months	Breastfeeding status						Total	Percentage currently breastfeeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids ¹	Breast-feeding and consuming other milk	Breast-feeding and consuming complementary foods					
0-1	0.8	86.9	0.2	8.2	2.0	1.9	100.0	99.2	238	3.1	242
2-3	0.0	88.9	1.1	7.5	2.5	0.0	100.0	100.0	265	2.2	266
4-5	2.1	68.1	3.2	8.5	6.9	11.1	100.0	97.9	278	7.6	283
6-8	3.1	9.7	0.2	3.0	5.3	78.7	100.0	96.9	412	13.2	420
9-11	2.0	1.7	0.2	1.6	0.0	94.4	100.0	98.0	405	11.2	417
12-17	4.7	0.3	0.1	0.7	0.0	94.3	100.0	95.3	797	6.8	825
18-23	14.8	0.0	0.1	0.1	0.0	84.9	100.0	85.2	750	4.0	807
0-3	0.4	88.0	0.7	7.8	2.3	0.9	100.0	99.6	503	2.6	508
0-5	1.0	80.9	1.6	8.1	3.9	4.5	100.0	99.0	781	4.4	791
6-9	2.4	8.0	0.3	2.7	4.1	82.4	100.0	97.6	531	12.3	546
12-15	3.8	0.4	0.1	0.6	0.0	95.1	100.0	96.2	556	7.4	576
12-23	9.6	0.1	0.1	0.4	0.0	89.7	100.0	90.4	1,547	5.4	1,633
20-23	14.6	0.0	0.2	0.0	0.0	85.2	100.0	85.4	509	3.9	551

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100%. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

¹ Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status

Percentage of children fed according to various IYCF practices, Rwanda DHS 2019-20

Indicator	Percentage	Number
Exclusive breastfeeding under 6 months	80.9	781
Exclusive breastfeeding at 4-5 months	68.1	278
Continued breastfeeding at 1 year	96.2	556
Introduction of solid, semisolid, or soft foods (6-8 months)	81.4	412
Continued breastfeeding at 2 years	85.4	509
Age-appropriate breastfeeding (0-23 months) ¹	86.7	3,145
Predominant breastfeeding (0-5 months) ²	90.6	781
Mixed breast and non-breast milk feeding (0-5 months) ³	5.1	781
Bottle feeding (0-23 months)	6.9	3,260

¹ For children age 0-5 months: exclusively breastfed; for children age 6-23 months: received breast milk and complementary foods

² Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

³ Received breast milk and fresh, tinned, or powdered animal milk, soy milk or commercial infant formula

Table 11.5 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Median duration (months) of breastfeeding among children born in the past 3 years ¹		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding ²
Sex			
Male	26.0	5.2	5.8
Female	26.4	5.5	5.9
Residence			
Urban	24.4	4.7	5.0
Rural	26.7	5.5	6.0
Province			
City of Kigali	24.4	4.4	5.0
South	30.3	5.5	5.7
West	26.7	5.9	6.2
North	26.5	5.6	6.0
East	25.1	5.1	6.0
Mother's education			
No education	27.4	6.5	7.0
Primary	26.8	5.3	5.8
Secondary	24.3	5.4	5.8
More than secondary	(23.9)	(4.3)	(4.6)
Wealth quintile			
Lowest	27.1	5.7	6.1
Second	26.5	5.5	5.7
Middle	27.0	5.7	6.3
Fourth	24.6	5.2	5.8
Highest	25.0	4.6	5.3
Total	26.2	5.4	5.9
Mean for all children	26.5	6.1	6.8

Note: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases.

¹ For last-born children under age 24 months who live with their mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with their mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with their mother and all non-last-born children are not currently breastfeeding.

² Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Rwanda DHS 2019-20

Age in months	Liquids			Solid or semisolid foods									Cheese, yogurt, other milk products	Any solid or semisolid food	Number of children under age 2
	Infant formula	Other milk ¹	Other liquids ²	Fortified baby foods	Food made from grains ³	Fruits and vegetables rich in vitamin A ⁴	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs				
BREASTFEEDING CHILDREN															
0-1	0.7	2.1	9.4	0.8	1.5	1.9	0.4	1.6	1.5	0.3	0.4	0.4	1.9	236	
2-3	1.9	0.7	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	265	
4-5	1.3	9.5	13.7	4.0	5.1	6.6	1.5	0.8	0.7	0.0	0.7	0.0	11.3	273	
6-8	2.4	30.1	58.7	16.9	38.8	70.5	23.2	22.0	41.4	15.4	8.1	0.3	81.2	399	
9-11	1.8	30.6	65.8	18.1	48.3	82.2	22.9	42.5	78.1	21.3	7.7	2.2	96.4	396	
12-17	1.1	24.6	68.7	16.6	49.4	85.7	23.8	52.8	78.2	17.2	7.0	3.7	98.9	760	
18-23	0.2	25.4	68.0	20.4	49.6	84.8	19.0	58.0	83.5	20.7	8.1	2.4	99.7	639	
6-23	1.2	26.9	66.1	18.0	47.3	82.0	22.1	46.9	73.0	18.6	7.7	2.4	95.5	2,194	
Total	1.2	21.0	51.6	13.8	35.6	61.4	16.5	34.8	54.2	13.8	5.8	1.8	71.8	2,968	
NONBREASTFEEDING CHILDREN															
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	2	
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	0	
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	6	
6-8	*	*	*	*	*	*	*	*	*	*	*	*	*	13	
9-11	*	*	*	*	*	*	*	*	*	*	*	*	*	8	
12-17	(3.2)	(39.7)	(72.3)	(21.0)	(58.2)	(89.7)	(20.2)	(26.6)	(79.8)	(33.9)	(6.5)	(4.0)	(100.0)	37	
18-23	0.9	42.5	74.3	19.9	63.2	85.0	17.0	61.3	77.5	26.0	8.3	7.4	100.0	111	
6-23	2.9	41.7	73.9	22.1	61.6	84.2	19.3	48.6	73.2	26.8	8.9	6.3	99.0	169	
Total	3.7	41.1	71.5	21.1	59.3	81.4	18.4	47.0	70.5	25.6	8.5	6.0	95.6	177	

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Other milk includes fresh, tinned, and powdered animal milk.

² Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

³ Includes fortified baby food

⁴ Includes pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside, dark green leafy vegetables, ripe mangoes, avocados, papayas, banana or other fruit with A vitamin

Table 11.7 Minimum acceptable diet

Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among breastfed children age 6-23 months, percentage fed:				Among nonbreastfed children age 6-23 months, percentage fed:				Among all children age 6-23 months, percentage fed:					
	Minimum dietary diversity ¹	Minimum meal frequency ²	Minimum acceptable diet ³	Number of breast-fed children age 6-23 months	Minimum milk feeding frequency ⁴	Minimum dietary diversity ¹	Minimum meal frequency ⁵	Minimum acceptable diet ⁶	Number of non-breast-fed children age 6-23 months	Breast milk, or milk products ⁷	Minimum dietary diversity ¹	Minimum meal frequency ⁸	Minimum acceptable diet ⁹	Number of all children age 6-23 months
Age in months														
6-11	32.2	45.1	20.7	795	*	*	*	*	21	98.2	31.8	44.7	20.4	816
6-8	27.1	56.1	22.0	399	*	*	*	*	13	97.7	26.8	55.2	21.9	412
9-11	37.4	33.9	19.3	396	*	*	*	*	8	98.6	36.8	33.9	18.9	405
12-17	37.0	41.9	22.3	760	(32.5)	(13.9)	(53.1)	(7.4)	37	96.8	35.9	42.4	21.6	797
18-23	38.6	50.7	23.7	639	41.3	19.3	47.0	16.1	111	91.3	35.7	50.1	22.6	750
Sex														
Male	36.2	44.8	21.8	1,108	36.9	15.9	43.2	13.7	91	95.2	34.6	44.7	21.2	1,199
Female	35.3	46.4	22.4	1,086	38.8	19.7	49.4	13.4	79	95.9	34.2	46.6	21.8	1,164
Residence														
Urban	51.1	52.7	33.5	340	(50.2)	(26.4)	(65.5)	(22.2)	45	94.2	48.2	54.2	32.2	385
Rural	32.9	44.3	20.0	1,854	33.4	14.5	39.2	10.5	125	95.8	31.7	44.0	19.4	1,979
Province														
City of Kigali	49.4	54.0	33.7	273	(29.6)	(9.5)	(54.2)	(7.0)	36	91.7	44.7	54.1	30.6	309
South	39.1	51.2	26.9	488	(36.6)	(12.4)	(39.8)	(12.4)	25	96.9	37.8	50.6	26.2	513
West	30.6	37.0	18.3	505	(40.1)	(26.3)	(43.6)	(18.9)	43	95.3	30.3	37.5	18.3	548
North	24.4	47.7	13.9	341	*	*	*	*	12	97.1	24.0	46.7	13.8	352
East	37.5	43.2	20.9	587	(48.0)	(20.2)	(51.6)	(15.0)	53	95.7	36.1	43.9	20.4	640
Mother's education														
No education	22.2	30.2	9.7	222	*	*	*	*	11	96.2	21.2	29.6	9.3	232
Primary	30.8	43.8	18.3	1,421	31.3	8.6	35.4	8.6	85	96.1	29.5	43.3	17.8	1,505
Secondary	51.3	54.3	34.2	452	(46.6)	(32.1)	(60.4)	(25.5)	56	94.1	49.2	54.9	33.3	508
More than secondary	65.4	65.9	49.3	100	*	*	*	*	18	92.7	59.3	66.3	43.0	118
Wealth quintile														
Lowest	20.6	33.4	10.7	514	*	*	*	*	23	96.5	19.8	32.5	10.2	537
Second	26.6	39.7	15.4	470	*	*	*	*	26	96.4	25.2	39.2	14.6	496
Middle	32.0	46.7	18.7	432	(41.3)	(17.3)	(44.6)	(17.3)	27	96.5	31.1	46.5	18.6	460
Fourth	47.6	56.5	32.2	430	(27.8)	(9.2)	(35.5)	(3.8)	43	93.4	44.1	54.6	29.6	474
Highest	60.4	56.8	40.1	347	(57.6)	(41.8)	(78.6)	(32.8)	51	94.6	58.0	59.6	39.1	397
Total	35.7	45.6	22.1	2,194	37.8	17.6	46.1	13.6	169	95.5	34.4	45.6	21.5	2,363

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Children received foods from five or more of the following eight food groups: a. breast milk; b. infant formula, milk other than breast milk, cheese or yogurt or other milk products; c. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; d. vitamin A-rich fruits and vegetables; e. other fruits and vegetables; f. eggs; g. meat, poultry, fish, and shellfish (and organ meats); h. legumes and nuts.

² For breastfed children, minimum meal frequency is receiving solid, semisolid, or soft food at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months.

³ Breastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as defined in footnote 2.

⁴ Includes two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

⁵ For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid, semisolid, or soft food or milk feeds at least four times a day. At least one of the feeds must be a solid, semisolid, or soft feed.

⁶ Nonbreastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they receive other milk or milk products at least twice a day, receive the minimum meal frequency as defined in footnote 5, and receive solid, semisolid, or soft foods from at least four food groups not including the milk or milk products food group.

⁷ Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

⁸ Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 5.

⁹ Children age 6-23 months are considered to be fed a minimum acceptable diet if they receive breast milk, receive other milk or milk products as described in footnote 7, are fed the minimum dietary diversity as described in footnote 1, and are fed the minimum meal frequency as described in footnotes 2 and 5.

Table 11.8 Prevalence of anemia in children

Percentage of children age 6-59 months classified as having anemia, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Anemia status by hemoglobin level				Number of children age 6-59 months
	Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (<7.0 g/dl)	
Age in months					
6-8	70.1	36.5	32.7	0.9	219
9-11	64.3	27.7	36.5	0.0	222
12-17	50.9	28.8	21.5	0.7	411
18-23	39.5	22.6	16.4	0.5	411
24-35	31.6	19.4	11.9	0.3	853
36-47	29.8	19.4	10.4	0.1	820
48-59	23.5	15.3	8.2	0.0	829
Sex					
Male	38.0	21.8	15.7	0.4	1,895
Female	35.1	20.8	14.1	0.2	1,870
Mother's interview status					
Interviewed	36.8	21.5	14.9	0.3	3,514
Not interviewed but in household	*	*	*	*	18
Not interviewed and not in the household ¹	34.7	18.7	16.0	0.0	233
Residence					
Urban	34.0	21.3	12.4	0.3	641
Rural	37.1	21.3	15.5	0.3	3,123
Province					
City of Kigali	36.7	23.3	13.0	0.3	513
South	32.1	18.3	13.5	0.3	761
West	40.9	20.3	20.4	0.1	886
North	41.4	24.4	16.6	0.4	584
East	33.3	21.7	11.3	0.3	1,021
Mother's education²					
No education	40.6	23.0	17.3	0.3	424
Primary	36.5	21.0	15.1	0.3	2,276
Secondary	36.0	21.9	13.8	0.3	689
More than secondary	31.6	22.6	8.9	0.0	143
Wealth quintile					
Lowest	41.8	22.4	19.3	0.1	852
Second	37.0	21.4	15.4	0.2	781
Middle	37.1	20.7	15.9	0.5	733
Fourth	35.2	22.5	12.6	0.1	708
Highest	30.4	19.3	10.5	0.6	690
Total	36.6	21.3	14.9	0.3	3,765

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anemia. Prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using formulas in CDC 1998. Hemoglobin is in grams per deciliter (g/dl). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes children whose mothers are deceased

² For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.9 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among all children age 6-23 months, percentage given Ongerita intungamubiri (multiple micronutrient powders) in the 7 days preceding the survey; and among all children age 6-59 months, percentages who were given vitamin A supplements and deworming medication in the 6 months preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among youngest children age 6-23 months living with their mother:			Among all children age 6-23 months:		Among all children age 6-59 months:		
	Percentage who consumed foods rich in vitamin A in last 24 hours ¹	Percentage who consumed foods rich in iron in last 24 hours ²	Number of children	Percentage given Ongerita intungamubiri in past 7 days ⁴	Number of children	Percentage given vitamin A supplements in past 6 month ⁵	Percentage given deworming medication in past 6 months ^{3,6}	Number of children
Age in months								
6-8	71.7	20.7	412	7.5	420	61.7	20.9	420
9-11	84.8	25.8	405	15.5	417	80.0	35.5	417
12-17	87.5	21.7	797	19.0	825	87.9	72.7	825
18-23	86.6	26.1	750	25.1	807	89.6	88.8	807
24-35	na	na	na	na	na	89.3	91.5	1,631
36-47	na	na	na	na	na	86.4	89.5	1,594
48-59	na	na	na	na	na	89.9	92.8	1,535
Sex								
Male	84.9	24.9	1,199	18.0	1,251	85.4	81.4	3,647
Female	83.0	22.4	1,164	18.9	1,218	87.6	81.7	3,582
Breastfeeding status								
Breastfeeding	83.9	22.9	2,194	18.4	2,236	84.7	68.5	2,879
Not breastfeeding	85.9	32.9	169	19.2	233	87.7	90.2	4,350
Mother's age								
15-19	77.1	19.3	61	27.0	63	80.4	56.2	91
20-29	83.9	24.9	1,005	19.0	1,058	86.1	79.7	2,659
30-39	85.0	23.2	1,042	17.6	1,085	86.3	82.4	3,548
40-49	81.9	21.4	255	17.7	262	89.1	85.9	932
Residence								
Urban	87.9	38.5	385	14.4	409	84.1	81.9	1,286
Rural	83.2	20.7	1,979	19.2	2,060	87.0	81.5	5,943
Province								
City of Kigali	88.6	39.8	309	8.8	336	77.7	74.8	1,029
South	86.5	24.2	513	16.9	533	88.8	81.7	1,453
West	82.2	21.4	548	23.5	573	85.9	82.3	1,728
North	83.6	9.7	352	16.4	367	90.9	85.0	1,110
East	81.6	24.9	640	21.2	662	87.6	82.3	1,910
Mother's education								
No education	73.7	11.3	232	23.4	243	85.4	81.4	828
Primary	83.8	19.2	1,505	19.7	1,560	87.2	82.0	4,708
Secondary	86.7	36.1	508	15.7	539	86.6	81.0	1,374
More than secondary	95.6	50.4	118	5.2	126	79.2	77.3	319
Wealth quintile								
Lowest	76.5	9.4	537	23.4	551	85.5	79.8	1,672
Second	81.4	17.1	496	20.1	524	87.0	81.0	1,405
Middle	85.0	19.7	460	20.9	471	87.1	81.9	1,414
Fourth	88.1	31.3	474	14.7	499	87.4	82.3	1,405
Highest	91.3	46.5	397	11.5	424	85.7	83.0	1,334
Total	84.0	23.6	2,363	18.4	2,469	86.5	81.5	7,229

na = Not applicable

¹ Includes meat, such as beef, pork, lamb, goat, chicken, or duck meat, liver, kidney, heart, or other organ meats, fresh or dried fish or shellfish, eggs pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside, dark green leafy vegetables, ripe mangoes, avocados, papayas, banana, or other fruit with A vitamin

² Includes meat (and organ meat), fish, poultry, and eggs

³ Based on both mother's recall

⁴ Local name for multiple micronutrient powders

⁵ Based on both mother's recall and the vaccination card (where available)

⁶ Deworming for intestinal parasites is commonly done for helminths and for schistosomiasis.

Table 11.10 Nutritional status of women

Among women age 15-49, percentage with height under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Height		Body mass index ¹								Number of women
	Percentage below 145 cm	Number of women	Mean body mass index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total over-weight or obese)	25.0-29.9 (overweight)	≥30.0 (obese)	
Age											
15-19	4.5	1,619	22.1	74.6	10.5	7.3	3.2	14.9	13.6	1.4	1,593
20-29	2.8	2,159	23.4	69.9	3.9	3.0	0.9	26.1	22.1	4.0	1,891
30-39	2.2	2,116	23.9	65.3	3.4	3.0	0.5	31.3	23.0	8.2	1,900
40-49	2.9	1,373	23.9	60.0	6.9	5.2	1.7	33.1	22.9	10.1	1,326
Residence											
Urban	1.3	1,430	25.1	54.2	3.7	2.9	0.8	42.2	28.2	14.0	1,339
Rural	3.5	5,836	22.9	71.2	6.5	4.9	1.7	22.3	18.6	3.7	5,372
Province											
City of Kigali	1.8	1,052	25.1	53.5	3.9	2.7	1.1	42.6	27.3	15.3	977
South	3.1	1,521	22.5	71.0	9.2	6.7	2.6	19.7	16.4	3.4	1,397
West	3.4	1,605	23.0	71.7	6.3	5.3	1.0	22.1	17.7	4.3	1,464
North	3.1	1,091	23.1	70.7	4.6	3.3	1.3	24.6	21.0	3.6	1,005
East	3.3	1,998	23.3	68.1	5.0	3.6	1.4	26.9	21.9	5.0	1,866
Education											
No education	4.1	721	22.9	71.8	6.1	5.2	0.9	22.0	17.2	4.8	678
Primary	3.7	4,204	23.1	69.0	5.8	4.2	1.6	25.2	20.5	4.8	3,860
Secondary	1.7	2,026	23.4	67.5	6.4	5.0	1.4	26.1	20.2	5.8	1,884
More than secondary	0.3	315	26.2	44.0	4.3	3.3	1.0	51.7	30.0	21.7	289
Wealth quintile											
Lowest	4.8	1,281	22.0	78.9	8.1	5.9	2.2	13.0	11.6	1.3	1,166
Second	3.7	1,409	22.2	76.5	7.7	6.0	1.7	15.8	14.0	1.8	1,301
Middle	3.3	1,382	22.8	73.6	5.9	4.5	1.4	20.5	18.3	2.2	1,279
Fourth	2.3	1,504	23.8	62.1	5.2	3.9	1.3	32.7	26.2	6.5	1,390
Highest	1.5	1,691	25.2	52.6	3.6	2.5	1.0	43.8	29.2	14.6	1,574
Total	3.0	7,266	23.3	67.8	5.9	4.5	1.5	26.3	20.5	5.8	6,710

Note: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

¹ Excludes pregnant women and women with a birth in the preceding 2 months

Table 11.11 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Anemia status by hemoglobin level				Number of women
	Any (NP <12.0 g/dl/ P <11.0 g/dl)	Mild (NP 11.0-11.9 g/dl/ P 10.0-10.9 g/dl)	Moderate (NP 8.0-10.9 g/dl/ P 7.0-9.9 g/dl)	Severe (NP <8.0 g/dl/ P <7.0 g/dl)	
Age					
15-19	14.7	10.7	4.0	0.1	1,620
20-29	12.8	8.1	4.5	0.2	2,158
30-39	12.2	8.6	3.2	0.4	2,116
40-49	13.2	7.4	5.5	0.3	1,371
Number of children ever born					
0	14.1	9.2	4.7	0.3	2,598
1	12.6	8.7	3.6	0.3	920
2-3	12.1	7.5	4.1	0.4	1,886
4-5	11.5	7.7	3.7	0.1	1,073
6+	15.2	11.0	4.1	0.1	788
Maternity status					
Pregnant	24.5	16.2	8.1	0.2	434
Breastfeeding	11.6	8.4	3.1	0.2	1,797
Neither	12.7	8.1	4.3	0.3	5,033
Using IUD					
Yes	19.3	9.4	7.0	2.8	80
No	13.1	8.7	4.2	0.2	7,185
Cigarette use¹					
Smokes cigarettes	11.7	8.9	2.9	0.0	53
Does not smoke cigarettes	13.1	8.7	4.2	0.3	7,212
Residence					
Urban	12.3	7.0	4.5	0.7	1,428
Rural	13.3	9.1	4.1	0.1	5,837
Province					
City of Kigali	14.5	8.7	5.0	0.8	1,050
South	14.5	9.0	5.2	0.4	1,521
West	12.7	9.0	3.6	0.1	1,604
North	11.4	7.8	3.5	0.1	1,091
East	12.6	8.7	3.8	0.1	1,999
Education					
No education	14.1	9.6	4.5	0.0	721
Primary	12.9	8.6	4.0	0.2	4,205
Secondary	12.6	8.2	4.0	0.4	2,024
More than secondary	17.6	9.8	6.9	0.9	315
Wealth quintile					
Lowest	15.8	10.8	4.9	0.1	1,281
Second	12.9	8.7	4.0	0.1	1,408
Middle	12.2	8.1	3.9	0.2	1,381
Fourth	12.3	9.0	3.3	0.1	1,506
Highest	12.8	7.1	5.0	0.7	1,689
Total	13.1	8.7	4.2	0.3	7,265

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC, 1998.

P: Pregnant

NP: Non-pregnant

¹ Includes manufactured cigarettes and hand-rolled cigarettes

Table 11.12 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child and percentage who took deworming medication during the pregnancy of the last child, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth						Percentage of women who took deworming medication during pregnancy of last birth	Number of women
	None	<60	60-89	90+	Don't know/missing	Total		
Age								
15-19	23.5	52.0	10.4	14.1	0.0	100.0	38.7	125
20-29	19.9	50.9	12.2	16.6	0.5	100.0	42.5	2,398
30-39	19.1	51.8	13.5	15.2	0.3	100.0	44.3	2,937
40-49	24.2	48.2	12.0	14.6	1.0	100.0	40.3	842
Residence								
Urban	21.1	55.0	10.1	12.8	1.0	100.0	41.4	1,123
Rural	20.0	50.1	13.3	16.3	0.4	100.0	43.3	5,179
Province								
City of Kigali	24.9	54.3	10.2	9.5	1.1	100.0	34.7	866
South	17.1	48.2	14.6	19.4	0.6	100.0	44.7	1,305
West	22.0	58.2	8.3	10.9	0.6	100.0	42.1	1,425
North	13.1	48.5	16.8	21.3	0.3	100.0	53.8	1,004
East	22.7	46.8	14.0	16.4	0.1	100.0	40.3	1,702
Education								
No education	24.2	50.5	11.3	13.3	0.6	100.0	43.9	698
Primary	20.4	51.4	13.1	14.7	0.3	100.0	42.9	4,071
Secondary	16.8	51.1	12.9	18.4	0.8	100.0	42.7	1,258
More than secondary	21.5	44.9	11.0	22.0	0.6	100.0	42.3	275
Wealth quintile								
Lowest	26.2	45.5	12.5	15.5	0.3	100.0	42.8	1,448
Second	18.3	51.9	16.6	12.9	0.3	100.0	43.2	1,217
Middle	20.0	49.8	12.4	17.4	0.4	100.0	43.8	1,224
Fourth	16.2	55.4	11.1	16.8	0.6	100.0	44.3	1,234
Highest	19.0	53.3	11.2	15.6	0.9	100.0	40.7	1,178
Total	20.2	51.0	12.7	15.6	0.5	100.0	43.0	6,302

Key Findings

- **Ownership of insecticide-treated nets:** 66% of households own at least one insecticide-treated net (ITN).
- **Use of ITNs:** 71% of the de facto population in households with at least one ITN slept under an ITN the night before the survey.
- **Prevalence of severe anemia:** 1% of children age 6-59 months have a hemoglobin level below 8 g/dl.

Malaria, a preventable, treatable, and curable disease, is endemic in Rwanda and remains one of the foremost public health problems in the country, taking its greatest toll on children under age 5 and pregnant women. Africa still bears over 80% of the global malaria burden, and it is estimated that approximately 57 million cases of malaria and nearly 100,000 malaria-related deaths occur each year (WHO 2018). In Rwanda, 1.8 million children less than age 5 and 443,000 pregnant women developed the disease in 2016 (PMI 2017). Of the 30 districts in Rwanda, 19 are prone to epidemics and malaria is endemic in 11.

The Malaria and Other Parasitic Diseases Department (MOPDD) developed a Malaria Contingency Plan that identified improved strategies to reduce the case burden, and these strategies were incorporated into and implemented in the extended Malaria Strategic Plan for 2013-2020. In 2016, Rwanda expanded community-based treatment of malaria to include children older than age 5 and adults and granted free malaria diagnosis and treatment to the most economically vulnerable populations (PMI 2021).

This chapter presents data that are useful in assessing malaria control strategies, including the availability and use of mosquito nets, diagnostic testing of children with fever, and prevalence of anemia and malaria among children under age 5.

12.1 OWNERSHIP OF INSECTICIDE-TREATED NETS

Ownership of insecticide-treated nets

Households that have at least one insecticide-treated net (ITN). An ITN is defined as a factory-treated net that does not require any further treatment.

Sample: Households

Full household ITN coverage

Percentage of households with at least one ITN for every two people.

Sample: Households

Overall, 67% of households have at least one mosquito net, while 66% have at least one ITN. This implies that almost all mosquito nets owned by households in Rwanda are ITNs. The average number of ITNs per household is 1.3 (**Table 12.1**).

Thirty-four percent of households have at least one ITN for every two persons who stayed in the household the night preceding the survey. In other words, 34% of households own enough ITNs to cover all household members (**Table 12.1** and **Figure 12.1**). To offer maximum protection, ITN distribution needs to expand to reach the 34% of households that do not currently own any ITNs and to provide enough ITNs for the 32% of households that own at least one ITN but have an insufficient supply for the number of household members (**Figure 12.1**).

Trends: After increasing from 81% in the 2014-15 RDHS to 84% in the 2017 RMIS, ownership of ITNs dropped to 66% in 2019-20 (**Figure 12.2**).

Patterns by background characteristics

- Household ownership of ITNs in Rwanda is higher in urban (76%) than rural (64%) areas (**Table 12.1**).
- Household ownership of ITNs increases with increasing wealth, from 46% in the lowest wealth quintile to 82% in the highest quintile (**Figure 12.3**).
- By province, household ownership of ITNs is highest in City of Kigali (86%) and lowest in East (59%).
- The percentage of households owning at least one ITN for every two persons who stayed in the household the night preceding the survey is higher in urban areas (53%) than in rural areas (30%).
- Full household ITN coverage is highest in City of Kigali (64%) and lowest in West (27%).
- The percentage of households with at least one ITN for every two persons who stayed in the household the night preceding the survey increases from 18% in the lowest wealth quintile to 58% in the highest quintile (**Table 12.1**).

Figure 12.1 Household ownership of ITNs

Percent distribution of households

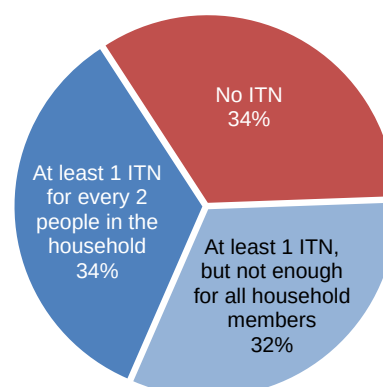
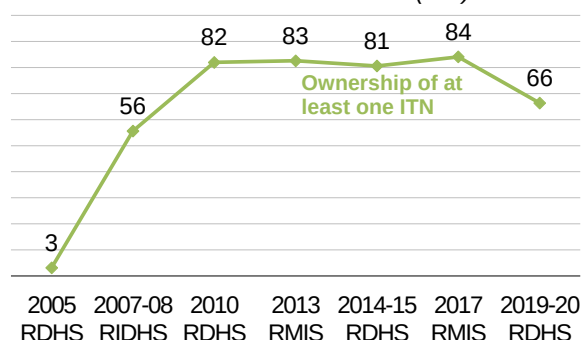


Figure 12.2 Trends in household ownership of ITNs

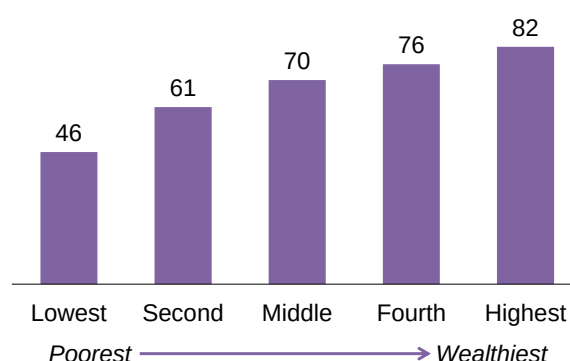
Percentage of households owning at least one insecticide-treated net (ITN)



Note: The definition of an ITN in surveys conducted prior to 2015 included nets that had been soaked with insecticides within the past 12 months.

Figure 12.3 ITN ownership by household wealth

Percentage of households with at least one insecticide-treated net (ITN)



Source of Nets

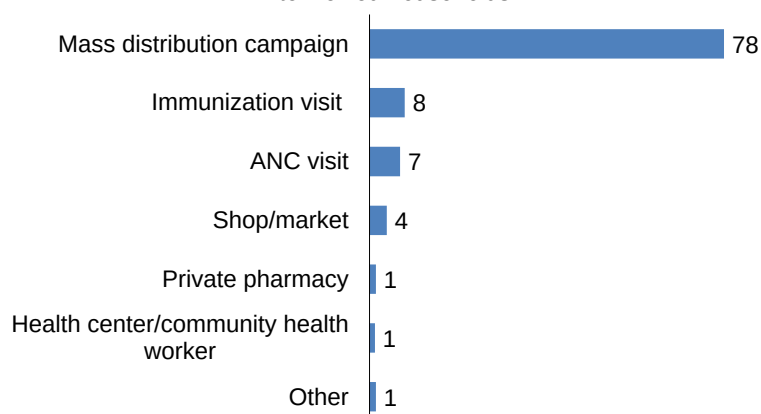
Nearly 4 in 5 (79%) ITNs in Rwandan households were obtained through mass distribution campaigns, while 8% were obtained during immunization visits, 7% were obtained during antenatal care (ANC) visits, and 3% were obtained from a shop or market (Table 12.2 and Figure 12.4).

Patterns by background characteristics

- Eight percent of nets in rural areas and 4% in urban areas were obtained during antenatal care visits. Similarly, the percentage of households obtaining nets during immunization visits is higher in rural than urban areas (Table 12.2).
- By province, the percentage of households obtaining nets through mass campaigns is highest in City of Kigali (86%) and lowest in the North (71%).
- Sixty-six percent of mosquito nets obtained from a shop/market were classified as other nets (any nets that are not ITNs) (Table 12.2).

Figure 12.4 Source of ITNs

Percent distribution of insecticide-treated nets (ITNs) in interviewed households



12.2 HOUSEHOLD ACCESS TO AND USE OF ITNs

Access to an ITN

Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to two people.

Sample: De facto household population

Use of ITNs

Percentage of the population that slept under an ITN the night before the survey.

Sample: De facto household population

Access to an ITN is measured by the proportion of the population that could sleep under an ITN if each ITN in the household were used by up to two people. Comparing ITN access and ITN use indicators can help programs identify if there is a behavioral gap in which available ITNs are not being used. If the difference between these indicators is substantial, the ITN program may need to focus on behavior change and identify the main barriers to ITN use. This analysis helps ITN programs determine whether they need to achieve higher ITN coverage, promote ITN use, or both.

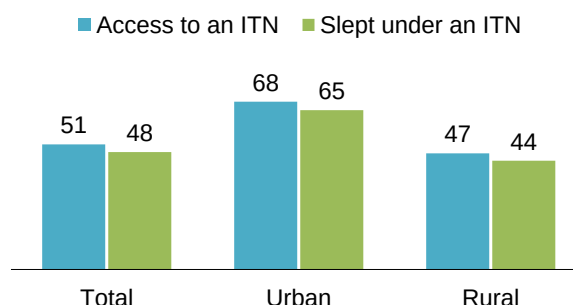
Nationally, 51% of de facto household members in Rwanda who stayed in the household the night before the survey could sleep inside an ITN if each ITN were used by up to two people (**Table 12.3** and **Table 12.4**). The results showed that 48% of the population slept under an ITN the night before the survey (**Table 12.5** and **Figure 12.5**). Based on these two numbers, it is evident that there is only a small difference between ITN access and ITN use at the population level. Overall, 78% of ITNs were used the night before the survey (**Table 12.6**).

Patterns by background characteristics

- Access to ITNs is higher in urban areas (68%) than in rural areas (47%) (**Table 12.4**).
- The percentage of household residents with access to an ITN ranges from 30% among those in the lowest wealth quintile to 72% among those in the highest quintile.
- ITN access among the de facto population ranges from a high of 81% in City of Kigali to a low of 44% in West.
- Urban residents (65%) are more likely than rural residents (44%) to have slept under an ITN the night before the survey (**Table 12.5**).
- The difference between ITN access and ITN use is slightly higher among urban residents (4 percentage points) than rural residents (3 percentage points) (**Figure 12.5**).
- The percentage of the household population that slept under an ITN the night before the survey is highest in City of Kigali (76%) and lowest in East (41%) (**Table 12.5**).
- Use of ITNs increases with increasing household wealth, from 29% among households in the lowest wealth quintile to 65% among households in the highest quintile (**Table 12.5**).

Figure 12.5 Access to and use of ITNs by residence

Percentage of the household population with access to an insecticide-treated net (ITN) and percentage that slept under an ITN the night before the survey



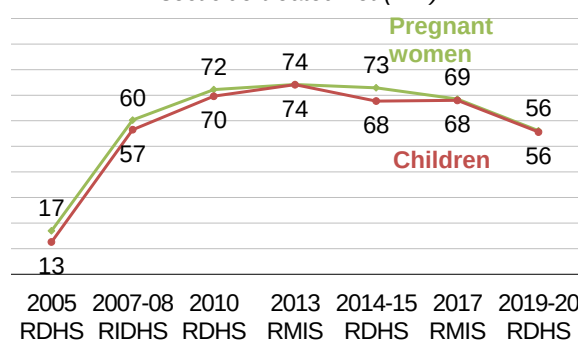
12.3 USE OF ITNs BY CHILDREN AND PREGNANT WOMEN

Over half (56%) of children less than age 5 slept under an ITN the night before the survey. The percentage of children who slept under an ITN decreases with increasing age, from 63% among those age 0-23 months to 47% among those age 48-59 months (**Table 12.7**). Fifty-six percent of pregnant women slept under an ITN the night before the survey (**Table 12.8**).

Trends: Use of ITNs among children under age 5 increased from 70% in 2010 to 74% in 2013 before dropping to 68% in both 2014-15 and 2017 and 56% in 2019-20. Similarly, use of ITNs by pregnant women increased from 72% in 2010 to 74% in 2013 and then dropped to 73% in 2014-15, 69% in 2017, and 56% in 2019-20 (**Figure 12.6**).

Figure 12.6 Trends in use of ITNs by pregnant women and children

Percentage who slept under an insecticide-treated net (ITN)



Note: The definition of an ITN in surveys conducted prior to 2015 included nets that had been soaked with insecticides within the past 12 months.

Patterns by background characteristics

- A higher percentage of children in urban (74%) than rural (52%) areas slept under an ITN the night before the survey (**Table 12.7**). A similar pattern was observed among pregnant women (70% and 53%, respectively) (**Table 12.8**).
- The proportions of children under age 5 and pregnant women who slept under an ITN the night before the survey are highest in City of Kigali (81% and 77%, respectively) and lowest in East (48% and 42%, respectively).
- Children under age 5 and pregnant women from households in the highest wealth quintile (73% and 75%, respectively) were more likely to sleep under an ITN the night before the survey than those from the lowest wealth quintile (36% and 32%, respectively) (**Table 12.8**).

12.4 CASE MANAGEMENT OF MALARIA IN CHILDREN

Care seeking for children under age 5 with a fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey for whom advice or treatment was sought from a health provider, a health facility, or a pharmacy.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Diagnosis of malaria in children under age 5 with a fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey who had blood taken from a finger or heel for testing. Fever or history of fever is an entry point for parasitological testing for malaria.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Artemisinin-based combination therapy (ACT) for children under age 5 with a fever

Among children under age 5 with a fever in the 2 weeks before the survey who took any antimalarial drugs, the percentage who received artemisinin-based combination therapy (ACT).

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Nineteen percent of children under age 5 had a fever in the 2 weeks preceding the survey (**Table 12.9**). Advice or treatment was sought for 62% of these children, and 41% had blood taken from a finger or heel for testing.

Patterns by background characteristics

- The prevalence of fever among children under age 5 is higher in rural areas (20%) than in urban areas (15%) (**Table 12.9**).
- The percentage of children with a fever in the 2 weeks preceding the survey ranges from a high of 23% in West to a low of 15% in City of Kigali.
- The proportion of children with a fever in the past 2 weeks is lower among those whose mothers have more than a secondary education than among those whose mothers are in other educational categories (12% versus 18%-19%) (**Table 12.9**).
- Children of mothers with more than a secondary education are more likely than children of mothers with no education to have been taken for advice or treatment (89% versus 57%) and to have had blood taken from their finger or heel for testing (62% versus 37%) (**Table 12.9**).

12.4.1 Source of Advice or Treatment for Children with Fever

Among children with a fever for whom advice or treatment was sought, 85% received advice or treatment from a public sector source, while 15% received advice or treatment from a private sector source (**Table 12.10**). Health centers (55%), community health workers (17%), and health posts (14%) were the most prominent public sector sources of care, while pharmacies (7%) and private clinics (4%) were the primary sources in the private sector.

12.4.2 Type of Antimalarial Drugs Used

Among children who were given antimalarial medicines, 92% were given artemisinin-based combination therapy (ACT) (**Table 12.11**); 4% received artesunate, and another 4% received other antimalarial medications. The percentage of children receiving ACT for fever has decreased since 2014-15 (from 99% to 92%).

12.5 PREVALENCE OF LOW HEMOGLOBIN IN CHILDREN

Prevalence of low hemoglobin in children

Percentage of children age 6-59 months who had a hemoglobin measurement of less than 8 grams per deciliter (g/dl) of blood. The cutoff of 8 g/dl is often used to classify malaria-related anemia.

Sample: Children age 6-59 months

Anemia, defined as a reduced level of hemoglobin in the blood, decreases the amount of oxygen reaching the tissues and organs of the body and reduces their capacity to function. Anemia is associated with impaired motor and cognitive development in children. The main causes of anemia in children are malaria and inadequate intake of iron, folate, vitamin B12, and other nutrients. Other causes of anemia include intestinal worms, hemoglobinopathy, and sickle cell disease. Although anemia is not specific to malaria, trends in anemia prevalence can reflect malaria morbidity, and they respond to changes in the coverage of malaria interventions (Korenromp et al. 2004).

Children age 6-59 months in 50% of the households selected for the men's survey were tested for anemia using a battery-operated portable HemoCue analyzer to measure hemoglobin levels. Hemoglobin testing was carried out for nearly all (more than 99%) eligible children (**Table 12.12**). Results of the tests were given to the mothers or caregivers of the children. Mothers of children whose results indicated anemia were counseled and referred to nearby health facilities. Only 1% of children age 6-59 months were classified as having severe anemia (a hemoglobin level below 8.0 g/dl) (**Table 12.13**).

Patterns by background characteristics

- The prevalence of severe anemia is highest among children age 6-8 months (4%) and lowest among children age 48-59 months (less than 1%) (**Table 12.13**).
- The percentage of children with severe anemia is highest among those whose mothers have no education (3%).

12.6 PREVALENCE OF MALARIA IN CHILDREN

Malaria prevalence in children

Percentage of children age 6-59 months classified as infected with malaria according to microscopy results.

Sample: Children age 6-59 months

Many people, including children, may have malaria parasites in their blood without showing any signs of infection. Such asymptomatic infections not only contribute to further transmission of malaria but also increase the risk of anemia and other associated morbidity among infected individuals.

In the 2019-20 RDHS, all children age 6-59 months from the male survey subsample were eligible for malaria testing. Testing with malaria rapid diagnostic tests (RDTs) was successfully carried out among 99.5% of eligible children, and 99.8% were tested for malaria by microscopy (**Table 12.12**).

One percent of children age 6-59 months tested positive for malaria parasites according to microscopy results (**Table 12.14**). Rapid diagnostic tests were done in conjunction with microscopy to facilitate treatment of infected children during the survey fieldwork. Results from these RDTs are also presented in **Table 12.14** for reference.

The 2019-20 RDHS was conducted between November 2019 and July 2020, with more than a 2-month break between April and June 2020 due to the COVID-19 lockdown. Malaria transmission peaks during April and May, and a high number of malaria cases were observed in the South and East provinces. The survey collected data in these two provinces in June and July, during the off-peak malaria season.

Patterns by background characteristics

- The percentage of children with malaria according to microscopy is higher in rural areas (0.9%) than in urban areas (0.5%).
- Malaria prevalence according to microscopy is higher among girls (1.1%) than boys (0.6%).
- By province, the percentage of children with malaria according to microscopy is highest in South (1.3%) and West (1.5%) and lowest in North (0.3%).

12.7 PREVALENCE OF MALARIA IN WOMEN

Malaria prevalence in women

Percentage of women age 15-49 classified as infected with malaria according to microscopy results.

Sample: Women age 15-49

In the 2019-20 RDHS, all women age 15-49 from the male survey subsample were eligible for malaria testing. Testing with both malaria rapid diagnostic tests (RDTs) and microscopy was successfully carried out among 99.7% of eligible children (**Table 12.15**).

About 1% of women age 15-49 tested positive for malaria parasites according to microscopy results (**Table 12.16**). Rapid diagnostic tests were done in conjunction with microscopy to facilitate treatment of infected women during the survey fieldwork.

Similar to children, the survey collected data in the two higher prevalence provinces during the off-peak malaria season.

Patterns by background characteristics

- The percentage of women with malaria according to microscopy is higher in rural areas (0.5%) than in urban areas (0.3%).
- Malaria prevalence according to microscopy is higher among pregnant women (1.3%) than among those who are not pregnant (0.4%).

LIST OF TABLES

For more information on malaria, see the following tables:

- **Table 12.1** **Household possession of mosquito nets**
- **Table 12.2** **Source of mosquito nets**
- **Table 12.3** **Access to an insecticide-treated net (ITN)**
- **Table 12.4** **Access to an ITN according to background characteristics**
- **Table 12.5** **Use of mosquito nets by persons in the household**
- **Table 12.6** **Use of existing ITNs**
- **Table 12.7** **Use of mosquito nets by children**
- **Table 12.8** **Use of mosquito nets by pregnant women**
- **Table 12.9** **Prevalence, diagnosis, and prompt treatment of children with fever**
- **Table 12.10** **Source of advice or treatment for children with fever**
- **Table 12.11** **Type of antimalarial drugs used**
- **Table 12.12** **Coverage of testing for anemia and malaria in children**
- **Table 12.13** **Hemoglobin <8.0 g/dl in children**
- **Table 12.14** **Prevalence of malaria in children**
- **Table 12.15** **Coverage of testing for anemia and malaria in women**
- **Table 12.16** **Prevalence of malaria in women**

Table 12.1 Household possession of mosquito nets

Percentage of households with at least one mosquito net (treated or untreated) and insecticide-treated net (ITN), average number of nets and ITNs per household, and percentage of households with at least one net and ITN per two persons who stayed in the household last night, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of households with at least one mosquito net		Average number of nets per household		Number of households	Percentage of households with at least one net for every two persons who stayed in the household last night		Number of households with at least one person who stayed in the household last night
	Any mosquito net	Insecticide-treated mosquito net (ITN) ¹	Any mosquito net	Insecticide-treated mosquito net (ITN) ¹		Any mosquito net	Insecticide-treated mosquito net (ITN) ¹	
Residence								
Urban	78.6	76.2	1.8	1.8	2,355	55.6	52.9	2,353
Rural	64.7	64.2	1.2	1.2	10,594	30.7	30.2	10,591
Province								
City of Kigali	88.2	86.0	2.2	2.1	1,810	66.2	63.5	1,808
South	65.4	64.9	1.2	1.2	3,003	32.3	31.6	3,001
West	64.6	64.2	1.2	1.1	2,770	27.7	27.3	2,770
North	66.0	65.7	1.2	1.2	2,012	31.3	31.2	2,012
East	60.6	59.3	1.2	1.2	3,353	29.7	28.7	3,353
Wealth quintile								
Lowest	45.8	45.6	0.7	0.7	2,837	18.5	18.4	2,836
Second	61.6	61.1	1.0	1.0	2,609	26.8	26.7	2,608
Middle	70.7	70.4	1.3	1.3	2,473	32.3	32.0	2,473
Fourth	76.7	75.9	1.5	1.5	2,570	40.4	39.7	2,570
Highest	84.6	81.9	2.2	2.1	2,460	60.9	57.6	2,457
Total	67.2	66.4	1.3	1.3	12,949	35.2	34.3	12,944

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.2 Source of mosquito nets

Percent distribution of mosquito nets by source of net, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Mass distribution campaign	ANC visit	Immunization visit	Health center	District pharmacy	Private pharmacy	Shop/market	Community health worker	Religious institution	School	Gift from friend/neighbor	Other	Don't know/missing	Total	Number of mosquito nets
Type of net															
ITN ¹	79.1	6.8	7.9	0.6	0.1	1.2	2.6	0.6	0.0	0.0	1.0	0.1	0.1	100.0	16,738
Other ²	0.0	0.0	0.0	0.0	0.0	15.1	65.6	0.6	0.0	0.5	13.0	4.0	1.1	100.0	324
Residence															
Urban	79.0	3.8	3.6	0.5	0.2	2.6	7.7	0.6	0.0	0.0	1.6	0.2	0.2	100.0	4,321
Rural	77.2	7.7	9.1	0.6	0.0	1.0	2.5	0.5	0.0	0.0	1.1	0.1	0.0	100.0	12,742
Province															
City of Kigali	85.5	2.6	1.8	0.1	0.1	1.8	5.7	0.9	0.0	0.0	1.2	0.2	0.1	100.0	3,903
South	78.4	7.1	8.1	0.2	0.0	1.9	2.5	0.2	0.1	0.0	1.4	0.0	0.1	100.0	3,507
West	73.1	9.3	11.5	1.1	0.0	0.9	2.5	0.3	0.0	0.0	1.0	0.2	0.1	100.0	3,202
North	70.5	8.9	13.5	1.9	0.0	0.5	1.9	1.7	0.0	0.0	0.6	0.3	0.1	100.0	2,410
East	77.1	6.9	6.7	0.3	0.1	1.6	5.2	0.1	0.0	0.0	1.7	0.1	0.0	100.0	4,040
Wealth quintile															
Lowest	72.9	11.2	12.8	0.8	0.0	0.2	0.6	0.3	0.0	0.0	1.1	0.0	0.1	100.0	1,867
Second	76.1	9.0	11.2	0.5	0.0	0.4	0.9	0.8	0.0	0.0	1.0	0.1	0.0	100.0	2,630
Middle	77.9	8.0	10.1	0.6	0.1	0.2	1.6	0.7	0.0	0.1	0.8	0.0	0.0	100.0	3,202
Fourth	81.6	6.3	6.5	0.7	0.0	0.6	2.0	0.5	0.0	0.0	1.6	0.1	0.1	100.0	3,862
Highest	77.1	3.5	3.8	0.6	0.1	3.7	8.8	0.5	0.1	0.0	1.4	0.3	0.2	100.0	5,502
Total	77.6	6.7	7.7	0.6	0.1	1.4	3.8	0.6	0.0	0.0	1.2	0.1	0.1	100.0	17,063

ANC = Antenatal care

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

² Any net that is not an ITN

Table 12.3 Access to an insecticide-treated net (ITN)

Percent distribution of the de facto household population by number of ITNs the household owns, according to number of persons who stayed in the household the night before the survey, Rwanda DHS 2019-20

Number of ITNs ¹	Number of persons who stayed in the household the night before the survey								Total
	1	2	3	4	5	6	7	8+	
0	47.1	37.9	31.5	32.9	30.5	31.2	32.8	31.8	32.3
1	43.7	37.2	35.6	24.8	19.5	17.3	17.7	17.8	23.1
2	8.0	19.8	23.5	28.1	27.6	22.6	17.6	17.2	23.1
3	0.9	4.1	7.6	11.3	16.5	21.7	21.7	16.9	15.0
4	0.3	1.0	1.5	2.3	4.2	5.1	8.8	9.7	4.6
5	0.0	0.0	0.2	0.5	1.3	1.5	1.1	3.4	1.2
6	0.0	0.0	0.2	0.1	0.3	0.5	0.3	1.4	0.4
7	0.0	0.0	0.0	0.0	0.1	0.1	0.0	1.8	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	993	3,046	6,899	10,053	11,399	9,739	6,357	6,993	55,479
Percentage of the de facto population with access to an ITN ^{1,2}	52.9	62.1	56.7	54.7	52.2	49.8	43.9	39.3	50.8

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

² Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.4 Access to an ITN according to background characteristics

Percentage of the de facto population with access to an ITN in the household, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of the de facto population with access to an ITN ¹
Residence	
Urban	68.2
Rural	47.2
Province	
City of Kigali	80.6
South	47.7
West	43.9
North	48.7
East	45.8
Wealth quintile	
Lowest	30.0
Second	41.9
Middle	50.8
Fourth	58.7
Highest	72.2
Total	50.8

¹ Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.5 Use of mosquito nets by persons in the household

Percentage of the de facto household population who slept the night before the survey under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among the de facto household population in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Household population			Household population in households with at least one ITN ¹	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN ¹ last night	Number of persons	Percentage who slept under an ITN ¹ last night	Number of persons
Age					
<5	56.6	55.6	8,238	77.7	5,903
5-14	38.8	38.3	14,761	57.9	9,768
15-34	46.0	44.8	17,959	67.2	11,978
35-49	59.6	58.7	8,425	83.7	5,911
50+	53.7	53.2	6,095	81.1	3,994
Don't know/missing	*	*	2	*	0
Sex					
Male	46.6	45.8	25,862	68.2	17,357
Female	50.4	49.4	29,618	72.5	20,197
Residence					
Urban	67.3	64.7	9,482	81.3	7,546
Rural	44.7	44.2	45,998	67.8	30,008
Province					
City of Kigali	78.2	75.7	7,228	83.6	6,549
South	47.1	46.6	12,237	70.9	8,048
West	43.1	42.7	12,496	66.4	8,038
North	44.3	44.2	8,472	65.5	5,710
East	42.6	41.3	15,047	67.5	9,209
Wealth quintile					
Lowest	29.2	29.1	11,059	64.1	5,017
Second	39.7	39.4	11,075	64.8	6,734
Middle	48.5	48.3	11,073	68.7	7,780
Fourth	57.0	56.4	11,118	72.7	8,628
Highest	68.3	65.2	11,155	77.5	9,395
Total	48.6	47.7	55,479	70.5	37,555

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.6 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of existing ITNs ¹ used last night	Number of ITNs ¹
Residence		
Urban	78.0	4,147
Rural	78.1	12,591
Province		
City of Kigali	75.5	3,775
South	82.3	3,471
West	80.8	3,170
North	75.8	2,398
East	75.9	3,925
Wealth quintile		
Lowest	76.8	1,861
Second	77.3	2,615
Middle	79.3	3,183
Fourth	80.3	3,819
Highest	76.5	5,260
Total	78.0	16,738

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.7 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among children under age 5 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Children under age 5 in all households			Children under age 5 in households with at least one ITN ¹	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN ¹ last night	Number of children	Percentage who slept under an ITN ¹ last night	Number of children
Age in months					
<12	64.2	62.9	1,627	83.2	1,231
12-23	64.0	63.0	1,651	84.4	1,231
24-35	55.9	54.7	1,672	78.8	1,162
36-47	51.3	50.6	1,645	72.6	1,146
48-59	47.6	47.1	1,643	68.3	1,133
Sex					
Male	55.1	54.2	4,147	76.5	2,936
Female	58.1	57.1	4,092	78.8	2,967
Residence					
Urban	76.6	73.6	1,397	87.2	1,179
Rural	52.5	52.0	6,841	75.3	4,723
Province					
City of Kigali	83.6	81.2	1,099	86.8	1,028
South	57.0	56.4	1,670	79.8	1,180
West	51.9	51.5	1,993	75.5	1,359
North	52.8	52.5	1,257	73.0	905
East	49.3	48.0	2,220	74.4	1,432
Wealth quintile					
Lowest	36.1	35.9	1,918	71.6	961
Second	49.2	48.7	1,606	74.0	1,057
Middle	58.4	58.2	1,609	77.3	1,212
Fourth	68.2	67.8	1,592	80.7	1,336
Highest	76.3	72.6	1,513	82.2	1,336
Total	56.6	55.6	8,238	77.7	5,903

Note: Table is based on children who stayed in the household the night before the interview.

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.8 Use of mosquito nets by pregnant women

Percentage of pregnant women age 15-49 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among pregnant women age 15-49 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Among pregnant women age 15-49 in all households			Among pregnant women age 15-49 in households with at least one ITN ¹	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN ¹ last night	Number of pregnant women	Percentage who slept under an ITN ¹ last night	Number of pregnant women
Residence					
Urban	76.5	70.1	161	90.3	125
Rural	53.6	53.0	709	79.5	472
Province					
City of Kigali	86.3	76.9	110	88.3	96
South	58.8	58.4	208	84.3	144
West	58.5	57.9	199	82.5	140
North	56.9	55.9	131	83.0	88
East	42.9	42.3	222	72.6	129
Education					
No education	39.9	39.9	75	(68.6)	43
Primary	55.9	55.6	522	83.5	348
Secondary	63.6	59.3	230	79.9	171
More than secondary	(81.2)	(73.9)	44	(90.2)	36
Wealth quintile					
Lowest	31.9	31.9	154	67.7	73
Second	48.0	48.0	175	76.2	110
Middle	54.9	54.9	178	84.4	116
Fourth	67.4	66.0	173	83.5	137
Highest	82.1	75.4	190	88.6	162
Total	57.9	56.1	871	81.8	598

Note: Table is based on women who stayed in the household the night before the interview. Figures in parentheses are based on 25-49 unweighted cases.

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.9 Prevalence, diagnosis, and prompt treatment of children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey, and among children under age 5 with a fever, percentage for whom advice or treatment was sought, percentage for whom advice or treatment was sought the same or next day following the onset of fever, and percentage who had blood taken from a finger or heel for testing, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Children under age 5		Children under age 5 with fever			
	Percentage with a fever in the 2 weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought ¹	Percentage for whom advice or treatment was sought the same or next day	Percentage who had blood taken from a finger or heel for testing	Number of children
Age in months						
<12	19.6	1,627	60.5	28.8	33.4	319
12-23	26.8	1,633	65.6	35.6	41.3	437
24-35	18.6	1,631	61.3	33.1	39.1	304
36-47	16.4	1,594	58.8	35.0	42.1	261
48-59	12.1	1,535	64.3	36.0	52.4	186
Sex						
Male	19.0	4,046	63.6	32.0	40.4	770
Female	18.5	3,974	61.0	35.2	41.0	736
Residence						
Urban	15.0	1,411	68.9	43.6	49.4	212
Rural	19.6	6,608	61.2	32.0	39.3	1,295
Province						
City of Kigali	15.4	1,133	71.8	43.7	50.7	175
South	16.2	1,610	61.6	30.1	43.1	260
West	22.8	1,940	63.3	36.6	40.5	443
North	21.1	1,214	53.3	29.8	26.0	257
East	17.5	2,123	63.4	30.4	44.6	372
Mother's education						
No education	17.9	913	57.1	29.9	37.0	164
Primary	19.3	5,197	59.0	30.7	38.6	1,005
Secondary	18.9	1,555	72.6	40.9	46.8	294
More than secondary	12.2	354	(89.3)	(65.9)	(61.8)	43
Wealth quintile						
Lowest	19.5	1,866	52.3	24.5	35.5	364
Second	21.6	1,542	56.5	28.1	32.6	333
Middle	20.3	1,560	62.3	33.8	36.1	316
Fourth	17.6	1,560	70.5	36.9	53.3	275
Highest	14.7	1,491	77.4	52.6	52.5	219
Total	18.8	8,020	62.3	33.6	40.7	1,507

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes advice or treatment from the following sources: public sector, private medical sector, kiosk/shop. Excludes advice or treatment from a traditional practitioner.

Table 12.10 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Rwanda DHS 2019-20

Source	Percentage for whom advice or treatment was sought from each source:	
	Among children with fever	Among children with fever for whom advice or treatment was sought
Public sector	53.5	85.0
Government referral hospital	0.2	0.3
Provincial/district hospital	1.1	1.8
Health center	34.4	54.6
Health post	8.6	13.6
Outreach	0.0	0.0
Community health worker	10.6	16.9
Private sector	9.2	14.7
Polyclinic	0.5	0.9
Pharmacy	4.7	7.4
Private clinic	2.6	4.1
Dispensary	1.4	2.2
Other private medical sector	0.1	0.2
Other source	1.2	1.9
Traditional practitioner	0.8	1.3
Friend/relative	0.3	0.6
Other	0.2	0.4
Number of children	1,507	948

Table 12.11 Type of antimalarial drugs used

Among children under age 5 with a fever in the 2 weeks preceding the survey who took any antimalarial medication, percentage who took specific antimalarial drugs, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of children who took:				Number of children with fever who took antimalarial drug
	Any ACT	Quinine	Artesunate	Other anti-malarial	
Age in months					
<6	*	*	*	*	1
6-11	*	*	*	*	3
12-23	(82.4)	(0.0)	(9.2)	(8.4)	34
24-35	*	*	*	*	20
36-47	(96.7)	(0.0)	(0.0)	(3.3)	28
48-59	(97.9)	(0.0)	(2.1)	(0.0)	36
Sex					
Male	94.8	0.0	5.2	0.0	57
Female	90.3	0.0	2.7	7.0	65
Residence					
Urban	*	*	*	*	15
Rural	92.1	0.0	3.7	4.2	107
Province					
City of Kigali	*	*	*	*	13
South	(89.9)	(0.0)	(0.0)	(10.1)	29
West	(94.4)	(0.0)	(3.9)	(1.7)	45
North	*	*	*	*	12
East	*	*	*	*	25
Mother's education					
No education	*	*	*	*	14
Primary	93.3	0.0	2.7	4.0	94
Secondary	*	*	*	*	12
More than secondary	*	*	*	*	2
Wealth quintile					
Lowest	(89.8)	(0.0)	(2.1)	(8.1)	35
Second	(93.6)	(0.0)	(6.4)	(0.0)	28
Middle	*	*	*	*	23
Fourth	*	*	*	*	25
Highest	*	*	*	*	11
Total	92.4	0.0	3.8	3.7	122

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

ACT = Artemisinin-based combination therapy

Table 12.12 Coverage of testing for anemia and malaria in children

Percentage of eligible children age 6-59 months who were tested for anemia and for malaria, according to background characteristics (unweighted), Rwanda DHS 2019-20

Background characteristic	Percentage tested for:			Number of children
	Anemia	Malaria with RDT	Malaria by microscopy	
Age in months				
6-8	99.5	99.5	99.5	208
9-11	99.5	99.5	99.5	212
12-17	100.0	99.5	99.8	400
18-23	99.5	99.5	99.5	402
24-35	99.6	98.8	99.6	844
36-47	99.9	99.6	99.9	809
48-59	100.0	99.9	100.0	810
Sex				
Male	99.7	99.4	99.6	1,861
Female	99.9	99.5	99.9	1,824
Mother's interview status				
Interviewed	99.8	99.5	99.8	3,428
Not interviewed but in household	*	*	*	20
Not interviewed and not in the household ¹	100.0	99.6	100.0	237
Residence				
Urban	99.2	99.0	99.1	781
Rural	99.9	99.6	99.9	2,904
Province				
City of Kigali	99.5	99.3	99.3	415
South	99.8	99.2	99.8	855
West	99.8	99.7	99.8	911
North	100.0	99.7	100.0	592
East	99.8	99.5	99.8	912
Mother's education²				
No education	100.0	99.5	100.0	410
Primary	99.9	99.7	99.9	2,232
Secondary	99.8	99.2	99.7	640
More than secondary	97.0	97.0	97.0	166
Wealth quintile				
Lowest	100.0	99.5	100.0	872
Second	100.0	99.7	100.0	763
Middle	99.9	99.3	99.9	691
Fourth	99.9	99.9	99.9	684
Highest	99.1	98.8	99.0	675
Total	99.8	99.5	99.8	3,685

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

RDT = Rapid diagnostic test (SD Bioline Malaria Ag Pf/Pan)

¹ Includes children whose mothers are deceased

² For women who are not interviewed, information on education is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 12.13 Hemoglobin <8.0 g/dl in children

Percentage of children age 6-59 months with hemoglobin lower than 8.0 g/dl, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Hemoglobin <8.0 g/dl	Number of children
Age in months		
6-8	4.0	219
9-11	1.4	222
12-17	2.2	411
18-23	2.4	411
24-35	1.2	853
36-47	0.9	820
48-59	0.4	829
Sex		
Male	1.4	1,895
Female	1.3	1,870
Mother's interview status		
Interviewed	1.4	3,514
Not interviewed but in household	*	18
Not interviewed and not in the household ¹	1.1	233
Residence		
Urban	1.5	641
Rural	1.3	3,123
Province		
City of Kigali	1.6	513
South	0.7	761
West	1.4	886
North	2.5	584
East	1.1	1,021
Mother's education²		
No education	2.5	424
Primary	1.0	2,276
Secondary	1.8	689
More than secondary	1.2	143
Wealth quintile		
Lowest	1.8	852
Second	1.1	781
Middle	1.0	733
Fourth	1.3	708
Highest	1.5	690
Total	1.4	3,765

Note: Table is based on children who stayed in the household the night before the interview. Prevalence of anemia is based on hemoglobin levels and is adjusted for altitude using CDC formulas (CDC 1998). Hemoglobin is measured in grams per deciliter (g/dl). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes children whose mothers are deceased

² For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 12.14 Prevalence of malaria in children

Percentage of children age 6-59 months classified in two tests as having malaria, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Malaria prevalence according to RDT		Malaria prevalence according to microscopy	
	RDT positive	Number of children	Microscopy positive	Number of children
Age in months				
6-8	2.1	219	0.7	219
9-11	1.7	222	0.8	222
12-17	1.9	408	0.2	410
18-23	2.5	411	0.8	411
24-35	1.9	847	0.4	853
36-47	2.9	818	1.3	820
48-59	4.3	828	1.3	829
Sex				
Male	2.3	1,890	0.6	1,894
Female	3.1	1,862	1.1	1,870
Mother's interview status				
Interviewed	2.7	3,503	0.8	3,513
Not interviewed but in household	*	18	*	18
Not interviewed and not in the household ¹	3.2	232	1.2	233
Residence				
Urban	1.7	640	0.5	641
Rural	2.9	3,113	0.9	3,123
Province				
City of Kigali	2.0	511	0.6	512
South	3.7	757	1.3	761
West	3.1	885	1.5	886
North	2.2	582	0.3	584
East	2.3	1,017	0.5	1,021
Mother's education²				
No education	5.1	422	2.1	424
Primary	2.8	2,270	0.7	2,276
Secondary	1.3	686	0.4	688
More than secondary	0.0	143	1.1	143
Wealth quintile				
Lowest	4.6	849	1.9	852
Second	3.8	779	0.8	781
Middle	2.7	729	0.3	733
Fourth	0.9	708	0.8	708
Highest	0.9	688	0.2	689
Total	2.7	3,753	0.9	3,764

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

RDT = Rapid diagnostic test (SD Bioline Malaria Ag Pf/Pan)

¹ Includes children whose mothers are deceased

² For women who are not interviewed, information on education is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 12.15 Coverage of testing for malaria in women

Percentage of eligible women age 15-49 who were tested for anemia and for malaria, according to background characteristics (unweighted), Rwanda DHS 2019-20

Background characteristic	Percentage tested for:		Number of women
	Malaria with RDT	Malaria by microscopy	
Age			
15-19	99.8	99.8	1,674
20-29	99.7	99.7	2,166
30-39	99.8	99.7	2,101
40-49	99.7	99.6	1,378
Currently pregnant			
Pregnant	99.8	99.8	414
Not pregnant or not sure	99.7	99.7	6,905
Residence			
Urban	99.0	99.0	1,795
Rural	100.0	99.9	5,524
Province			
City of Kigali	99.4	99.4	947
South	99.8	99.7	1,744
West	99.8	99.8	1,677
North	99.8	99.8	1,134
East	99.8	99.7	1,817
Education			
No education	99.9	99.9	703
Primary	99.8	99.8	4,233
Secondary	99.8	99.8	2,042
More than secondary	98.2	98.2	341
Wealth quintile			
Lowest	100.0	100.0	1,335
Second	100.0	99.9	1,394
Middle	99.9	99.8	1,354
Fourth	100.0	100.0	1,478
Highest	99.0	99.0	1,758
Total	99.7	99.7	7,319

Table 12.16 Prevalence of malaria in women

Percentage of women age 15-49 classified in two tests as having malaria, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Malaria prevalence according to RDT		Malaria prevalence according to microscopy	
	RDT positive	Number of women	Microscopy positive	Number of women
Age				
15-19	1.7	1,620	0.8	1,620
20-29	1.1	2,158	0.4	2,158
30-39	1.1	2,116	0.5	2,115
40-49	0.8	1,372	0.2	1,371
Currently pregnant				
Pregnant	1.9	434	1.3	434
Not pregnant or not sure	1.2	6,832	0.4	6,830
Residence				
Urban	0.8	1,428	0.3	1,428
Rural	1.3	5,838	0.5	5,836
Province				
City of Kigali	1.5	1,050	0.4	1,050
South	1.0	1,521	0.6	1,520
West	1.7	1,605	0.5	1,605
North	0.9	1,091	0.6	1,091
East	0.9	1,999	0.4	1,999
Education				
No education	1.5	722	0.1	722
Primary	1.2	4,205	0.6	4,203
Secondary	1.0	2,024	0.5	2,024
More than secondary	0.9	315	0.0	315
Wealth quintile				
Lowest	1.5	1,281	0.6	1,281
Second	1.7	1,409	0.6	1,408
Middle	1.5	1,381	0.9	1,380
Fourth	0.9	1,506	0.3	1,506
Highest	0.5	1,689	0.1	1,689
Total	1.2	7,266	0.5	7,264

Key Findings

- **Knowledge about HIV transmission and prevention:** 64% each of women and men age 15-49 have comprehensive knowledge about the modes of HIV transmission and prevention.
- **Knowledge of mother-to-child transmission of HIV:** 68% of women and 56% of men know that HIV can be transmitted during pregnancy, labor/delivery, or breastfeeding. Additionally, 94% of women and 92% of men know that the risk of mother-to-child transmission can be reduced by the mother taking drugs.
- **Discriminatory attitudes:** 4% each of women and men age 15-49 think that children living with HIV should not be able to attend school with children who are HIV negative; 12% of women and 11% of men would not buy fresh vegetables from a shopkeeper with HIV.
- **Sexual partners:** 1% of women and 6% of men age 15-49 reported having two or more sexual partners in the past 12 months.
- **Coverage of HIV testing:** 78% of women and 64% of men age 15-49 have ever been tested for HIV and received the test results.
- **Male circumcision:** 56% of men age 15-49 are circumcised.
- **Comprehensive knowledge of HIV among young people:** 59% of young women and 57% of young men age 15-24 have comprehensive knowledge of HIV.

Acquired immunodeficiency syndrome (AIDS) is one of the most serious public health and development challenges facing the world. AIDS is caused by the human immunodeficiency virus (HIV). HIV weakens the immune system, making the body susceptible to secondary infections and opportunistic diseases. Without treatment, HIV infection leads to AIDS, which is invariably fatal. The predominant mode of HIV transmission is sexual contact. Other modes of transmission are unsafe injections, use of infected blood supplies during blood transfusions, and mother-to-child transmission (in which the mother passes HIV to her child during pregnancy, delivery, or breastfeeding). HIV infection is a major public health concern in Rwanda, where it is an important cause of mortality with negative social and economic consequences that affect people throughout the country.

Rwanda's HIV/AIDS surveillance efforts began in 1984 with the establishment of a national AIDS case reporting system in hospitals and health centers; that early response to the country's HIV/AIDS epidemic was relatively rapid and sustained. In 1986, Rwanda was the first country in the world to conduct and report on a nationally representative HIV/AIDS seroprevalence survey, and in 1987 the National AIDS Program (currently operating within the Rwanda Biomedical Center) was established in collaboration with

the World Health Organization. There has been growing availability of HIV testing, care, and treatment services, and antiretroviral therapy (ART) has been introduced. Since 2005, HIV prevalence in Rwanda has remained stable at 3%, and new HIV infections have declined from 27 to 8 per 10,000 population.

The goals of the 2005-2009 Health Sector Strategic Plan included curbing and reversing the spread of HIV infection, meeting the increasing demand for HIV prophylaxis and treatment through the development of public education campaigns and “gender-specific” implementation, providing voluntary testing and counseling in all health centers, and implementing large-scale initiatives focusing on prevention of mother-to-child transmission (PMTCT) and health promotion. The Second National Strategic Plan on HIV and AIDS 2013-2018 (NSP 2013-2018) had the goals of lowering the new infection rate by two-thirds, from an estimated 6,000 per year to 2,000; halving the number of HIV-related deaths from 5,000 to 2,500 per year; and ensuring that people living with HIV had the same opportunities as all others.

The recent Health Sector Performance Report 2019-2020 indicated that services such as HIV testing provided around 2.6 million tests. Also, PMTCT programs provided HIV testing during antenatal care (ANC) visits, HIV self-testing services for male partners of pregnant women attending ANC, and follow-up services for HIV-exposed children. In addition, 401,987 voluntary medical male circumcision procedures were performed, 13.2% with medical devices. HIV prevention initiatives targeting adolescent girls and young women were conducted to strengthen knowledge of HIV prevention, SRHR services, and linkage to HIV services. Condom programs distributed 29,912,778 condoms, 40% through health facilities. Key populations services targeted female sex workers (FSW) and men who have sex with men (MSM) for enrollment in HIV prevention programs, and HIV care and treatment and HIV continuum of care services linked individuals to care and antiretroviral treatment coverage. These approaches have allowed Rwanda to successfully reach the UNAIDS goal of 90-90-90: 84% of all people living with HIV in Rwanda know their HIV status, 98% are on antiretroviral therapy, and 90% of those receiving antiretrovirals have achieved viral suppression below 1,000 copies/ml.

To assess the impact of Rwanda’s HIV/AIDS control program, the 2019-20 RDHS devoted considerable effort to gathering data on HIV/AIDS and other sexually transmitted infections (STIs). The aim of this chapter is to present data concerning HIV-related knowledge, attitudes, and behaviors at the national and provincial levels and among certain subgroups of the population. The chapter also provides information on male circumcision in Rwanda. Survey data were collected on beliefs regarding how HIV infection is prevented and transmitted, on stigmatization of those who have the disease, and on risk factors, particularly those relating to sexual behavior. The information gathered is essential for adjusting current programs and creating new AIDS information, education, and communication campaigns. Nationally, HIV/AIDS programs have received a boost through the efforts of the government and the support of development partners, which have led to a scale up of prevention, care, and treatment programs aimed at combating the disease.

The 2019-20 RDHS also included an HIV testing component to determine the prevalence of HIV infection and factors associated with infection (will be published in a supplementary report).

13.1 HIV/AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

The 2019-20 RDHS included a series of questions to measure respondents’ knowledge and attitudes regarding HIV/AIDS. Ever-married women and men age 15-49 were first asked whether they had heard of HIV/AIDS. Those who reported having heard of HIV/AIDS were asked additional questions regarding the various modes of prevention, including whether it is possible to reduce the chances of getting the HIV virus by having just one faithful sex partner and using a condom during every sexual encounter. To allow an assessment of the extent of possible misconceptions, respondents were also asked whether they think it is possible for a healthy-looking person to have the HIV/AIDS virus and whether a person can contract HIV/AIDS from mosquito bites, by sharing food with a person who has HIV/AIDS, or through supernatural means.

Eighty-three percent of both women and men know that consistent use of condoms and limiting sexual intercourse to one uninfected partner can reduce the risk of HIV (**Table 13.1**).

Trends: The percentage of women who know that using condoms and limiting sexual intercourse to one uninfected partner who has no other partner can reduce the risk of HIV has remained unchanged since 2014-15 (83%), while the percentage among men has decreased from 88% to 83%.

Patterns by background characteristics

- The percentage of women who know that using condoms and limiting sexual intercourse to one uninfected partner can reduce the risk of HIV varies slightly by age, from 79% among those age 15-19 to 85% among those age 40-49. Among men, the percentage increases from 80% among those age 15-19 to a peak of 86% among those age 30-39 before dropping to 82% among those age 40-49.
- There are differences by province in knowledge of HIV/AIDS prevention methods. The proportion of women who know about both methods is lowest in City of Kigali (74%) and highest in South (87%). Among men, knowledge is lowest in North (74%) and highest in City of Kigali (93%).
- There is no clear relationship between knowledge of prevention methods and level of education among either women or men. Similarly, among women, there is no clear association with household wealth. Among men, knowledge increases slightly with increasing household wealth, from 81% among those in the lowest quintile to 87% among those in the highest quintile.

Comprehensive knowledge of HIV

Knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

Sample: Women and men age 15-24 and 15-49

The two most common local misconceptions about HIV transmission in Rwanda are that HIV can be transmitted through mosquitoes and sharing of food. The survey results showed that 64% each of women and men age 15-49 have comprehensive knowledge of HIV (**Table 13.2**).

The percentage of women with comprehensive knowledge about HIV varies by age, from 54% among those age 15-19 to 69% among those age 40-49. The percentage of men with comprehensive knowledge increases from 55% among those age 15-19 to 70% among those age 30-39 before dropping to 66% among those age 40-49.

Trends: The percentage of respondents with comprehensive knowledge of HIV has decreased slightly since 2014-15, from 67% to 64% among women and from 69% to 64% among men.

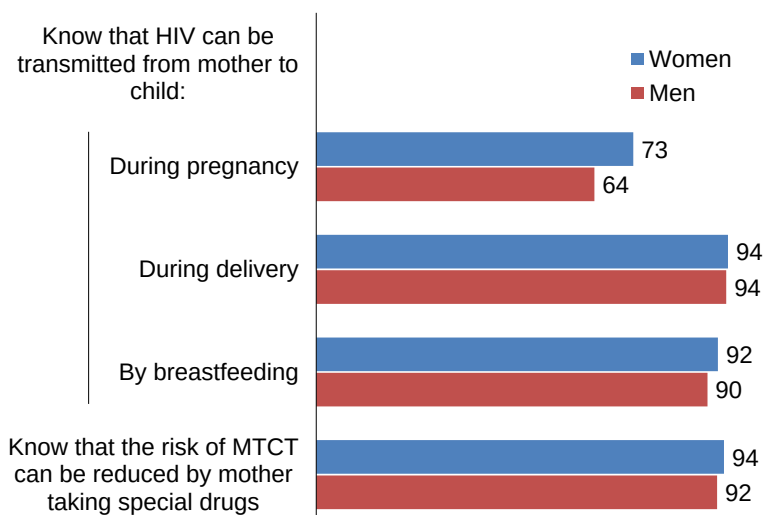
13.2 KNOWLEDGE ABOUT MOTHER-TO-CHILD TRANSMISSION

Increasing the level of general knowledge about transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents were asked whether HIV can be transmitted from a mother to her child during pregnancy, during delivery, or through breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking ART prophylaxis during pregnancy.

Figure 13.1 Knowledge of mother-to-child transmission (MTCT) of HIV

Percentage of women and men age 15-49

Overall, women are more likely than men to be aware of all three means of HIV transmission (68% versus 56%) (**Table 13.3**). Nearly three quarters (73%) of women know that HIV can be transmitted during pregnancy, 94% know that it can be transmitted during delivery, and 92% know that it can be transmitted through breastfeeding. Among men, 64% know that HIV can be transmitted during pregnancy, 94% know that it can be transmitted during delivery, and 90% know that it can be transmitted during breastfeeding (**Figure 13.1**).



Trends: The percentage of women and men who know that MTCT can be reduced by taking special medications changed only minimally between 2014-15 and 2019-20 (95% versus 94% among women and 93% versus 92% among men) (**Figure 13.2**).

Patterns by background characteristics

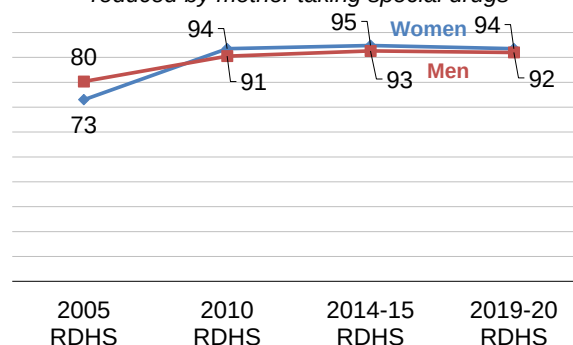
- The percentage of women who know that HIV can be transmitted during breastfeeding increases from 88% among those age 15-19 to 94% among those age 25-39 before dropping to 93% among those age 40-49.

- Knowledge that MTCT can be reduced by mothers taking special drugs is slightly higher among women (94%) than men (92%).

Knowledge generally increases with age among women and men alike. For example, 88% of women age 15-19 know that MTCT can be reduced by mothers taking special drugs, as compared with 97% of women age 30-39.

Figure 13.2 Trends in knowledge of mother-to-child transmission (MTCT) of HIV

Percentage of women and men age 15-49 who know that the risk of MTCT can be reduced by mother taking special drugs



13.3 DISCRIMINATORY ATTITUDES TOWARDS PEOPLE LIVING WITH HIV

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested and their adherence to antiretroviral therapy (ART). Thus, reduction of stigma and discrimination in a population is an important indicator of the success of programs targeting HIV/AIDS prevention and control.

Discriminatory attitudes towards people living with HIV

Women and men are asked two questions to assess discriminatory attitudes towards people living with HIV. Respondents with discriminatory attitudes towards people living with HIV are those who say that they would not buy fresh vegetables from a shopkeeper or vendor if they knew that person had HIV or who say that children living with HIV should not be allowed to attend school with children who do not have HIV.

Sample: Women and men age 15-49 who have heard of HIV or AIDS

The results showed that, overall, discriminatory attitudes are similar among women (13%) and men (12%) (Table 13.4). Only 4% each of women and men do not think that children living with HIV should be able to attend school with children who are HIV negative. Similarly, only 12% of women and 11% of men would not buy fresh vegetables from a shopkeeper who has HIV.

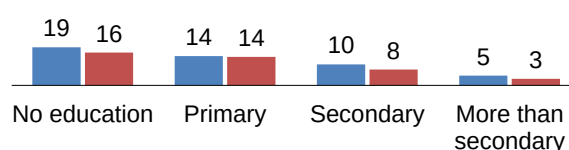
Patterns by background characteristics

- There are urban-rural differences in discriminatory attitudes among both women (10% versus 14%) and men (7% versus 13%).
- Women in West (17%) and men in South (21%) are more likely to have discriminatory attitudes towards people with HIV than women and men in other provinces.
- The proportion of women and men with discriminatory attitudes decreases with increasing education; 19% of women and 16% of men with no education have discriminatory attitudes, as compared with 5% of women and 3% of men with more than a secondary education (Figure 13.3).
- Discriminatory attitudes also decline with increasing wealth. The percentage of women with discriminatory attitudes decreases from 20% among those in the lowest wealth quintile to 9% among those in the highest wealth quintile. Among men, the percentage decreases from 17% among those in the lowest wealth quintile to 8% among those in the highest wealth quintile.

Figure 13.3 Discriminatory attitudes towards people living with HIV by education

Percentage among women and men age 15-49 who have heard of HIV

■ Women ■ Men



Note: Respondents have discriminatory attitudes if they do not think that children living with HIV should be able to attend school with children who are HIV negative or would not buy fresh vegetables from a shopkeeper who has HIV.

13.4 MULTIPLE SEXUAL PARTNERS

Given that most HIV infections in Rwanda are acquired through heterosexual intercourse, information on number of sexual partners and use of safe sex practices is important in designing and monitoring programs that control the spread of HIV.

Only 1% of women age 15-49 reported having two or more sexual partners in the past 12 months. In the 12 months before the survey, 9% of women reported having sexual intercourse with a person who neither was their husband nor lived with them, and fewer than half of those women (46%) reported using a condom during the last sexual intercourse with such a partner (**Table 13.5.1**).

Among men age 15-49, 6% reported having two or more sexual partners in the 12 months before the survey, and 12% reported having sexual intercourse with a person who neither was their wife nor lived with them. Seventy percent of those men reported using a condom during the last sexual intercourse with such a partner (**Table 13.5.2**).

Patterns by background characteristics

- Women in urban areas are more likely (13%) than women in rural areas (8%) to have had sex in the last 12 months with a person who neither was their husband nor lived with them. They are also more likely to have used a condom during the last sexual intercourse with such a partner (59% versus 41%). The pattern is similar among men.
- The percentage of women who used a condom during their last sexual intercourse with a non-marital or non-cohabiting partner increases with increasing education, from 29% among those with no education to 67% among those with more than a secondary education. Similarly, 58% of women in the highest wealth quintile used a condom during their last sexual intercourse with such a partner, as compared with 29% of those in the lowest quintile. No such patterns were observed among men.
- Respondents living in urban areas reported higher numbers of lifetime partners than those living in rural areas (2.3 versus 1.6 among women and 4.4 versus 2.4 among men).

13.5 PAID SEX

The act of paying for sex introduces an uneven negotiating ground for safer sexual intercourse. Transactional sex is the exchange of money, favors, or gifts for sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other sexually transmitted infections (STIs) because of compromised power relations and the likelihood of having multiple partners.

Four percent of men age 15-49 have ever paid for sex. The percentage of men who have paid for sex increases from less than 1% among those age 15-19 to 7% among those age 25-29 and then drops to 6% among those age 30-39 and 5% among those age 40-49. Among men who paid for sex in the last 12 months, 75% reported using a condom during the last paid sexual intercourse (**Table 13.6**).

Trends: The percentage of men who reported having ever paid for sex has decreased since 2014-15, from 7% to 4%. Condom use during last paid sexual intercourse has increased from 65% to 75%.

13.6 COVERAGE OF HIV TESTING SERVICES

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain disease free. Among those who are living with HIV, knowledge of their status allows them to take action to protect their sexual partners, to access care, and to receive treatment.

13.6.1 Awareness of HIV Testing Services and Experience with HIV Testing

Tables 13.7.1 and **13.7.2** show that nearly all women (97%) and men (98%) know where to get an HIV test. Seventy-eight percent of women and 64% of men age 15-49 have ever been tested for HIV and received the results of the last test. Thirty-six percent of women have been tested for HIV in the last 12 months and received the results, as compared with 30% of men.

Trends: The percentage of women who were tested for HIV in the 12 months preceding the survey and received the results has decreased slightly since 2014-15, from 38% to 36%. Among men, the percentage has decreased from 37% to 30%.

Patterns by background characteristics

- Across the provinces, the percentage of women who have ever been tested for HIV and received the results ranges from 75% in West to 84% in City of Kigali. Among men, the percentage who have ever been tested and received the results is lowest in East (59%) and highest in City of Kigali (75%).
- The percentages of women and men who have ever been tested and received the results are higher in urban areas (82% and 72%, respectively) than in rural areas (77% and 62%, respectively).

13.6.2 HIV Testing of Pregnant Women

Table 13.8 presents information on self-reported HIV testing during pregnancy or delivery among women age 15-49 who gave birth in the 2 years preceding the survey. Eighty-six percent of women received counseling on HIV, an HIV test, and the test results during antenatal care (ANC). Ninety-seven percent of women had an HIV test during an ANC visit or labor and received the test results.

Trends: The percentage of women who were counseled, tested, and received the test results during ANC increased from 88% in 2010 to 92% in 2014-15 before declining to 86% in 2019-20.

Patterns by background characteristics

- Rural women are slightly more likely than urban women to have received HIV counseling, an HIV test, and the test results during ANC (87% versus 85%).
- At the provincial level, the percentage of women who received counseling, an HIV test, and the results during ANC ranges from 81% in North to 90% in East.
- Never-married women are less likely to have received HIV counseling, an HIV test and the results during ANC (80%) than currently married women (87%) and formerly married women (88%).

13.7 MALE CIRCUMCISION

Male circumcision has been shown to be associated with lower rates of STI transmission, including transmission of HIV (WHO and UNAIDS 2007). Fifty-six percent of men age 15-49 have been circumcised, 51% by health professionals and 3% by traditional practitioners or family and friends (**Table 13.9**).

Patterns by background characteristics

- Younger men are more likely to be circumcised than older men. Seventy-three percent of men age 15-24 are circumcised, as compared with 61% of men age 25-29, 44% of men age 30-39, and 30% of men age 40-49.
- Urban men are more likely than rural men to have been circumcised (75% versus 52%).
- The proportion of men who have been circumcised varies markedly by province, from 41% in South to 72% in City of Kigali.
- More than 9 in 10 Muslim men (91%) have been circumcised.

13.8 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) and symptoms

Respondents who have ever had sex are asked whether they had an STI or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months before the survey.

Sample: Women and men age 15-49 who have ever had sex

Sexually transmitted infections are associated with HIV, and people with an STI are more likely to contract HIV than those without an STI. Overall, 13% of women and 7% of men who have ever had sexual intercourse reported having an STI and/or STI symptoms in the 12 months preceding the survey (**Table 13.10**). Among them, 32% of women and 35% of men sought no advice or treatment (**Table 13.11**).

13.9 HIV/AIDS-RELATED KNOWLEDGE AND BEHAVIOR AMONG YOUNG PEOPLE

This section addresses HIV/AIDS-related knowledge among young people age 15-24 and also assesses the extent to which young people are engaged in behaviors that may place them at risk of contracting HIV.

13.9.1 Comprehensive Knowledge

Knowledge of how HIV is transmitted is crucial in enabling people to avoid HIV infection, and this is especially true for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviors. Fifty-nine percent of young women and 57% of young men age 15-24 have comprehensive knowledge of HIV/AIDS (defined as knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV) (**Table 13.12**).

Trends: The proportion of young people with comprehensive knowledge about HIV has declined since 2014-15, from 65% to 59% among young women and from 64% to 57% among young men.

Patterns by background characteristics

- Comprehensive knowledge is higher among young men in urban areas (65%) than those in rural areas (56%). The urban-rural difference among young women is negligible (60% versus 59%).
- The proportion of both young women and young men with comprehensive knowledge about HIV increases with increasing education. Forty-nine percent of young women with no education have comprehensive knowledge, as compared with 69% of those with more than a secondary education. The corresponding proportions among men are 33% and 78%.

13.9.2 First Sex

Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or contracting an STI than young people who initiate sex later. Consistent condom use can reduce such risks. Four percent of young women and 8% of young men age 15-24 had sexual intercourse before age 15 (**Table 13.13**). Slightly more than one in every five young women (21%) and 23% of young men reported having sex before age 18.

Trends: The percentage of young people age 15-24 who had sex before age 15 has decreased slightly since 2014-15, from 5% to 4% among women and from 11% to 8% among men. The percentage of young men age 18-24 who had sex by age 18 has remained unchanged, while the percentage among young women has increased slightly (from 20% to 21%).

Patterns by background characteristics

- Young men in rural areas (9%) are more likely to have sex before age 15 than their urban counterparts (7%).
- The percentage of young women age 18-24 who had sexual intercourse before age 18 decreases with increasing education, from 32% among those with no education to 5% among those with more than a secondary education.

13.9.3 Premarital Sex

Table 13.14 shows that 76% of never-married young women and 70% of never-married young men age 15-24 have never had sexual intercourse. The percentage of never-married respondents who have never had sexual intercourse decreases sharply with age; 91% of young women and 87% of young men age 15-17 have never had sex, as compared with 48% of young women and 39% of young men age 23-24.

The percentages of never-married young women and young men age 15-24 who have never had sexual intercourse are higher in rural areas (77% and 72%, respectively) than in urban areas (70% and 61%, respectively).

13.9.4 Multiple Sexual Partners

Young men age 15-24 are more likely than their female counterparts to have had more than one partner in the 12 months before the survey; 2% of men had more than one partner in the previous 12 months, as compared with 1% of women (**Table 13.15.1** and **Table 13.15.2**). Young men (13%) are also more likely than young women (10%) to have had intercourse with a non-marital, non-cohabiting partner in the last 12 months. Forty-six percent of young women and 78% of young men used a condom during their last sex with a non-marital, non-cohabiting partner.

Patterns by background characteristics

- The percentage of young people who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them is higher in urban than rural areas (16% versus 9% among young women and 21% versus 11% among young men).
- The proportion of young women who used a condom during their last sex with a non-marital, non-cohabiting partner is higher in urban than rural areas (57% versus 41%). By contrast, 76% of young men in urban areas used a condom during their last sex with such a partner, as compared with 79% of young men in rural areas.

13.9.5 Coverage of HIV Testing Services

Seeking an HIV test may be more difficult for young people than adults because many young people lack experience in accessing health services for themselves and because there are often barriers to young people obtaining services. Among young people age 15-24 who have had sexual intercourse in the previous 12 months, 55% of young women and 41% of young men were tested for HIV in the 12 months preceding the survey and received the results of their last test (**Table 13.16**).

Trends: HIV testing among young women and men decreased from 59% and 49% in 2014-15 to 55% and 41% in 2019-20, respectively.

Patterns by background characteristics

- Ever-married young men are slightly less likely than their never-married counterparts to have been tested for HIV in the past 12 months and to have received their results (38% versus 42%).

13.10 COVERAGE OF HIV SELF-TESTING

An approach to rapidly increase uptake of HIV testing services, especially for populations with low access and those at higher risk that would otherwise not get tested, is HIV self-testing. Self-testing is when a person collects his or her own specimen (oral fluid or blood) and then performs an HIV test and interprets the result, often in a private setting, either alone or with someone he or she trusts.

Table 13.17 shows that 18% of women and 23% of men age 15-49 have ever heard of HIV self-testing kits. One percent of women and 2% of men have used self-testing kits.

Patterns by background characteristics

- Knowledge of HIV self-testing kits increases sharply with increasing education and wealth. For example, 11% of women and 12% of men with no education have heard of HIV self-testing kits, as compared with 56% of women and 69% of men with more than a secondary education.
- Self-testing for HIV among women and men also generally increases with increasing education and wealth (**Table 13.17**).

Coverage of HIV Testing for Prenuptial Purposes and as a Couple

HIV testing for prenuptial purposes and as a couple

Women and men who have ever had an HIV test as part of a prenuptial arrangement and ever-married women and men who have been tested as a couple.

Sample: Women and men age 15-49 and ever-married women and men age 15-49

Table 13.18 shows that 45% of women and 49% of men have ever had an HIV test as part of a prenuptial arrangement. A large majority of ever-married women (90%) and ever-married men (94%) have been tested as a couple.

Trends: HIV testing for prenuptial purposes has increased slightly since 2014-15, from 43% to 45% among women and from 45% to 49% among men. The proportion of women and men who have been tested as a couple has also increased slightly.

13.11 SPECIFIC ACCEPTING ATTITUDES TOWARD A FAMILY MEMBER WITH HIV/AIDS AND TEACHING TEENAGERS TO USE CONDOMS

Specific accepting attitudes toward people with HIV/AIDS and teaching teenagers to use condoms

Women who have heard of HIV or AIDS were asked whether they would keep the secret and take care of a family member with HIV/AIDS and whether they agree that teenagers should be taught how to use condoms to prevent HIV infection.

Sample: Women age 15-49 who have heard of HIV or AIDS

Table 13.19 shows that 36% of women would keep the secret if a family member was infected with HIV and 95% would be willing to take care of a family member with HIV at home. In addition, 90% of women agree that teenagers age 12-14 should be taught how to use condoms to prevent HIV infection.

Trends: The percentage of women who agree that teenagers age 12-14 should be taught how to use condoms to prevent HIV infection has remained unchanged since 2014-15 (90%).

Patterns by background characteristics

- The proportion of women who would keep the secret if a family member was infected with HIV decreases with age, from 42% among those age 15-19 to 31% among those age 40-49.
- Urban women are more willing than their rural counterparts to keep the secret if a family member is infected with HIV (42% versus 35%).
- The proportion of women who are willing to keep the secret if a family member is infected with HIV increases from 33% among those with no education to 40% among those with more than a secondary education.

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Table 13.1 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting HIV by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Women				Men			
	Using condoms ¹	Limiting sexual intercourse to one uninfected partner ²	Using condoms and limiting sexual intercourse to one uninfected partner ^{1,2}	Number of women	Using condoms ¹	Limiting sexual intercourse to one uninfected partner ²	Using condoms and limiting sexual intercourse to one uninfected partner ^{1,2}	Number of men
Age								
15-24	90.3	87.2	80.4	5,672	93.1	85.5	81.1	2,486
15-19	89.1	85.9	78.6	3,258	92.5	84.5	80.1	1,526
20-24	92.0	89.0	82.8	2,414	94.1	86.9	82.7	960
25-29	93.2	89.6	84.7	2,073	95.7	89.1	85.5	710
30-39	93.7	89.8	85.1	4,190	96.0	89.1	86.0	1,628
40-49	93.8	89.4	85.3	2,699	95.2	85.4	81.8	1,022
Residence								
Urban	92.7	83.2	78.8	2,909	95.6	91.0	87.9	1,115
Rural	92.2	90.0	84.4	11,725	94.3	85.9	82.0	4,731
Province								
City of Kigali	91.3	80.3	74.1	2,166	95.2	95.7	92.5	879
South	92.0	92.9	86.8	3,065	94.6	88.8	84.9	1,239
West	92.4	89.9	83.8	3,174	94.7	88.4	84.0	1,268
North	92.2	88.6	83.7	2,226	93.8	77.2	73.7	886
East	93.2	89.1	84.8	4,003	94.7	84.8	81.1	1,574
Education								
No education	91.9	91.0	85.0	1,377	94.5	87.4	83.9	420
Primary	91.6	89.1	83.2	8,529	93.9	87.0	82.6	3,569
Secondary	93.4	88.3	83.5	4,086	95.6	86.3	83.3	1,562
More than secondary	96.2	81.1	78.9	642	98.3	88.5	87.0	295
Wealth quintile								
Lowest	90.3	91.0	83.8	2,741	93.3	85.3	80.8	924
Second	90.6	89.6	83.4	2,756	94.5	85.2	81.5	1,076
Middle	93.6	89.4	85.0	2,757	94.8	86.3	82.4	1,227
Fourth	93.7	90.3	85.5	2,966	93.9	86.7	82.7	1,278
Highest	93.2	84.2	79.3	3,414	96.1	90.2	87.2	1,342
Total 15-49	92.3	88.7	83.3	14,634	94.6	86.9	83.1	5,846
50-59	na	na	na	na	93.1	91.0	85.4	667
Total 15-59	na	na	na	na	94.4	87.3	83.4	6,513

na = Not applicable

¹ Using condoms every time they have sexual intercourse

² Partner who has no other partners

Table 13.2 Comprehensive knowledge about HIV

Percentage of women and men age 15-49 who say that a healthy-looking person can have HIV and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of HIV, and percentage with comprehensive knowledge about HIV, according to age, Rwanda DHS 2019-20

Age	Percentage of respondents who say that:				Percentage who say that a healthy-looking person can have HIV and who reject the two most common local misconceptions ¹	Percentage with comprehensive knowledge about HIV ²	Number of respondents
	A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	HIV cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has HIV			
WOMEN							
15-24	81.9	89.3	95.4	91.6	70.6	58.8	5,672
15-19	77.8	88.2	94.9	90.1	66.1	54.3	3,258
20-24	87.3	90.7	96.1	93.6	76.8	65.0	2,414
25-29	90.1	88.8	97.1	94.1	77.5	66.3	2,073
30-39	93.4	87.5	96.4	93.9	79.1	67.5	4,190
40-49	94.1	87.0	96.7	93.6	79.3	68.6	2,699
Total 15-49	88.6	88.3	96.2	93.0	75.6	64.2	14,634
MEN							
15-24	82.0	87.5	96.4	92.6	68.6	57.4	2,486
15-19	78.9	87.4	96.2	91.4	65.0	54.7	1,526
20-24	86.9	87.7	96.7	94.4	74.4	61.6	960
25-29	91.7	88.9	97.1	95.0	78.8	68.0	710
30-39	92.6	87.9	98.2	95.0	80.1	69.6	1,628
40-49	93.6	88.5	98.0	95.9	80.6	66.1	1,022
Total 15-49	88.1	88.0	97.3	94.1	75.1	63.6	5,846
50-59	93.4	87.6	97.7	94.9	79.6	69.4	667
Total 15-59	88.7	87.9	97.3	94.2	75.6	64.2	6,513

¹ Two most common local misconceptions: HIV can be transmitted by mosquito bites and a person can become infected by sharing food with a person who has HIV.

² Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about HIV transmission or prevention.

Table 13.3 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child during pregnancy, during delivery, by breastfeeding, and by all three means, and percentage who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs, according to age, Rwanda DHS 2019-20

Percentage who know that HIV can be transmitted from mother to child:					Percentage who know that the risk of MTCT can be reduced by mother taking special drugs	Number of respondents
Age	During pregnancy	During delivery	By breastfeeding	By all three means		
WOMEN						
15-24	75.0	90.1	89.6	66.3	89.4	5,672
15-19	75.9	87.7	88.3	65.8	87.5	3,258
20-24	73.7	93.3	91.3	66.9	91.9	2,414
25-29	70.9	96.5	94.0	67.8	95.4	2,073
30-39	72.0	97.7	93.9	69.0	96.8	4,190
40-49	70.3	96.6	93.3	67.3	95.8	2,699
Total 15-49	72.7	94.4	92.1	67.5	93.5	14,634
MEN						
15-24	68.1	89.7	87.5	56.9	88.1	2,486
15-19	70.0	88.4	86.8	57.3	87.5	1,526
20-24	65.1	91.8	88.7	56.3	89.1	960
25-29	61.7	96.8	91.6	54.8	93.8	710
30-39	60.9	97.4	92.1	56.6	94.4	1,628
40-49	58.5	95.5	88.5	52.8	94.3	1,022
Total 15-49	63.7	93.7	89.5	55.9	91.6	5,846
50-59	64.6	96.7	91.7	60.6	93.7	667
Total 15-59	63.8	94.0	89.7	56.3	91.9	6,513

Table 13.4 Discriminatory attitudes towards people living with HIV

Among women and men age 15-49 who have heard of HIV or AIDS, percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative, percentage who would not buy fresh vegetables from a shopkeeper who has HIV, and percentage with discriminatory attitudes towards people living with HIV, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women				Men			
	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV ¹	Number of respondents who have heard of HIV or AIDS	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV ¹	Number of respondents who have heard of HIV or AIDS
Age								
15-24	6.2	17.5	19.3	5,636	6.2	16.6	18.6	2,482
15-19	8.1	21.2	23.4	3,226	8.0	20.2	22.6	1,523
20-24	3.7	12.6	13.8	2,410	3.4	10.9	12.2	959
25-29	2.3	9.3	10.4	2,071	2.7	7.2	8.4	710
30-39	2.2	8.3	9.1	4,190	1.3	6.3	6.7	1,627
40-49	2.5	8.3	9.1	2,696	0.9	6.1	6.6	1,021
Marital status								
Never married	6.1	16.3	18.2	5,876	5.4	14.8	16.4	2,863
Ever had sex	4.6	12.9	14.3	1,957	3.5	12.7	13.6	1,107
Never had sex	6.8	18.0	20.2	3,918	6.7	16.0	18.3	1,756
Married/living together	2.2	9.0	9.7	7,400	1.6	6.8	7.5	2,859
Divorced/separated/widowed	3.0	9.7	10.7	1,318	2.6	8.5	9.5	119
Residence								
Urban	2.7	8.7	10.0	2,905	2.1	6.5	7.4	1,114
Rural	4.1	12.8	14.0	11,688	3.8	11.8	13.0	4,726
Province								
City of Kigali	3.2	8.5	10.1	2,164	1.8	4.8	5.7	879
South	3.8	10.6	11.9	3,057	4.0	19.3	20.5	1,239
West	4.6	15.7	16.9	3,163	4.6	10.4	12.4	1,268
North	2.7	14.0	14.8	2,215	3.0	9.3	10.4	883
East	4.1	10.9	12.1	3,993	3.4	8.5	9.2	1,572
Education								
No education	6.0	17.3	18.8	1,373	4.7	14.6	16.2	420
Primary	4.2	13.2	14.4	8,497	4.3	12.7	14.0	3,564
Secondary	2.8	9.0	10.3	4,081	1.8	6.8	7.8	1,561
More than secondary	1.2	3.8	4.8	642	1.1	2.7	3.2	295
Wealth quintile								
Lowest	6.3	18.8	20.2	2,724	6.5	15.3	16.9	922
Second	4.7	15.3	16.9	2,741	4.6	13.7	15.1	1,076
Middle	3.1	10.8	11.6	2,753	2.6	9.8	11.1	1,226
Fourth	2.8	8.7	9.7	2,964	2.5	10.1	10.8	1,275
Highest	2.6	7.8	9.1	3,412	2.3	6.7	7.8	1,342
Total 15-49	3.8	12.0	13.2	14,593	3.5	10.8	11.9	5,840
50-59	na	na	na	na	3.2	8.4	9.4	666
Total 15-59	na	na	na	na	3.5	10.5	11.7	6,506

na = Not applicable

¹ Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative and/or would not buy fresh vegetables from a shopkeeper who has HIV

Table 13.5.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women

Among all women age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among women who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among women who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	All women			Women who had 2+ partners in the past 12 months		Women who had intercourse in the past 12 months with a person who neither was their husband nor lived with them		Women who ever had sexual intercourse ¹	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual inter- course	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Mean number of sexual partners in lifetime	Number of women
Age									
15-24	1.2	10.1	5,672	44.8	69	45.7	576	1.8	2,089
15-19	0.6	6.1	3,258	*	21	42.8	199	1.6	539
20-24	2.0	15.6	2,414	(45.4)	49	47.3	377	1.8	1,550
25-29	2.3	12.2	2,073	(49.5)	48	52.0	252	1.7	1,853
30-39	1.3	7.1	4,190	44.8	54	44.9	296	1.8	4,059
40-49	0.8	6.4	2,699	*	21	39.1	174	1.7	2,667
Marital status									
Never married	1.4	14.7	5,914	61.0	85	47.5	869	2.1	1,956
Married or living together	0.7	1.1	7,401	(10.0)	53	46.0	78	1.4	7,397
Divorced/separated/ widowed	4.1	26.5	1,318	(55.0)	54	42.0	349	2.8	1,316
Residence									
Urban	2.5	13.3	2,909	54.6	73	58.6	386	2.3	2,101
Rural	1.0	7.8	11,725	39.5	120	40.5	911	1.6	8,567
Province									
City of Kigali	3.1	13.3	2,166	50.6	68	60.2	289	2.5	1,602
South	1.2	8.8	3,065	(38.2)	35	38.4	270	1.7	2,253
West	0.9	7.2	3,174	(54.5)	28	50.8	228	1.5	2,266
North	1.0	7.3	2,226	*	22	43.8	162	1.5	1,620
East	1.0	8.7	4,003	(38.5)	39	37.6	349	1.7	2,927
Education									
No education	0.8	7.1	1,377	*	11	28.9	97	1.8	1,312
Primary	1.5	9.0	8,529	43.2	129	43.1	765	1.7	6,755
Secondary	1.1	9.3	4,086	(59.5)	45	52.9	378	1.7	2,113
More than secondary	1.0	8.8	642	*	6	66.7	57	1.5	489
Wealth quintile									
Lowest	1.3	10.0	2,741	(27.1)	36	28.7	274	1.7	2,212
Second	1.1	8.4	2,756	(50.8)	29	36.5	232	1.6	2,025
Middle	1.4	7.0	2,757	(45.9)	38	45.7	193	1.7	2,004
Fourth	1.5	9.1	2,966	(62.9)	45	56.8	271	1.9	2,129
Highest	1.3	9.6	3,414	(37.6)	44	58.0	327	1.7	2,300
Total	1.3	8.9	14,634	45.2	192	45.9	1,297	1.7	10,669

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Means are calculated excluding respondents who gave non-numeric responses.

Table 13.5.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men

Among all men age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among men who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among men who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	All men			Men who had 2+ partners in the past 12 months		Men who had intercourse in the past 12 months with a person who neither was their wife nor lived with them		Men who ever had sexual intercourse ¹	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men	Mean number of sexual partners in lifetime	Number of men
Age									
15-24	2.0	12.5	2,486	(59.4)	51	78.4	310	2.2	847
15-19	0.7	6.1	1,526	*	10	75.1	93	1.7	280
20-24	4.2	22.6	960	(64.9)	40	79.8	217	2.4	567
25-29	9.5	21.9	710	43.9	67	67.5	156	2.8	623
30-39	8.0	11.8	1,628	21.9	130	60.7	192	3.0	1,598
40-49	7.0	6.4	1,022	6.1	71	58.5	65	3.1	1,019
Marital status									
Never married	3.4	17.3	2,867	69.7	97	74.3	495	2.8	1,109
Married or living together	7.5	6.4	2,860	9.3	214	57.2	184	2.7	2,860
Divorced/separated/widowed	7.7	36.7	119	*	9	(67.6)	44	5.3	119
Type of union									
In polygynous union	58.6	20.9	77	(7.3)	45	*	16	6.5	77
In non-polygynous union	6.1	6.0	2,783	9.8	169	56.2	168	2.6	2,783
Not currently in union	3.5	18.0	2,986	68.8	106	73.8	539	3.1	1,227
Residence									
Urban	7.6	20.3	1,115	33.6	85	71.9	226	4.4	811
Rural	5.0	10.5	4,731	27.2	235	68.5	496	2.4	3,277
Province									
City of Kigali	7.5	20.3	879	43.7	66	69.5	178	4.6	642
South	3.8	10.3	1,239	20.2	48	60.6	128	2.3	855
West	6.2	11.0	1,268	22.8	78	70.8	140	2.6	876
North	3.4	9.9	886	(21.9)	30	71.0	88	2.1	621
East	6.2	12.0	1,574	30.4	98	74.2	189	2.8	1,094
Education									
No education	5.9	6.1	420	*	25	(50.6)	25	2.5	388
Primary	5.6	11.4	3,569	23.8	200	64.3	406	2.8	2,671
Secondary	4.9	14.9	1,562	45.0	77	79.8	232	3.1	780
More than secondary	6.3	19.7	295	*	18	73.8	58	3.2	249
Wealth quintile									
Lowest	5.0	10.6	924	(19.1)	47	54.4	97	2.4	702
Second	3.4	8.4	1,076	(23.2)	36	63.1	90	2.4	737
Middle	5.8	10.4	1,227	24.8	71	66.4	128	2.3	841
Fourth	6.1	12.9	1,278	34.8	78	78.8	165	3.1	882
Highest	6.6	18.1	1,342	34.6	88	73.5	243	3.8	926
Total 15-49	5.5	12.4	5,846	28.9	320	69.6	723	2.8	4,088
50-59	4.1	3.7	667	(26.3)	27	(52.9)	25	4.1	661
Total 15-59	5.3	11.5	6,513	28.7	347	69.0	747	3.0	4,748

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Means are calculated excluding respondents who gave non-numeric responses.

Table 13.6 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, percentage reporting that a condom was used the last time they paid for sexual intercourse, according to age, Rwanda DHS 2019-20

Age	Among all men:			Among men who paid for sex in the past 12 months:	
	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
15-24	1.3	0.8	2,486	*	19
15-19	0.4	0.3	1,526	*	5
20-24	2.6	1.5	960	*	14
25-29	6.8	3.0	710	*	21
30-39	6.1	2.2	1,628	(65.9)	37
40-49	4.6	0.8	1,022	*	9
Total 15-49	3.9	1.5	5,846	75.1	85
50-59	4.3	0.8	667	*	5
Total 15-59	3.9	1.4	6,513	75.9	91

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.7.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women by testing status and by whether they received the results of the last test, percentage of women ever tested, and percentage of women who were tested in the past 12 months and received the results of the last test, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested ¹				
Age								
15-24	93.1	53.6	1.8	44.6	100.0	55.4	27.2	5,672
15-19	89.2	34.6	1.9	63.5	100.0	36.5	16.6	3,258
20-24	98.5	79.3	1.6	19.1	100.0	80.9	41.5	2,414
25-29	99.8	93.2	1.6	5.3	100.0	94.7	49.9	2,073
30-39	99.9	94.9	1.5	3.6	100.0	96.4	43.7	4,190
40-49	99.7	91.5	1.3	7.3	100.0	92.7	29.5	2,699
Marital status								
Never married	93.3	53.5	1.9	44.7	100.0	55.3	25.4	5,914
Ever had sex	96.9	80.2	2.1	17.7	100.0	82.3	43.4	1,964
Never had sex	91.5	40.2	1.8	58.1	100.0	41.9	16.4	3,950
Married/living together	99.9	95.1	1.4	3.6	100.0	96.4	43.4	7,401
Divorced/separated/widowed	99.6	92.4	1.3	6.3	100.0	93.7	37.3	1,318
Residence								
Urban	98.8	82.4	1.5	16.0	100.0	84.0	40.3	2,909
Rural	96.8	76.9	1.6	21.5	100.0	78.5	34.4	11,725
Province								
City of Kigali	99.0	83.6	1.7	14.7	100.0	85.3	38.8	2,166
South	97.7	77.3	1.7	21.0	100.0	79.0	35.7	3,065
West	97.2	75.2	1.6	23.2	100.0	76.8	39.2	3,174
North	96.2	78.7	1.7	19.6	100.0	80.4	36.0	2,226
East	96.5	77.4	1.3	21.3	100.0	78.7	30.6	4,003
Education								
No education	98.9	89.3	1.1	9.6	100.0	90.4	35.7	1,377
Primary	96.4	78.4	1.4	20.2	100.0	79.8	34.7	8,529
Secondary	97.9	71.6	1.8	26.6	100.0	73.4	35.5	4,086
More than secondary	100.0	89.8	3.1	7.1	100.0	92.9	48.4	642
Wealth quintile								
Lowest	96.4	77.4	1.5	21.1	100.0	78.9	34.9	2,741
Second	95.7	76.2	1.4	22.4	100.0	77.6	31.8	2,756
Middle	97.6	77.4	1.5	21.1	100.0	78.9	34.6	2,757
Fourth	98.1	80.1	1.5	18.4	100.0	81.6	37.5	2,966
Highest	98.1	78.7	1.8	19.5	100.0	80.5	38.3	3,414
Total	97.2	78.0	1.6	20.4	100.0	79.6	35.6	14,634

¹ Includes "don't know/missing"

Table 13.7.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men by testing status and by whether they received the results of the last test, percentage of men ever tested, and percentage of men who were tested in the past 12 months and received the results of the last test, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested ¹				
Age								
15-24	96.1	52.2	2.4	45.4	100.0	54.6	23.2	2,486
15-19	94.7	40.4	3.2	56.5	100.0	43.5	17.3	1,526
20-24	98.4	70.9	1.3	27.8	100.0	72.2	32.7	960
25-29	99.7	77.5	0.8	21.7	100.0	78.3	41.1	710
30-39	100.0	72.6	0.5	26.9	100.0	73.1	36.5	1,628
40-49	99.7	70.6	0.5	29.0	100.0	71.0	30.1	1,022
Marital status								
Never married	96.7	57.4	2.3	40.2	100.0	59.8	26.0	2,867
Ever had sex	99.0	74.5	1.0	24.5	100.0	75.5	38.0	1,109
Never had sex	95.2	46.7	3.1	50.2	100.0	49.8	18.5	1,759
Married/living together	99.8	70.6	0.4	29.1	100.0	70.9	34.6	2,860
Divorced/separated/ widowed	100.0	72.1	1.0	26.9	100.0	73.1	30.4	119
Residence								
Urban	99.3	71.5	0.8	27.7	100.0	72.3	34.9	1,115
Rural	98.0	62.4	1.5	36.1	100.0	63.9	29.2	4,731
Province								
City of Kigali	99.3	75.0	0.3	24.7	100.0	75.3	32.3	879
South	97.9	60.4	1.2	38.4	100.0	61.6	27.2	1,239
West	98.4	61.1	1.2	37.7	100.0	62.3	36.1	1,268
North	97.3	72.1	2.3	25.6	100.0	74.4	34.1	886
East	98.4	59.0	1.6	39.3	100.0	60.7	24.8	1,574
Education								
No education	98.2	64.4	0.7	35.0	100.0	65.0	26.2	420
Primary	98.0	60.9	1.4	37.6	100.0	62.4	28.4	3,569
Secondary	98.6	67.9	1.6	30.5	100.0	69.5	32.5	1,562
More than secondary	100.0	83.2	0.0	16.8	100.0	83.2	47.5	295
Wealth quintile								
Lowest	96.7	58.0	1.6	40.4	100.0	59.6	24.9	924
Second	98.5	59.7	1.4	39.0	100.0	61.0	28.4	1,076
Middle	98.0	61.7	1.7	36.6	100.0	63.4	28.4	1,227
Fourth	98.4	66.0	1.7	32.3	100.0	67.7	31.2	1,278
Highest	99.3	72.5	0.4	27.0	100.0	73.0	36.5	1,342
Total 15-49	98.3	64.2	1.3	34.5	100.0	65.5	30.3	5,846
50-59	99.8	66.1	0.2	33.7	100.0	66.3	24.9	667
Total 15-59	98.4	64.4	1.2	34.4	100.0	65.6	29.8	6,513

¹ Includes "don't know/missing"

Table 13.8 Pregnant women counseled and tested for HIV

Among all women age 15-49 who gave birth in the 2 years preceding the survey, percentage who received counseling on HIV during antenatal care, percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counseling, and percentage who received an HIV test during ANC or labor for their most recent birth by whether they received their test results, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who received counseling on HIV during antenatal care ¹	Percentage who were tested for HIV during antenatal care and who:			Percentage who received counseling on HIV and an HIV test during ANC, and the results	Percentage who had an HIV test during ANC or labor and who: ²		Number of women who gave birth in the past 2 years ³
		Received results and received post-test counseling	Received results and did not receive post-test counseling	Did not receive results		Received results	Did not receive results	
Age								
15-24	84.2	84.2	11.9	0.7	83.2	96.9	0.7	730
15-19	85.2	84.3	13.0	0.9	83.4	97.4	0.9	98
20-24	84.0	84.1	11.7	0.7	83.2	96.9	0.7	632
25-29	88.4	87.6	8.5	0.4	87.7	97.1	0.4	754
30-39	87.5	88.6	7.7	0.3	87.1	96.8	0.3	1,430
40-49	86.8	84.4	10.1	0.3	85.9	95.1	0.6	321
Marital status								
Never married	80.8	82.2	10.4	0.2	80.0	95.0	0.2	345
Married/living together	87.5	87.6	9.0	0.5	86.9	97.2	0.5	2,665
Divorced/separated/ widowed	88.7	86.4	7.4	0.5	88.2	94.3	0.5	226
Residence								
Urban	85.3	85.3	11.6	0.0	85.1	98.2	0.0	526
Rural	87.2	87.2	8.6	0.5	86.5	96.4	0.6	2,710
Province								
City of Kigali	82.8	83.2	13.1	0.0	82.8	98.0	0.0	422
South	89.0	90.2	6.2	0.4	88.6	96.8	0.4	689
West	85.4	88.6	6.9	0.9	84.5	96.3	0.9	775
North	82.1	81.6	13.9	0.4	81.2	95.7	0.6	477
East	91.3	87.5	8.6	0.3	90.4	97.0	0.3	873
Education								
No education	87.4	86.8	5.4	1.2	86.2	93.6	1.2	326
Primary	86.8	86.7	9.0	0.4	86.2	96.3	0.4	2,047
Secondary	88.4	88.8	9.1	0.3	87.9	98.9	0.3	708
More than secondary	80.0	82.0	17.2	0.0	79.2	99.1	0.0	155
Wealth quintile								
Lowest	84.9	84.6	8.2	0.7	84.1	93.5	0.7	754
Second	86.0	86.6	9.2	0.8	85.0	96.9	0.8	657
Middle	89.1	88.8	8.2	0.2	89.0	97.7	0.2	613
Fourth	88.5	88.8	8.0	0.3	87.4	97.4	0.5	641
Highest	86.5	86.4	12.1	0.0	86.2	99.1	0.0	571
Total	86.9	86.9	9.1	0.4	86.2	96.7	0.5	3,236

¹ In this context, "counseling" means that someone talked with the respondent about all three of the following topics: (1) babies getting HIV from their mother, (2) preventing the virus, and (3) getting tested for HIV.

² Women were asked whether they received an HIV test during labor only if they were not tested for HIV during ANC.

³ Denominator for percentages includes women who did not receive antenatal care for their last birth in the past 2 years.

Table 13.9 Male circumcision

Percent distribution of men age 15-49 by circumcision status and provider of circumcision, and percentage of men circumcised, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Circumcised by:			Not circumcised	Don't know/missing circumcision status	Total	Percentage of men circumcised ¹	Number of men
	Health worker/professional	Traditional practitioner/family/friend	Other/don't know/missing					
Age								
15-24	68.5	2.8	2.0	26.7	0.0	100.0	73.3	2,486
15-19	67.5	3.0	2.1	27.4	0.0	100.0	72.6	1,526
20-24	70.2	2.4	1.9	25.5	0.0	100.0	74.5	960
25-29	55.5	3.2	2.3	38.8	0.2	100.0	61.0	710
30-39	38.4	3.0	2.5	56.1	0.0	100.0	43.9	1,628
40-49	26.2	2.2	1.1	70.5	0.0	100.0	29.5	1,022
Residence								
Urban	68.5	3.1	3.1	25.4	0.0	100.0	74.6	1,115
Rural	47.1	2.7	1.8	48.4	0.0	100.0	51.6	4,731
Province								
City of Kigali	67.1	3.1	2.2	27.6	0.0	100.0	72.4	879
South	37.2	3.4	0.9	58.6	0.0	100.0	41.4	1,239
West	54.9	5.1	2.6	37.4	0.0	100.0	62.6	1,268
North	47.6	1.4	0.8	50.2	0.0	100.0	49.8	886
East	52.1	1.1	3.1	43.6	0.1	100.0	56.3	1,574
Religion								
Catholic	48.9	2.7	1.3	47.1	0.0	100.0	52.9	2,455
Protestant	52.5	2.5	2.1	43.0	0.0	100.0	57.0	2,340
Adventist	52.3	2.9	2.0	42.8	0.0	100.0	57.2	748
Muslim	69.1	8.9	12.7	9.3	0.0	100.0	90.7	153
Traditional	*	*	*	*	*	*	*	0
Jehovah's Witness	(48.2)	(4.2)	(4.5)	(43.0)	(0.0)	(100.0)	(57.0)	30
Other	*	*	*	*	*	*	*	8
No religion	43.0	1.8	2.7	52.6	0.0	100.0	47.4	112
Total 15-49	51.1	2.8	2.0	44.0	0.0	100.0	56.0	5,846
50-59	18.3	1.9	1.8	78.0	0.0	100.0	22.0	667
Total 15-59	47.8	2.7	2.0	47.5	0.0	100.0	52.5	6,513

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes all men who report they are circumcised, regardless of provider

Table 13.10 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
	STI	Bad-smelling/abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad-smelling/abnormal discharge from penis	Genital sore or ulcer	STI/abnormal discharge from penis/sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	4.1	10.7	5.5	13.6	2,090	3.4	3.8	4.5	6.7	847
15-19	2.6	9.8	5.7	13.1	539	2.5	1.7	4.8	5.5	280
20-24	4.6	11.0	5.5	13.7	1,552	3.9	4.8	4.4	7.3	567
25-29	4.9	12.1	5.1	14.0	1,855	3.1	3.6	5.0	6.6	623
30-39	4.6	11.3	5.5	13.5	4,068	2.9	3.0	5.8	6.7	1,598
40-49	4.1	10.4	6.1	12.4	2,671	2.4	2.4	6.0	6.5	1,019
Marital status										
Never married	4.3	10.7	5.2	13.1	1,964	3.4	4.0	4.5	6.5	1,109
Married/living together	4.1	10.9	5.2	12.9	7,401	2.6	2.5	5.7	6.6	2,860
Divorced/separated/widowed	6.8	12.9	8.1	16.2	1,318	5.9	8.3	7.3	9.0	119
Circumcised										
Yes ¹	na	na	na	na	na	3.0	3.0	4.2	5.5	2,005
No	na	na	na	na	na	2.8	3.2	6.6	7.7	2,083
Residence										
Urban	6.1	13.2	5.5	15.6	2,110	4.5	3.3	5.4	6.9	811
Rural	4.0	10.6	5.6	12.8	8,574	2.5	3.0	5.5	6.6	3,277
Province										
City of Kigali	5.9	15.6	5.7	18.2	1,610	4.8	2.7	5.5	6.6	642
South	4.3	8.7	4.3	10.6	2,254	2.0	2.8	3.4	4.8	855
West	3.3	12.9	5.3	14.9	2,268	1.8	3.8	4.6	6.4	876
North	3.9	9.7	5.7	11.9	1,622	2.5	2.3	6.2	7.4	621
East	5.0	9.8	6.7	12.3	2,929	3.7	3.4	7.3	7.9	1,094
Education										
No education	4.4	9.5	5.8	11.8	1,314	3.1	3.2	7.3	7.6	388
Primary	4.4	11.3	6.1	13.5	6,764	2.9	3.3	5.8	7.1	2,671
Secondary	4.8	11.9	4.8	14.1	2,116	3.0	2.9	4.6	5.8	780
More than secondary	3.3	9.2	1.8	10.9	490	2.0	1.3	1.2	2.4	249
Wealth quintile										
Lowest	3.9	8.6	6.0	11.1	2,212	3.7	4.7	6.7	8.6	702
Second	4.7	10.7	5.5	13.4	2,030	1.1	2.4	4.4	5.5	737
Middle	4.0	12.7	6.0	14.3	2,004	3.3	3.4	7.2	8.4	841
Fourth	5.3	12.3	6.1	14.6	2,133	2.5	2.1	4.9	5.7	882
Highest	4.4	11.4	4.4	13.4	2,305	3.8	3.0	4.3	5.5	926
Total 15-49	4.4	11.1	5.6	13.3	10,684	2.9	3.1	5.4	6.6	4,088
50-59	na	na	na	na	na	1.8	1.1	3.7	4.8	661
Total 15-59	na	na	na	na	na	2.8	2.8	5.2	6.4	4,748

na = Not applicable

¹ Includes all men who report they are circumcised, regardless of provider

Table 13.11 Women and men seeking treatment for STIs

Percentage of women and men age 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, Rwanda DHS 2019-20

Source of advice or treatment	Women	Men
Clinic/hospital/private doctor/other health professional	64.4	62.3
Advice or medicine from shop/pharmacy	0.8	2.1
Advice or treatment from any other source	2.5	1.8
No advice or treatment	32.4	34.6
Number with STI or symptoms of STI	1,422	271

Table 13.12 Comprehensive knowledge about HIV among young people

Percentage of young women and young men age 15-24 with comprehensive knowledge about HIV, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women		Men	
	Percentage with comprehensive knowledge of HIV ¹	Number of respondents	Percentage with comprehensive knowledge of HIV ¹	Number of respondents
Age				
15-19	54.3	3,258	54.7	1,526
15-17	52.4	2,158	53.8	1,001
18-19	58.1	1,100	56.3	525
20-24	65.0	2,414	61.6	960
20-22	63.3	1,470	59.9	612
23-24	67.6	943	64.5	348
Marital status				
Never married	57.3	4,732	57.2	2,346
Ever had sex	60.2	1,151	61.5	707
Never had sex	56.3	3,582	55.4	1,639
Ever married	66.7	940	59.3	140
Residence				
Urban	60.3	1,140	64.7	462
Rural	58.5	4,532	55.7	2,024
Education				
No education	49.1	77	(33.0)	49
Primary	52.6	2,820	52.6	1,357
Secondary	65.3	2,649	63.7	1,031
More than secondary	69.1	126	78.2	50
Total	58.8	5,672	57.4	2,486

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV. The components of comprehensive knowledge are presented in Tables 13.1 and 13.2.

Table 13.13 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women				Men			
	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)
Age								
15-19	4.5	3,258	na	na	10.1	1,526	na	na
15-17	4.8	2,158	na	na	9.5	1,001	na	na
18-19	4.0	1,100	22.0	1,100	11.5	525	24.0	525
20-24	2.9	2,414	20.8	2,414	5.4	960	21.9	960
20-22	3.4	1,470	21.6	1,470	5.4	612	22.7	612
23-24	2.1	943	19.5	943	5.3	348	20.3	348
Residence								
Urban	3.6	1,140	21.7	801	6.5	462	23.7	319
Rural	3.9	4,532	21.0	2,713	8.7	2,024	22.3	1,166
Education								
No education	11.1	77	32.2	63	(12.1)	49	(21.0)	38
Primary	4.6	2,820	26.6	1,710	9.6	1,357	25.0	801
Secondary	3.0	2,649	16.2	1,614	6.6	1,031	20.0	597
More than secondary	0.0	126	5.1	126	3.3	50	17.0	50
Total	3.8	5,672	21.1	3,514	8.3	2,486	22.6	1,485

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

Table 13.14 Premarital sexual intercourse among young people

Among never-married women and men age 15-24, percentage who have never had sexual intercourse, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women age 15-24		Men age 15-24	
	Percentage who have never had sexual intercourse	Number of never-married women	Percentage who have never had sexual intercourse	Number of never-married men
Age				
15-19	85.7	3,175	81.8	1,523
15-17	91.0	2,149	87.3	1,001
18-19	74.4	1,026	71.3	523
20-24	55.3	1,557	47.7	823
20-22	58.5	1,094	51.6	567
23-24	47.9	464	39.3	256
Residence				
Urban	69.7	992	61.1	449
Rural	77.3	3,740	71.9	1,897
Education				
No education	(57.3)	49	(61.4)	34
Primary	72.0	2,240	67.8	1,260
Secondary	79.6	2,322	73.7	1,003
More than secondary	77.1	122	50.2	50
Total	75.7	4,732	69.8	2,346

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 13.15.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Women

Among all young women age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among young women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young women who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women age 15-24			Women age 15-24 who had 2+ partners in the past 12 months		Women age 15-24 who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women
Age							
15-19	0.6	6.1	3,258	*	21	42.8	199
15-17	0.2	3.3	2,158	*	5	34.1	72
18-19	1.5	11.6	1,100	*	16	47.7	127
20-24	2.0	15.6	2,414	(45.4)	49	47.3	377
20-22	1.8	15.6	1,470	*	26	47.1	230
23-24	2.4	15.6	943	*	22	47.6	147
Marital status							
Never married	1.0	11.4	4,732	(54.9)	47	45.1	538
Ever married	2.3	4.0	940	*	22	(54.7)	38
Residence							
Urban	2.3	15.8	1,140	(42.3)	26	56.8	180
Rural	1.0	8.7	4,532	(46.4)	43	40.7	396
Education							
No education	1.3	12.4	77	*	1	*	9
Primary	1.6	11.6	2,820	(37.4)	44	40.2	328
Secondary	0.9	8.3	2,649	(58.5)	23	51.4	221
More than secondary	0.7	13.1	126	*	1	*	17
Total 15-24	1.2	10.1	5,672	44.8	69	45.7	576

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.15.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Men

Among all young men age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among young men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young men who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Men age 15-24			Men age 15-24 who had 2+ partners in the past 12 months		Men age 15-24 who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	
	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men
Age							
15-19	0.7	6.1	1,526	*	10	75.1	93
15-17	0.2	2.6	1,001	*	2	(65.7)	26
18-19	1.7	12.8	525	*	9	78.7	67
20-24	4.2	22.6	960	(64.9)	40	79.8	217
20-22	4.6	23.2	612	(74.5)	28	80.9	142
23-24	3.5	21.6	348	*	12	77.8	75
Marital status							
Never married	1.8	12.8	2,346	(68.2)	43	78.0	300
Ever married	6.0	7.5	140	*	8	*	10
Residence							
Urban	2.8	21.2	462	*	13	76.3	98
Rural	1.9	10.5	2,024	(61.6)	38	79.4	212
Education							
No education	(2.3)	(6.0)	49	*	1	*	3
Primary	2.1	12.9	1,357	(67.9)	29	75.0	175
Secondary	2.0	11.8	1,031	*	20	83.1	122
More than secondary	2.0	20.8	50	*	1	*	10
Total 15-24	2.0	12.5	2,486	(59.4)	51	78.4	310

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.16 Recent HIV tests among young people

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, percentage who were tested for HIV in the past 12 months and received the results of the last test, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women age 15-24 who have had sexual intercourse in the past 12 months:		Men age 15-24 who have had sexual intercourse in the past 12 months:	
	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age				
15-19	54.8	273	29.7	96
15-17	47.4	79	(25.2)	26
18-19	57.8	194	31.4	70
20-24	55.3	1,150	43.8	342
20-22	57.0	567	44.1	184
23-24	53.7	583	43.4	159
Marital status				
Never married	54.7	538	41.8	300
Ever married	55.5	885	38.2	139
Total 15-24	55.2	1,423	40.7	438

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 13.17 Knowledge and coverage of self-testing for HIV

Percentage of women and men age 15-49 who have ever heard of HIV self-testing kits, and percentage who have ever used an HIV self-testing kit, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women			Men		
	Ever heard of HIV self-testing kits	Ever used an HIV self-testing kit	Number of women	Ever heard of HIV self-testing kits	Ever used an HIV self-testing kit	Number of men
Residence						
Urban	30.0	3.1	2,909	37.4	4.2	1,115
Rural	14.5	0.9	11,725	19.1	1.2	4,731
Education						
No education	10.6	0.4	1,377	12.4	0.6	420
Primary	12.8	0.5	8,529	17.8	0.7	3,569
Secondary	23.9	2.2	4,086	27.6	2.2	1,562
More than secondary	55.5	8.2	642	69.2	12.7	295
Wealth quintile						
Lowest	8.7	0.3	2,741	12.1	0.4	924
Second	10.1	0.3	2,756	13.8	0.7	1,076
Middle	14.5	0.7	2,757	17.7	0.8	1,227
Fourth	18.6	1.5	2,966	23.9	0.6	1,278
Highest	32.4	3.3	3,414	40.1	5.4	1,342
Total 15-49	17.6	1.3	14,634	22.6	1.7	5,846
50-59	na	na	na	20.9	0.4	667
Total 15-59	na	na	na	22.4	1.6	6,513

na = Not applicable

Table 13.18 HIV testing for preuptial purposes and as a couple

Percentage of all women and men age 15-49 who were ever tested for the HIV virus for preuptial purposes and percentage of ever-married women and men age 15-49 who were ever tested for the HIV virus as a couple, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of all women and men age 15-49 who were ever tested for the HIV virus for preuptial purposes				Percentage of ever-married women and men age 15-49 who were ever tested for the HIV virus as a couple			
	Percentage of women	Number of women	Percentage of men	Number of men	Percentage of women	Number of women	Percentage of men	Number of men
Age								
15-24	25.6	5,672	21.7	2,486	86.8	940	80.2	140
15-19	12.1	3,258	14.1	1,526	80.1	83	*	3
20-24	43.8	2,414	33.7	960	87.5	856	81.1	137
25-29	64.4	2,073	60.4	710	93.1	1,470	93.1	381
30-39	67.8	4,190	77.4	1,628	93.7	3,770	96.4	1,455
40-49	36.4	2,699	60.0	1,022	83.8	2,541	93.5	1,003
Marital status								
Never married	19.2	5,914	20.6	2,867	na	na	na	na
Ever had sex	30.7	1,964	25.7	1,109	na	na	na	na
Never had sex	13.5	3,950	17.3	1,759	na	na	na	na
Married/living together	65.2	7,401	76.0	2,860	92.5	7,401	95.1	2,860
Divorced/separated/widowed	49.4	1,318	64.4	119	75.5	1,318	74.2	119
Residence								
Urban	48.3	2,909	47.8	1,115	90.3	1,545	94.2	488
Rural	44.4	11,725	48.8	4,731	89.9	7,175	94.3	2,491
Province								
City of Kigali	50.9	2,166	45.8	879	89.5	1,207	96.1	398
South	44.6	3,065	51.4	1,239	90.4	1,819	93.6	617
West	47.8	3,174	47.7	1,268	90.0	1,891	93.2	655
North	44.4	2,226	54.8	886	87.7	1,369	93.6	490
East	40.9	4,003	45.1	1,574	91.0	2,434	95.1	819
Education								
No education	41.9	1,377	55.8	420	83.3	1,217	91.7	361
Primary	46.6	8,529	51.2	3,569	90.3	5,700	94.6	2,103
Secondary	40.9	4,086	38.9	1,562	92.8	1,420	94.3	373
More than secondary	60.4	642	57.4	295	95.4	384	96.0	142
Wealth quintile								
Lowest	41.9	2,741	51.5	924	84.8	1,862	90.8	582
Second	42.5	2,756	48.9	1,076	88.1	1,697	95.6	566
Middle	46.0	2,757	47.8	1,227	91.8	1,698	95.0	645
Fourth	47.9	2,966	48.1	1,278	92.0	1,765	93.5	623
Highest	46.9	3,414	47.5	1,342	93.5	1,699	96.5	562
Total 15-49	45.2	14,634	48.6	5,846	89.9	8,720	94.3	2,979
50-59	na	na	30.9	667	na	na	85.2	653
Total 15-59	na	na	46.8	6,513	na	na	92.6	3,632

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 13.19 Specific accepting attitudes toward a family member living with HIV/AIDS and teaching teenagers to use condoms to prevent HIV infection

Among women age 15-49 who have heard of HIV or AIDS, percentage who express specific accepting attitudes toward a family member living with HIV/AIDS and who agree that teenagers age 12-14 should be taught how to use condoms to prevent HIV infection, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who would keep the secret if a family member was infected with HIV	Percentage who would care for HIV-infected family member in their own home	Percentage who agree that teenagers age 12-14 should be taught how to use condoms to prevent HIV infection	Number of respondents who have heard of HIV or AIDS
Age				
15-24	41.8	93.3	89.7	5,636
15-19	42.3	92.2	88.8	3,226
20-24	41.1	94.9	90.8	2,410
25-29	36.5	96.1	92.9	2,071
30-39	31.0	96.0	89.9	4,190
40-49	30.9	97.3	88.8	2,696
Marital status				
Never married	41.2	93.8	89.8	5,876
Ever had sex	42.5	94.9	92.0	1,957
Never had sex	40.6	93.2	88.7	3,918
Married/living together	32.1	96.1	90.2	7,400
Divorced/separated/widowed	33.7	97.0	90.5	1,318
Residence				
Urban	41.6	96.8	87.6	2,905
Rural	34.5	94.9	90.7	11,688
Province				
City of Kigali	37.4	96.9	87.2	2,164
South	34.4	94.6	90.8	3,057
West	30.4	93.7	89.0	3,163
North	38.8	95.0	89.6	2,215
East	39.1	96.1	92.1	3,993
Education				
No education	33.3	93.9	88.1	1,373
Primary	34.1	94.5	90.5	8,497
Secondary	39.9	96.8	90.3	4,081
More than secondary	40.4	97.8	86.6	642
Wealth quintile				
Lowest	35.9	92.1	89.8	2,724
Second	31.8	94.0	91.0	2,741
Middle	34.6	96.0	91.3	2,753
Fourth	35.9	96.7	90.5	2,964
Highest	40.4	96.8	88.0	3,412
Total	35.9	95.2	90.1	14,593

Key Findings

- **Adult mortality:** The adult mortality rate is 1.82 deaths per 1,000 population among women and 3.21 deaths per 1,000 population among men.
- **Lifetime risk of maternal death:** The lifetime risk of maternal death indicates that one in 125 women in Rwanda will die from maternal causes.
- **Maternal mortality ratio:** The maternal mortality ratio for the 5-year period before the 2019-20 RDHS is estimated at 203 maternal deaths per 100,000 live births.
- **Pregnancy-related mortality ratio:** The estimated pregnancy-related mortality ratio for the 5-year period preceding the 2019-20 DHS is 226 deaths per 100,000 live births.

Adult and maternal mortality indicators can be used to assess the health status of a population. In most developing countries, reproductive health is a major concern, and there is a need for reliable data on maternal deaths.

WHO explains the problem of maternal mortality using a delay model that includes delays in seeking health care, delays in reaching health facilities, and poor health services in facilities. This model has been associated with human, health system, and socioeconomic factors such as poverty, poor emergency obstetric services, and fatalistic beliefs. These problems have contributed to a high incidence of infectious diseases, postpartum hemorrhage, hypertensive disorders, unsafe abortions, and prolonged labor, which have led to high adult and maternal mortality. The target of SDG 3.1 is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030.

Estimation of mortality rates requires complete and accurate data on adult and maternal deaths. In the 2019-20 RDHS, data were collected from all female respondents on the survival of their sisters and brothers to obtain an estimate of adult mortality. Questions were included to determine if any of the sisters' deaths were maternity-related, which permits an estimation of maternal mortality—a key indicator of maternal health and well-being.

This chapter presents information on the levels of and trends in maternal mortality in Rwanda. The chapter includes a summary measure ($_{35}q_{15}$) that represents the probability of dying between exact ages 15 and 50—that is, between the 15th and 50th birthdays.

14.1 DATA

To obtain a sibling history, each respondent was first asked to provide the total number of her mother's live births. The respondent was then asked to provide a list of all children born to her mother, starting with the first born, and the survival status of each sibling. Information on current age was collected for each surviving sibling. Age at death and number of years since death were recorded for each deceased sibling. When a respondent could not provide precise information on age at death or years since death, the interviewers were instructed to accept an approximate but quantitative answer. For sisters who died at age

12 or above, three questions were used to determine whether the death was maternity-related: “Was [NAME OF SISTER] pregnant when she died?” and, if not, “Did she die during childbirth?” and, if not, “Did she die within 2 months after the end of a pregnancy or childbirth?” Estimation of adult and pregnancy-related mortality by either direct or indirect means requires reasonably accurate reporting of the respondent’s number of sisters and brothers, the number who have died, and (for pregnancy-related mortality) the number of sisters who died of pregnancy-related causes. **Table 14.1** shows the number of siblings reported by respondents and the completeness of data on current age, age at death, and years since death.

A total of 77,668 siblings were recorded in the adult mortality section of the 2019-20 RDHS. There were only 166 siblings (0.2%) for whom survival status was not reported. Current age (used to estimate exposure to death) was reported for all surviving siblings. Also, data on age at death and years since death were obtained for all dead siblings. It is interesting to note that there were no reports of missing dates in the adult mortality section. The sex ratio for enumerated siblings (the ratio of brothers to sisters multiplied by 100) is 100.7.

14.2 DIRECT ESTIMATES OF ADULT MORTALITY

Adult mortality rate

The number of adult deaths per 1,000 population age 15-49. Adult mortality rates by 5-year age groups are calculated as follows: the number of deaths to a respondent’s siblings in each age group is divided by the number of person-years of exposure to the risk of dying in that age group during the 5 years preceding the survey. The number of deaths is the number of siblings (brothers or sisters) reported as having died within the 5 years preceding the survey. The person-years of exposure in each age group are calculated for both surviving and dead siblings based on their current age (living siblings) or age at death and years since death (dead siblings).

Sample: Siblings (both living and dead) who were age 15-49 in the 5 years preceding the survey, by sex and 5-year age groups

One way to assess the quality of the data used to estimate pregnancy-related mortality is to evaluate the plausibility and stability of overall adult mortality. If estimated rates of overall adult mortality are implausible, rates based on a subset of deaths (pregnancy-related deaths in particular) may have questionable plausibility.

The reported ages at death and years since death of the respondents’ brothers and sisters are used to make direct estimates of adult mortality. Age- and sex-specific death rates are presented in this report because of the differentials in exposure to the risk of dying. To ensure a sufficiently large number of adult deaths to generate a robust estimate, the rates are calculated for the 5-year period before the survey (approximately between 2014 -15 to between 2019-20).

Nevertheless, age-specific mortality rates obtained in this manner are subject to considerable sampling variation. Use of this 5-year period was a compromise between the desire for the most recent data and the need to minimize sampling error.

Figure 14.1 Adult mortality rates by age

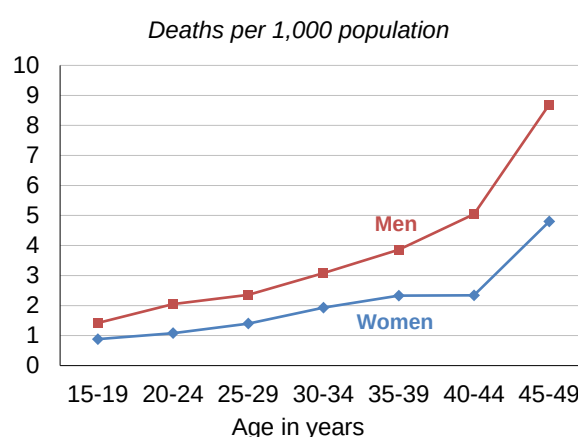


Table 14.2 and **Figure 14.1** show direct estimates of age-specific mortality rates among women and men age 15-49 for the 5-year period before the survey. Overall, the level of adult mortality is higher among men (3.21 deaths per 1,000 population) than among women (1.82 deaths per 1,000 population). Mortality rates rise rapidly with age among women, from 0.88 per 1,000 population in the 15-19 age group to 4.80 per 1,000 population in the 45-49 age group. Similarly, mortality rates among men increase steadily from 1.42 per 1,000 population in the 15-19 age group to 8.69 per 1,000 in the 45-49 age group. Mortality rates are higher among men than among women in all age groups.

14.3 ADULT MORTALITY

Table 14.3 shows the probability of dying between exact ages 15 and 50 ($_{35}q_{15}$) in the 5 years preceding the survey; $_{35}q_{15}$ is the probability of a woman or man who has just reached age 15 dying before age 50 if age-specific death rates in the 5 years before the survey are constant. The 2019-20 RDHS data show that women have a lower probability of dying than men: 71 of 1,000 women age 15 and 124 of 1,000 men age 15 would be expected to die before age 50.

14.4 DIRECT ESTIMATES OF MATERNAL MORTALITY

Maternal mortality rate

The number of maternal deaths per 1,000 women age 15-49. Maternal mortality rates by 5-year age groups are calculated by dividing the number of maternal deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 5 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 5 years preceding the survey either during pregnancy or delivery, or in the 42 days following the delivery or termination of a pregnancy, by their age group at the time of death; deaths due to accidents or violence are excluded. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 5 years preceding the survey, by 5-year age groups

Maternal mortality ratio

The number of maternal deaths per 100,000 live births. The maternal mortality ratio is calculated by dividing the age-standardized maternal mortality rate for women age 15-49 in the 5 years preceding the survey by the general fertility rate (GFR) for the same time period.

Maternal deaths are a subset of all female deaths; they are defined as any deaths that occur during pregnancy or childbirth or within 42 days after the birth or termination of a pregnancy. Maternal deaths do not include deaths due to accidents or violence. Two methods are generally used to estimate maternal mortality in low- and middle-income countries: the indirect sisterhood method (Graham et al. 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan 1991; Stanton et al. 1997). **Table 14.4** presents age-specific direct estimates of maternal mortality from the reported survivorship of sisters for the 5-year period prior to the 2019-20 RDHS. These rates were calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias (the lower boundary for eligibility among women interviewed in the survey is 15 years, and the upper boundary is 49 years), the overall rate for women age 15-49 was standardized by the age distribution of survey respondents.

Table 14.4 shows that the maternal mortality rate among women age 15-49 is 0.25 deaths per 1,000 woman-years of exposure. The overall percentage of female deaths due to maternal causes is 14%.

Because of the small number of maternal deaths in the sample, none of the differences between age groups are statistically significant.

Table 14.5 shows that the estimated maternal mortality ratio is 203 deaths per 100,000 live births during the 5-year period before the survey (with a 95% confidence interval of 125 to 281). Thus, for every 1,000 live births in Rwanda during the 5 years before the 2019-20 RDHS, approximately two women died during pregnancy, during childbirth, or within 2 months after childbirth. The lifetime risk of maternal death (0.008) indicates that of 1,000 women of exact age 15, about eight (one in 125 women) would die before age 50 during pregnancy, during childbirth, or within 2 months of childbirth.

14.5 PREGNANCY-RELATED MORTALITY

Pregnancy-related mortality rate

The number of pregnancy-related deaths per 1,000 women age 15-49. Pregnancy-related mortality rates by 5-year age groups are calculated by dividing the number of pregnancy-related deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 5 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 5 years preceding the survey during pregnancy or delivery, or in the 2 months following the delivery or termination of a pregnancy, by their age group at the time of death. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 5 years preceding the survey, by 5-year age groups

Pregnancy-related mortality ratio

The number of pregnancy-related deaths per 100,000 live births. The pregnancy-related mortality ratio is calculated by dividing the age-standardized pregnancy-related mortality rate for women age 15-49 in the 5 years preceding the survey by the general fertility rate (GFR) for the same time period.

The previous RDHS surveys used a definition of maternal mortality that did not attempt to exclude deaths due to accidents or violence; therefore, the results of those surveys are not comparable with the maternal mortality estimate presented in section 14.4, which deaths due to accidents or violence were excluded from the calculation. A pregnancy-related death is defined as the death of a woman during pregnancy or childbirth or within 2 months of delivery or termination of a pregnancy irrespective of the cause of death. Estimates of pregnancy-related mortality are therefore based solely on the timing of the death in relation to the pregnancy. This definition deviates slightly from the WHO definition of a pregnancy-related death, which limits the window to 42 days. Estimates of the pregnancy-related mortality ratio (PRMR) with confidence intervals for the 2019-20 RDHS is 226 (CI: 143-308) deaths per 100,000 live births.

LIST OF TABLES

For more information on adult and maternal mortality, see the following tables:

- **Table 14.1** **Completeness of information on siblings**
- **Table 14.2** **Adult mortality rates**
- **Table 14.3** **Adult mortality probabilities**
- **Table 14.4** **Maternal mortality rate**
- **Table 14.5** **Maternal mortality ratio**

Table 14.1 Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings, and age at death (AD) and years since death (YSD) of dead siblings (unweighted), Rwanda DHS 2019-20

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
All siblings	38,646	100.0	39,022	100.0	77,668	100.0
Living	32,766	84.8	31,487	80.7	64,253	82.7
Dead	5,823	15.1	7,426	19.0	13,249	17.1
Survival status unknown	57	0.1	109	0.3	166	0.2
Living siblings	32,766	100.0	31,487	100.0	64,253	100.0
Age reported	32,766	100.0	31,487	100.0	64,253	100.0
Dead siblings	5,823	100.0	7,426	100.0	13,249	100.0
AD and YSD reported	5,823	100.0	7,426	100.0	13,249	100.0

Table 14.2 Adult mortality rates

Direct estimates of female and male mortality rates for the 5 years preceding the survey, by 5-year age groups, Rwanda DHS 2019-20

Age	Deaths	Exposure years	Mortality rate ¹
FEMALE			
15-19	18	19,848	0.88
20-24	24	22,473	1.08
25-29	33	23,584	1.40
30-34	45	23,301	1.93
35-39	45	19,189	2.33
40-44	29	12,223	2.34
45-49	34	7,169	4.80
Total 15-49	227	127,787	1.82 ^a
MALE			
15-19	26	18,658	1.42
20-24	45	21,913	2.05
25-29	54	23,039	2.36
30-34	70	22,609	3.08
35-39	69	17,754	3.86
40-44	54	10,657	5.04
45-49	55	6,309	8.69
Total 15-49	372	120,940	3.21 ^a

¹ Expressed per 1,000 population

^a Age-adjusted rate

Table 14.3 Adult mortality probabilities

The probability of dying between ages 15 and 50 for women and men during the 5 years preceding the survey, Rwanda DHS 2019-20

Survey	Female ³⁵ Q ₁₅ ¹	Male ³⁵ Q ₁₅ ¹
2019-20 RDHS	71	124

¹ The probability of dying between exact ages 15 and 50, expressed per 1,000 persons at age 15

Table 14.4 Maternal mortality rate

Direct estimates of maternal mortality rates for the 5 years preceding the survey, by 5-year age groups, Rwanda DHS 2019-20

Age	Percentage of female deaths that are maternal	Maternal deaths ¹	Exposure years	Maternal mortality rate ²
15-19	7.4	1	19,848	0.06
20-24	7.2	2	22,473	0.08
25-29	8.4	3	23,584	0.12
30-34	17.7	8	23,301	0.34
35-39	14.8	7	19,189	0.34
40-44	27.3	8	12,223	0.64
45-49	9.9	3	7,169	0.47
Total 15-49	13.9	32	127,787	0.25 ^a

¹ A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause except accidents or violence.

² Expressed per 1,000 woman-years of exposure

^a Age-adjusted rate

Table 14.5 Maternal mortality ratio

Total fertility rate, general fertility rate, maternal mortality ratio, and lifetime risk of maternal death for the 5 years preceding the survey, Rwanda DHS 2019-20

	Estimate	Confidence interval	
		-2SE	+2SE
Total fertility rate (TFR)	4.2		
General fertility rate (GFR) ¹	121		
Maternal mortality ratio (MMR) ²	203	125	281
Lifetime risk of maternal death ³	0.008		

SE: Standard error

¹ Age-adjusted rate, expressed per 1,000 women age 15-49

² Expressed per 100,000 live births; calculated as the age-adjusted maternal mortality rate (shown in Table 14.4) times 100 divided by the age-adjusted general fertility rate

³ Calculated as $1 - (1 - \text{MMR})^{\text{TFR}}$, where TFR represents the total fertility rate for the 5 years preceding the survey

Key Findings

- **Employment and earnings:** 84% of currently married women age 15-49 were employed in the 12 months before the survey, compared with practically all of currently married men. Twenty-three percent of employed women and 8% of employed men do not receive payment for their work.
- **Women's control over their cash earnings:** 23% of currently married women with cash earnings report that they themselves make decisions about how their earnings are used, a slight increase from the percentage in 2014-15 (20%).
- **Participation in decision making:** 68% of currently married women participate in three specified household decisions (regarding their own health care, household purchases, and visits to their family or relatives), while 6% are not involved in any of these decisions.
- **Attitudes toward wife beating:** 50% of women and 18% of men agree that a husband is justified in beating his wife in at least one of five specified circumstances. Sixty-five percent of women and 39% of men justify wife beating in at least one of seven specified circumstances. Agreement with wife beating has declined substantially over time.
- **Ownership and use of bank accounts and mobile phones:** 21% of women have a bank account that they use, and 48% own a mobile phone. Among women with a mobile phone, 80% use their phone for financial transactions.
- **Reproductive health:** Contraceptive use and antenatal care, delivery assistance, postnatal care, and child survival indicators are all higher among women with higher levels of women's empowerment.

The Rwandan government is committed to promoting gender equality and women's empowerment, and, as a signatory to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the government has adopted a number of institutional and policy measures that support these goals. Examples include the 2003 Rwandan Constitution; the Revised National Gender Policy 2020; Vision 2020; the National Strategy for Transformation (NST1); the 2nd National Action Plan on Implementation of UN Security Council Resolution (UNSCR) 1325 and Related Resolutions on Women, Peace and Security (2018-2022); and gender-based violence policies. The government has also shown an increasing commitment to supporting social and economic empowerment of women and fostering gender equality through constant review of policies, reassessment of priorities, commitment of adequate financial resources, encouragement of women's participation in politics, and effective

implementation of programs such as the Economic Development and Poverty Reduction Strategy and Vision 2020.

This chapter explores women's empowerment in terms of their employment and control over earnings, asset ownership, gender-related attitudes, and household decision making. In order to examine gender differentials, where possible, indicators for women are compared with those for men. In addition, women's responses to specific questions on their participation in household decision making and attitudes towards wife beating are used to examine how selected demographic and health indicators vary by women's empowerment.

15.1 MARRIED WOMEN'S AND MEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.

Sample: Currently married women and men age 15-49

Earning cash for employment

Respondents are asked if they are paid for their labor in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: Currently married women and men age 15-49 employed in the 12 months before the survey

Eighty-four percent of currently married women age 15-49 were employed in the 12 months before the survey, compared with practically all of currently married men (**Table 15.1**). Among those employed, women are less likely than men to be paid in cash only (37% versus 48%). Thirty-two percent of women and 39% of men receive payment in cash and in-kind. Twenty-three percent of women and 8% of men do not receive any payment for their work.

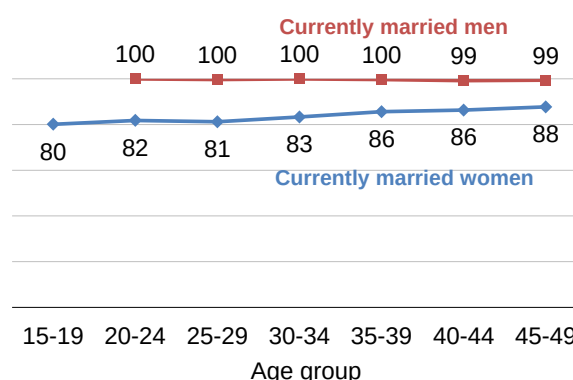
Trends: The percentage of currently married women employed in the 12 months before the survey increased from 81% in 2005 to 94% in 2014-15 before dropping to 84% in 2019-20, whereas the percentage of currently married men employed in the 12 months before the survey has increased over time, from 64% in 2014-15 to 100% in 2019-20. The percentage of employed married women who receive cash earnings only increased from 25% in 2014-15 to 37% in 2019-20. The percentage of employed married men who receive cash only for their work remains almost unchanged over the same period (from 49% to 48%).

Patterns by background characteristics

- Among married women, the percentage currently employed generally increases with age, from 80% in the 15-19 age group to 88% in the 45-49 age group (**Figure 15.1**).
- The percentage of employed married women who are not paid for their work increases with age from 10% among those age 15-19 to 28% among those age 45-49. A similar pattern was observed among employed married men.

Figure 15.1 Employment by age

Percentage of currently married women and men who were employed at any time in the 12 months before the survey



15.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

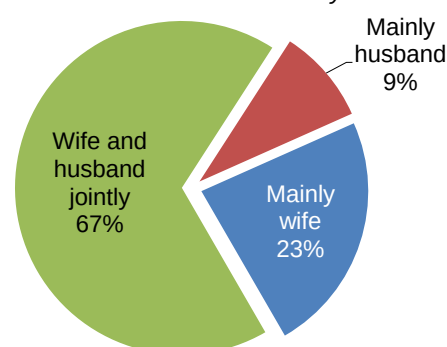
Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.

Sample: Currently married women and men age 15-49 who received cash earnings for employment during the 12 months before the survey

In addition to having access to income, women need to have control over their earnings to be empowered. Currently married women age 15-49 who were paid in cash for employment in the 12 months before the survey were asked who makes decisions about the use of their earnings. **Table 15.2.1** shows that among women earning cash, 23% report that they themselves mainly decide how their cash earnings are used and 67% report that they make such decisions jointly with their husbands. Only 9% say that these decisions are made primarily by their husbands (**Figure 15.2**). Twelve percent of married women earn more than their husbands, 58% earn less than their husbands, and 26% earn about the same as their husbands. Four percent of married women report that their husbands do not have earnings.

Figure 15.2 Control over women's earnings

Percent distribution of currently married women with cash earnings in the 12 months before the survey



Note: Figures may not add up to 100% due to rounding.

Trends: The proportion of currently married women who decide mainly on their own how their earnings will be used increased from 18% in 2010 and 20% in 2014-15 to 23% in 2019-20. The proportion who decides jointly with their husband remained relatively constant from 2010 to 2019-20 (66%-67%).

Patterns by background characteristics

- By province, the proportion of women who decide on their own how their earnings are used is highest in City of Kigali (34%) and lowest in East (18%).
- The percentage of married women whose husband primarily makes decisions about how their cash earnings will be used declines with increasing education, from 10% among those with no education or a primary education to 2% among those with more than a secondary education.

15.3 CONTROL OVER MEN'S EARNINGS

Currently married men who receive cash earnings were asked who makes decisions about the use of their earnings. The majority of currently married men age 15-49 earning cash report that decisions on how their cash earnings are used are made jointly with their wives (82%); 15% say that they make such decisions by themselves, and 3% say the decisions are made primarily by their wives (**Table 15.2.2**). By contrast, when women were asked about decisions regarding their husband's earnings, 24% said that their husband makes these decisions alone and 70% said that the decisions are made jointly; 6% of women said that they primarily make these decisions.

The percentage of men who report joint control over their own cash earnings increases with increasing education, while the percentage who report making decisions about their earnings by themselves declines with increasing education.

15.4 WOMEN'S CONTROL OVER THEIR OWN EARNINGS AND OVER THOSE OF THEIR HUSBANDS

Women's participation in decisions regarding the use of their own and their husband's earnings varies by the amount of their earnings relative to the amount of their husband's earnings. Women who earn about the same as their husband are more likely to decide jointly about the use of their own earnings (82%) and those of their husband (82%) than women who earn more or less than their husband. Conversely, the women who earn the same as their husband are less likely to decide mainly alone about the use of their own earnings (12%) and their husband's earnings (4%) (**Table 15.3**).

Women who earn less than their husband (28%), those who worked but had no cash earnings (26%), and those who are not employed (21%) were most likely to report that their husband primarily decides on his own about the use of his earnings.

15.5 WOMEN'S AND MEN'S OWNERSHIP OF ASSETS

Ownership of a house or land

Respondents who own a house or land, whether alone or jointly with someone else.

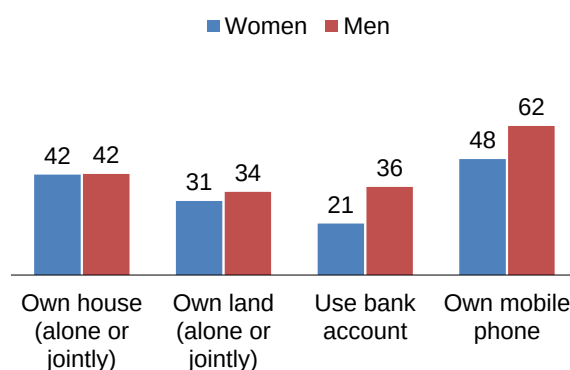
Sample: Women and men age 15-49

In Rwanda, the proportions of women and men who own a house or land are about the same (**Table 15.4.1** and **Table 15.4.2**). Forty-two percent of both women and men age 15-49 own a house (alone or jointly), and 31% of women and 34% of men own land (alone or jointly) (**Figure 15.3**).

Trends: The percentage of women who own a house alone or jointly with someone else declined from 54% in 2010 and 49% in 2014-15 to 42% in 2019-20. The percentage who own land alone or jointly also declined over the same period from 54% and 46% to 31%. Similar patterns were observed for house and land ownership among men.

Figure 15.3 Ownership of assets

Percentage of women and men age 15-49 by ownership of specific items



Patterns by background characteristics

- Ownership of property increases with age among both women and men. For example, 1% each of women and men age 15-19 own a house, compared with 83% of women and 89% of men age 45-49 (**Table 15.4.1** and **Table 15.4.2**).
- By province, house ownership among women and men is highest in North (50% and 52%, respectively) and lowest in City of Kigali (25% and 26%, respectively). The proportion of women and men who own land is also highest in North (45% and 49%, respectively) and lowest in City of Kigali (16% and 26%, respectively).

15.6 POSSESSION OF TITLE OR DEED FOR A HOUSE OR LAND

A title or deed that includes the owner's name is important in establishing legal rights to property. The 2019-20 RDHS sought information from currently married women and men who said that they own a house or land about whether they possess a title or deed for their property and whether their name appears on the title or deed. Thirty-six percent of women and 43% of men age 15-49 who own a house do not have a title or deed for their house (**Tables 15.5.1** and **15.5.2**). Similarly, 32% of women and 38% men who say

that they own land do not have a title deed for their land (**Tables 15.6.1 and 15.6.2**). However, it is notable that among women and men who do have a title or deed to the house or land they own, the majority say that their name is on the title or deed.

15.7 OWNERSHIP AND USE OF BANK ACCOUNTS AND MOBILE PHONES

Ownership of a bank account and a mobile phone are reflections of autonomy, social functioning, and financial independence. Women and men interviewed in the 2019-20 RDHS were asked if they had an account in a bank or other financial institution that they themselves used and if they owned a mobile phone. Those who owned a mobile phone were asked if they used the phone for financial transactions.

Obvious disparities are observed between women and men with respect to ownership and use of bank accounts and ownership of mobile phones. Twenty-one percent of women and 36% of men have an account in a bank or other financial institution that they use, while 48% of women and 62% of men say that they own a mobile phone. Among those with a mobile phone, 80% of women and 84% of men use their phone for financial transactions (**Tables 15.7.1 and 15.7.2**).

Patterns by background characteristics

- The proportions of women and men who own a mobile phone are highest in City of Kigali (77% and 84%, respectively) and lowest in South (40% and 52%, respectively).
- The percentages of women and men who have a bank account and a mobile phone generally increase with increasing education and wealth. For example, ownership and use of a bank account increases from 15% among women with no education to 85% among women with more than a secondary education. Similarly, the proportion of women who own a mobile phone increases from 24% among those with no education to 100% among those with more than a secondary education (**Table 15.7.1 and Table 15.7.2**). Also 25% of men in the lowest wealth quintile own a mobile phone, compared with 85% of men in the highest wealth quintile.

15.8 WOMEN'S PARTICIPATION IN DECISION MAKING

Participation in major household decisions

Women are considered to participate in household decisions if they make decisions alone or jointly with their husband in all three of the following areas: (1) their own health care, (2) major household purchases, and (3) visits to their family or relatives.

Sample: Currently married women age 15-49

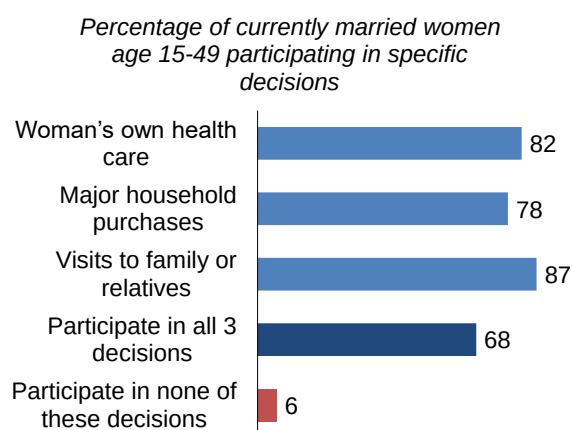
Participation in household decision making is an essential aspect of women's empowerment and reflects women's level of agency within their own household and environment. In the 2019-20 RDHS, currently married women were asked about their participation in decisions about their own health care, major household purchases, and visits to their family or relatives. The majority of currently married women say that they make joint decisions with their husband about their own health care, major household purchases, and visits to their family or relatives (53%, 70%, and 68%, respectively). Nearly 3 in 10 women (29%) say that they themselves make decisions about their own health care, the decision most commonly made by women themselves. Twenty-two percent of women say that decisions about major household purchases are made by their husband (**Table 15.8**).

Similar to women, the majority of currently married men say that they make decisions jointly with their wife about major household purchases (67%). Forty-eight percent of men say that they themselves decide about their own health care, whereas 49% make this decision jointly with their wife.

Overall, 82% of currently married women participate alone or jointly with their husband in decisions regarding their health care, 78% participate in decisions about major household purchases, 87% participate in decisions about visits to their family and relatives, and 68% participate in all three decisions. Only 6% of currently married women say that they are not involved in any of the three specified household decisions (**Table 15.9.1** and **Figure 15.4**).

Trends: Currently married women's participation in all three decisions increased from 59% in 2010 to 65% in 2014-15 and 68% in 2019-20. The percentage of currently married men who participate in making decisions about their own health care and major household purchases has remained unchanged since 2014-15 (93%).

Figure 15.4 Women's participation in decision making



Patterns by background characteristics

- Participation in all three decisions increases from 47% among women age 15-19 to 74% among women age 40-44 before dropping to 72% among women age 45-49.
- Women who are employed but do not earn cash are less likely to participate in all three decisions (63%) than other women (70%).
- Urban women are more likely to participate in all three decisions than rural women (73% versus 67%).
- Women's participation in decision making increases with increasing education. Sixty-three percent of women with no education participate in all three decisions, compared with 88% of women with more than a secondary education.

15.9 ATTITUDES TOWARD WIFE BEATING

Attitudes toward wife beating

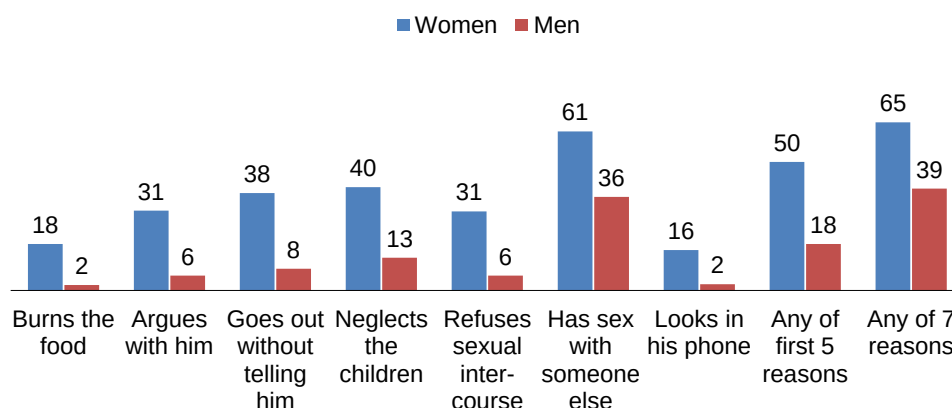
Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following seven circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, she refuses to have sex with him, she has sex with someone else, and she looks in his phone. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

Sample: Women and men age 15-49

Attitudes that accept and normalize violence by a husband against his wife undermine gender equality and women's empowerment. To gain insight into the extent to which spousal violence is accepted, the 2019-20 RDHS collected information on women's and men's attitudes toward a husband beating his wife under specified circumstances. In 2019-20, two circumstances were added to the five included in previous Rwanda DHS surveys: she has sex with someone else and she looks in his phone. Overall, 50% of Rwandan women believe that a husband is justified in beating his wife in at least one of the first five specified circumstances (she burns the food, argues with him, goes out without telling him, neglects the children, or refuses to have sexual intercourse with him), compared with 18% of men (**Table 15.10.1** and **Table 15.10.2**). Thirty-one percent of women agree that wife beating is justified if a wife argues with her husband, 38% if she goes out without telling him, 40% if she neglects the children, 31% if she refuses to have sexual intercourse, and 18% if she burns the food (**Figure 15.5**). Sixty-one percent of women agree that wife beating is justified if a wife has sex with someone else and 16% if she looks in his phone. Overall, men are less likely to justify wife beating in each of the different circumstances than women.

Figure 15.5 Attitudes towards wife beating

Percentage of women and men age 15-49 who agree that a husband is justified in beating his wife for specific reasons



Trends: The percentage of women who agree that wife beating is justified in at least one of the first five specified circumstances declined from 56% in 2010 to 41% in 2014-15 and then increased to 50% in 2019-20. The percentage of men justifying wife beating in at least one of the specified five circumstances decreased from 25% in 2010 to 17% in 2014-15 before increasing slightly to 18% in 2019-20.

Patterns by background characteristics

- Women who are employed but not earning cash are more likely to agree that wife beating is justified in at least one of the first five specified circumstances (57%) than women who are not employed (47%) and women who are employed for cash (48%).
- Formerly married women (55%) are more likely than currently married women and never-married women (49% each) to agree that wife beating is justified in at least one of the first five specified circumstances.
- Rural women are more likely than urban women to have attitudes that justify wife beating (55% versus 30%).
- By province, the percentage of women who agree that wife beating is justified in at least one of the first five circumstances ranges from 27% in City of Kigali to 59% each in South and West.
- Acceptance of wife beating decreases with increasing education and wealth. Sixty-six percent of women with no education agree that wife beating is justified in at least one of the first five specified circumstances, compared with 8% of women with more than a secondary education. Similarly, 68% of women in the lowest wealth quintile agree that wife beating is justified in at least one of the specified circumstances, compared with 28% of women in the highest quintile.

15.10 NEGOTIATING SEXUAL RELATIONS

To assess attitudes toward a wife's right to negotiate safer sexual relations with her husband, women and men were asked whether they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women and asking him to use a condom if she knows he has a sexually transmitted infection (STI).

Most Rwandan women and men agree that a wife is justified in negotiating sexual relations with her husband. Nearly three quarters (73%) of women and 85% of men agree that a wife is justified in refusing sexual intercourse with him if her husband has other partners; 92% of women and 95% of men agree that she is justified in asking her husband to use a condom if he has an STI (**Table 15.11**).

To assess the ability of women to actually negotiate safer sexual relations with their husband, currently married women were asked whether they could say no to their husband if they do not want to have sexual intercourse and whether they could ask their husband to use a condom. More than three in four (77%) women said that they can say no to their husband if they do not want to have sexual intercourse and the same percentage said that they can ask their husband to use a condom (**Table 15.12**).

Patterns by background characteristics

- Women in urban areas are slightly more likely than women in rural areas to be able to negotiate sexual relations with their husband. For example, 80% of urban women can ask their husband to use a condom, compared with 76% of rural women.
- The proportion of women who can ask their husband to use a condom increases with increasing education, from 68% among those with no education to 82% among those with more than a secondary education.

15.11 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

Two indices based on information collected in the 2019-20 RDHS on women's participation in household decision making and their attitudes toward wife beating can be used to examine the relationship between women's empowerment and selected demographic and health indicators. The first index, which ranges from 0 to 3, shows the number of decisions (see Section 15.8 for the list) in which women participate. For this index, the higher the value, the greater the respondent's level of empowerment. The second index is the total number of circumstances (see Section 15.9 for the list) in which women agree that wife beating is justified. This index ranges from 0 to 7 (**Table 15.13**). In this case, the higher the number, the lower the respondent's empowerment.

Tables 15.14-15.16 show how women's contraceptive use, mean ideal number of children, unmet need for family planning, and reproductive health care vary by the two empowerment indices. In general, desirable health outcomes increase with greater levels of women's empowerment. For example, 64% of women participating in all three household decisions use a contraceptive method, compared with 59% of women who do not participate in any decisions (**Table 15.14**). Also, women who participate in all three decisions are more likely than women who do not participate in any decisions to have received delivery care from a skilled provider (95% versus 92%) (**Table 15.16**). Similarly, women who do not justify wife beating are more likely than those who do to have received delivery care from a skilled provider.

The 2019-20 RDHS results also provide evidence that child survival is positively associated with women's empowerment. Under-5 mortality rates in the 10 years before the survey range from a high of 60 deaths per 1,000 live births among women who do not participate in any of the three household decisions to a low of 45 deaths per 1,000 live births among women who participate in all of the decisions. Also, under-5 mortality is lower among women who do not justify wife beating for any reason (39 deaths per 1,000 live births) than among women who justify wife beating for one or more reasons (47 to 59 deaths per 1,000 live births) (**Table 15.17**).

LIST OF TABLES

For more information on women's empowerment, see the following tables:

- **Table 15.1** **Employment and cash earnings of currently married women and men**
- **Table 15.2.1** **Control over women's cash earnings and relative magnitude of women's cash earnings**
- **Table 15.2.2** **Control over men's cash earnings**
- **Table 15.3** **Women's control over their own earnings and over those of their husbands**
- **Table 15.4.1** **Ownership of assets: Women**
- **Table 15.4.2** **Ownership of assets: Men**
- **Table 15.5.1** **Ownership of title or deed for house: Women**
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- **Table 15.9.1** **Women's participation in decision making by background characteristics**
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- **Table 15.10.1** **Attitude toward wife beating: Women**
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- **Table 15.11** **Attitudes toward negotiating safer sexual relations with husband**
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- **Table 15.16** **Reproductive health care by women's empowerment**
- **Table 15.17** **Early childhood mortality rates by women's status**

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Rwanda DHS 2019-20

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings					
	Percentage employed in past 12 months	Number of respondents						
Age			Cash only	Cash and in-kind	In-kind only	Not paid	Total	Number of respondents
WOMEN								
15-19	80.1	73	45.9	37.2	7.0	9.9	100.0	59
20-24	81.8	750	40.8	31.7	7.4	20.0	100.0	614
25-29	81.2	1,297	42.6	29.5	7.8	20.1	100.0	1,054
30-34	83.3	1,642	39.0	29.8	7.3	23.9	100.0	1,368
35-39	85.6	1,690	35.8	34.6	6.9	22.7	100.0	1,447
40-44	86.3	1,139	31.5	33.3	9.3	25.9	100.0	983
45-49	87.7	809	31.2	33.6	6.9	28.4	100.0	710
Total 15-49	84.2	7,401	37.0	32.1	7.6	23.3	100.0	6,234
MEN								
15-19	*	3	*	*	*	*	*	3
20-24	100.0	130	54.1	38.6	1.3	6.0	100.0	130
25-29	99.7	361	53.1	34.0	6.7	6.3	100.0	360
30-34	100.0	691	52.9	34.1	5.9	7.2	100.0	691
35-39	99.7	719	48.4	37.9	5.1	8.5	100.0	717
40-44	99.2	534	47.2	39.6	4.4	8.8	100.0	530
45-49	99.4	422	34.0	49.3	5.6	11.1	100.0	420
Total 15-49	99.7	2,860	48.0	38.5	5.3	8.2	100.0	2,850
50-59	97.8	620	34.7	43.8	9.4	12.1	100.0	607
Total 15-59	99.3	3,480	45.7	39.4	6.0	8.9	100.0	3,457

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how the wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Person who decides how the wife's cash earnings are used:				Total	Wife's cash earnings compared with husband's cash earnings:					Total	Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other		More	Less	About the same	Husband has no earnings	Don't know		
Age												
15-19	(25.4)	(52.0)	(22.7)	(0.0)	(100.0)	(5.0)	(69.2)	(23.4)	(2.4)	(0.0)	100.0	49
20-24	18.6	69.0	12.5	0.0	100.0	6.7	66.5	23.5	2.8	0.5	100.0	445
25-29	20.1	71.7	8.2	0.0	100.0	10.7	65.0	22.0	2.1	0.2	100.0	760
30-34	23.3	67.8	8.9	0.0	100.0	11.9	60.2	23.9	2.8	1.2	100.0	941
35-39	25.0	64.6	10.2	0.1	100.0	12.1	56.7	25.5	4.2	1.5	100.0	1,019
40-44	26.6	67.8	5.6	0.0	100.0	14.5	50.3	30.0	4.5	0.7	100.0	636
45-49	24.5	65.5	10.0	0.0	100.0	13.9	45.5	31.2	8.2	1.2	100.0	459
Number of living children												
0	13.4	70.5	16.1	0.0	100.0	7.5	65.8	23.9	2.4	0.4	100.0	206
1-2	20.5	69.8	9.7	0.1	100.0	10.9	63.0	22.8	2.8	0.5	100.0	1,633
3-4	24.4	67.0	8.6	0.0	100.0	12.7	54.4	27.2	4.5	1.3	100.0	1,522
5+	28.5	63.4	8.1	0.0	100.0	12.4	53.3	28.0	5.0	1.3	100.0	950
Residence												
Urban	29.5	64.3	6.2	0.0	100.0	17.9	58.1	19.2	4.1	0.7	100.0	816
Rural	21.8	68.2	10.0	0.0	100.0	10.3	57.9	27.0	3.8	1.0	100.0	3,494
Province												
City of Kigali	34.1	58.8	7.1	0.0	100.0	18.9	60.1	16.2	3.9	0.9	100.0	626
South	21.0	70.6	8.2	0.1	100.0	10.3	52.8	33.3	3.1	0.6	100.0	737
West	26.0	63.3	10.7	0.0	100.0	12.0	62.4	19.9	5.3	0.4	100.0	973
North	21.9	69.7	8.4	0.0	100.0	12.3	62.9	19.8	3.9	1.1	100.0	687
East	18.0	71.7	10.3	0.0	100.0	8.6	53.8	33.0	3.1	1.5	100.0	1,288
Education												
No education	29.1	60.9	10.0	0.0	100.0	11.3	55.1	26.6	5.9	1.2	100.0	572
Primary	24.0	65.9	10.1	0.0	100.0	10.1	57.5	27.3	4.0	1.0	100.0	2,746
Secondary	17.6	74.3	8.1	0.0	100.0	13.1	63.9	19.9	2.4	0.8	100.0	731
More than secondary	19.5	78.6	1.8	0.0	100.0	26.0	51.6	21.1	1.3	0.0	100.0	261
Wealth quintile												
Lowest	29.7	59.9	10.3	0.0	100.0	10.8	52.3	29.4	5.8	1.6	100.0	942
Second	26.4	63.1	10.3	0.1	100.0	10.5	60.3	24.4	4.1	0.7	100.0	769
Middle	21.4	67.7	10.8	0.0	100.0	7.8	62.1	25.5	3.2	1.3	100.0	824
Fourth	19.0	71.8	9.2	0.0	100.0	12.5	57.1	26.3	3.5	0.7	100.0	826
Highest	19.8	74.3	5.9	0.0	100.0	16.3	58.7	22.1	2.5	0.3	100.0	950
Total	23.3	67.4	9.2	0.0	100.0	11.7	57.9	25.6	3.8	0.9	100.0	4,311

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how the husband's cash earnings are used, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Men					Women					
	Mainly wife	Husband and wife jointly	Mainly husband	Total	Number	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number
Age											
15-19	*	*	*	100.0	3	1.3	63.8	34.9	0.0	100.0	71
20-24	2.2	77.6	20.2	100.0	120	4.0	71.1	24.7	0.2	100.0	735
25-29	0.7	82.4	16.9	100.0	314	4.7	73.7	21.6	0.0	100.0	1,277
30-34	3.1	81.5	15.5	100.0	601	5.3	70.5	24.2	0.1	100.0	1,609
35-39	2.0	81.3	16.7	100.0	619	6.7	68.3	25.0	0.1	100.0	1,641
40-44	3.1	85.4	11.6	100.0	460	6.9	70.9	22.0	0.1	100.0	1,094
45-49	4.2	84.0	11.9	100.0	349	8.3	65.4	26.2	0.1	100.0	765
Number of living children											
0	1.8	85.9	12.3	100.0	118	4.6	72.5	22.8	0.0	100.0	358
1-2	3.2	79.2	17.6	100.0	955	4.8	72.3	22.8	0.2	100.0	2,721
3-4	1.5	84.5	14.0	100.0	883	6.5	69.7	23.8	0.0	100.0	2,528
5+	3.7	84.1	12.2	100.0	510	7.2	66.3	26.4	0.1	100.0	1,585
Residence											
Urban	2.1	78.6	19.4	100.0	454	7.4	68.9	23.7	0.0	100.0	1,250
Rural	2.7	83.3	13.9	100.0	2,011	5.6	70.3	24.0	0.1	100.0	5,942
Province											
City of Kigali	1.9	75.3	22.8	100.0	380	8.7	64.0	27.2	0.1	100.0	982
South	4.4	81.8	13.7	100.0	460	5.8	70.5	23.7	0.1	100.0	1,522
West	2.2	85.4	12.4	100.0	578	5.9	70.1	23.9	0.1	100.0	1,564
North	1.0	85.2	13.8	100.0	431	5.1	72.3	22.4	0.2	100.0	1,166
East	3.2	82.6	14.2	100.0	617	5.0	71.5	23.4	0.0	100.0	1,958
Education											
No education	4.3	77.9	17.8	100.0	285	8.2	63.3	28.5	0.0	100.0	909
Primary	2.6	82.2	15.2	100.0	1,708	6.0	68.4	25.5	0.1	100.0	4,691
Secondary	1.8	84.1	14.0	100.0	337	3.8	77.5	18.6	0.0	100.0	1,230
More than secondary	0.8	91.2	8.0	100.0	136	6.0	84.0	10.0	0.0	100.0	362
Wealth quintile											
Lowest	4.1	80.5	15.4	100.0	479	8.5	63.5	27.9	0.1	100.0	1,371
Second	2.9	81.9	15.2	100.0	442	6.3	65.9	27.5	0.3	100.0	1,358
Middle	2.5	84.2	13.3	100.0	514	4.6	68.8	26.5	0.1	100.0	1,474
Fourth	1.8	83.2	15.0	100.0	522	5.6	73.4	21.0	0.0	100.0	1,484
Highest	1.9	82.2	15.9	100.0	509	4.7	77.8	17.5	0.0	100.0	1,506
Total 15-49	2.6	82.4	14.9	100.0	2,466	5.9	70.1	23.9	0.1	100.0	7,191
50-59	5.0	78.3	16.6	100.0	476	na	na	na	na	na	na
Total 15-59	3.0	81.8	15.2	100.0	2,942	na	na	na	na	na	na

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 15.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Rwanda DHS 2019-20

Woman's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:					Number of women	Person who decides how the husband's cash earnings are used:					Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total		Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	
More than husband	32.3	61.7	6.0	0.0	100.0	506	13.5	66.3	20.3	0.0	100.0	506
Less than husband	23.2	65.5	11.3	0.0	100.0	2,498	6.0	65.5	28.4	0.1	100.0	2,498
Same as husband	11.8	81.6	6.7	0.0	100.0	1,102	3.9	81.6	14.5	0.0	100.0	1,102
Husband has no cash earnings or did not work	58.2	34.4	7.4	0.0	100.0	161	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	0	5.3	69.2	25.5	0.0	100.0	1,904
Woman did not work	na	na	na	na	na	0	4.4	74.1	21.2	0.3	100.0	1,142
Total ¹	23.3	67.4	9.2	0.0	100.0	4,311	5.9	70.1	23.9	0.1	100.0	7,191

na = Not applicable

¹ Includes cases where a woman does not know whether she earned more or less than her husband

Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who own a house:					Percentage who own land:					Number
	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	
Age											
15-19	0.2	0.9	0.0	98.9	100.0	2.0	1.3	0.0	96.7	100.0	3,258
20-24	0.7	14.3	0.1	84.8	100.0	2.9	9.1	0.0	87.9	100.0	2,414
25-29	1.8	35.3	0.1	62.8	100.0	4.4	19.4	0.2	76.0	100.0	2,073
30-34	3.8	53.9	0.5	41.8	100.0	5.5	35.2	0.3	59.1	100.0	2,118
35-39	6.5	66.0	0.3	27.3	100.0	6.0	47.2	0.3	46.4	100.0	2,072
40-44	12.2	65.5	0.4	21.9	100.0	10.0	46.7	0.1	43.3	100.0	1,488
45-49	22.2	60.3	0.1	17.4	100.0	18.4	44.0	0.1	37.5	100.0	1,211
Residence											
Urban	3.8	20.8	0.1	75.2	100.0	4.3	11.2	0.0	84.5	100.0	2,909
Rural	5.3	40.2	0.2	54.3	100.0	6.1	28.1	0.2	65.7	100.0	11,725
Province											
City of Kigali	3.5	21.4	0.0	75.1	100.0	4.5	11.5	0.0	84.0	100.0	2,166
South	4.2	34.6	0.4	60.7	100.0	4.8	25.3	0.4	69.5	100.0	3,065
West	5.9	41.3	0.2	52.6	100.0	5.8	25.3	0.0	68.9	100.0	3,174
North	5.9	44.1	0.4	49.7	100.0	7.6	36.7	0.4	55.3	100.0	2,226
East	5.1	37.5	0.1	57.3	100.0	6.0	24.3	0.0	69.7	100.0	4,003
Education											
No education	14.6	53.0	0.5	31.9	100.0	10.7	35.4	0.2	53.6	100.0	1,377
Primary	5.4	42.8	0.3	51.6	100.0	6.4	29.9	0.2	63.5	100.0	8,529
Secondary	1.3	17.8	0.1	80.8	100.0	3.0	10.3	0.1	86.6	100.0	4,086
More than secondary	2.2	32.4	0.0	65.4	100.0	4.3	23.8	0.0	71.9	100.0	642
Wealth quintile											
Lowest	8.7	34.3	0.2	56.8	100.0	6.7	20.7	0.1	72.5	100.0	2,741
Second	6.7	39.3	0.1	53.9	100.0	7.7	26.2	0.2	65.8	100.0	2,756
Middle	4.2	44.2	0.4	51.2	100.0	5.6	33.1	0.2	61.2	100.0	2,757
Fourth	3.0	36.7	0.2	60.1	100.0	4.4	26.6	0.2	68.8	100.0	2,966
Highest	2.9	29.0	0.1	67.9	100.0	4.7	18.2	0.0	77.1	100.0	3,414
Total	5.0	36.4	0.2	58.5	100.0	5.7	24.7	0.1	69.4	100.0	14,634

Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who own a house:					Percentage who own land:					Number
	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	
Age											
15-19	0.6	0.3	0.0	99.1	100.0	2.3	0.4	0.0	97.3	100.0	1,526
20-24	7.2	3.6	0.7	88.4	100.0	10.7	2.3	0.5	86.5	100.0	960
25-29	18.0	18.3	1.6	62.1	100.0	15.9	10.4	1.3	72.3	100.0	710
30-34	27.9	35.4	3.2	33.5	100.0	24.1	25.0	3.1	47.8	100.0	835
35-39	28.5	44.4	5.0	22.1	100.0	26.8	31.7	3.2	38.3	100.0	793
40-44	25.2	54.2	3.6	17.1	100.0	22.2	43.1	3.4	31.3	100.0	575
45-49	25.2	58.0	5.4	11.4	100.0	22.1	46.3	3.8	27.9	100.0	447
Residence											
Urban	9.4	15.5	0.8	74.3	100.0	11.9	12.1	0.8	75.2	100.0	1,115
Rural	17.3	25.7	2.5	54.5	100.0	16.0	18.7	1.9	63.4	100.0	4,731
Province											
City of Kigali	10.8	14.1	1.4	73.6	100.0	13.6	11.2	1.2	73.9	100.0	879
South	14.5	25.7	2.3	57.4	100.0	12.6	20.8	1.6	65.0	100.0	1,239
West	8.8	33.9	0.3	57.0	100.0	8.0	22.4	0.2	69.4	100.0	1,268
North	26.9	20.5	4.4	48.2	100.0	28.8	16.2	3.7	51.4	100.0	886
East	19.0	21.2	2.9	57.0	100.0	16.4	14.8	2.3	66.4	100.0	1,574
Education											
No education	23.1	40.6	4.9	31.4	100.0	20.5	29.5	3.2	46.7	100.0	420
Primary	19.3	28.3	2.6	49.8	100.0	17.5	20.6	2.1	59.8	100.0	3,569
Secondary	7.2	8.2	0.9	83.7	100.0	8.8	6.1	0.7	84.4	100.0	1,562
More than secondary	8.2	26.9	0.4	64.5	100.0	14.1	21.8	0.1	64.0	100.0	295
Wealth quintile											
Lowest	19.4	25.5	2.7	52.4	100.0	14.4	16.5	1.8	67.4	100.0	924
Second	18.2	26.2	2.6	53.0	100.0	14.6	18.1	1.9	65.4	100.0	1,076
Middle	18.3	25.0	2.5	54.2	100.0	16.2	21.3	1.9	60.5	100.0	1,227
Fourth	14.7	22.7	2.1	60.5	100.0	16.5	16.9	2.3	64.3	100.0	1,278
Highest	10.0	20.4	1.5	68.1	100.0	14.2	14.5	0.8	70.4	100.0	1,342
Total 15-49	15.8	23.7	2.2	58.2	100.0	15.2	17.4	1.7	65.6	100.0	5,846
50-59	28.3	56.7	4.5	10.5	100.0	27.4	47.6	4.1	20.9	100.0	667
Total 15-59	17.1	27.1	2.4	53.4	100.0	16.5	20.5	2.0	61.0	100.0	6,513

Table 15.5.1 Ownership of title or deed for house: Women

Among women age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	House has a title or deed and:				Total	Number who own a house ²
	Woman's name is on title/deed	Woman's name is not on title/deed	Does not have a title/deed	Don't know/missing ¹		
Age						
15-19	(33.6)	(14.7)	(51.3)	(0.4)	(100.0)	37
20-24	10.9	23.2	65.4	0.5	100.0	366
25-29	23.6	20.0	55.9	0.5	100.0	770
30-34	44.0	14.7	40.7	0.6	100.0	1,233
35-39	58.6	9.6	31.5	0.4	100.0	1,507
40-44	63.4	8.1	27.8	0.7	100.0	1,162
45-49	70.2	7.0	21.9	0.9	100.0	1,001
Residence						
Urban	64.9	10.5	24.0	0.6	100.0	720
Rural	49.1	12.3	38.0	0.6	100.0	5,356
Province						
City of Kigali	58.0	12.9	29.0	0.2	100.0	539
South	48.2	13.2	38.1	0.5	100.0	1,203
West	54.2	8.3	36.9	0.6	100.0	1,506
North	50.3	10.8	38.2	0.7	100.0	1,120
East	48.4	15.2	35.7	0.7	100.0	1,708
Education						
No education	51.4	10.6	37.0	1.0	100.0	937
Primary	51.2	11.3	37.1	0.5	100.0	4,132
Secondary	42.3	19.0	38.0	0.7	100.0	785
More than secondary	77.2	8.6	14.2	0.0	100.0	222
Wealth quintile						
Lowest	34.0	10.9	54.6	0.4	100.0	1,185
Second	42.7	11.0	45.5	0.8	100.0	1,270
Middle	52.6	13.0	33.4	0.9	100.0	1,345
Fourth	56.7	15.5	27.4	0.3	100.0	1,183
Highest	70.8	9.7	19.2	0.3	100.0	1,094
Total	51.0	12.1	36.3	0.6	100.0	6,076

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes women who have a house with a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title/deed for the house (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.5.2 Ownership of title or deed for house: Men

Among men age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	House has a title or deed and:				Total	Number who own a house ²
	Man's name is on title/deed	Man's name is not on title/deed	Does not have a title/deed	Don't know/missing ¹		
Age						
15-19	*	*	*	*	*	14
20-24	17.7	8.1	74.2	0.0	100.0	111
25-29	19.3	8.6	72.2	0.0	100.0	269
30-34	41.5	7.0	51.5	0.0	100.0	555
35-39	59.6	2.0	38.4	0.0	100.0	618
40-44	67.1	3.9	29.0	0.0	100.0	477
45-49	74.5	3.6	21.9	0.0	100.0	396
Residence						
Urban	67.4	4.3	28.3	0.0	100.0	286
Rural	50.8	4.8	44.4	0.0	100.0	2,155
Province						
City of Kigali	57.9	5.4	36.7	0.0	100.0	232
South	50.7	3.1	46.2	0.0	100.0	527
West	52.2	6.1	41.7	0.0	100.0	545
North	55.3	3.3	41.4	0.0	100.0	459
East	51.3	5.7	43.0	0.0	100.0	678
Education						
No education	51.2	3.2	45.7	0.0	100.0	288
Primary	52.4	4.0	43.6	0.0	100.0	1,792
Secondary	50.0	9.9	40.1	0.0	100.0	255
More than secondary	70.1	8.6	21.3	0.0	100.0	105
Wealth quintile						
Lowest	36.8	2.4	60.8	0.0	100.0	440
Second	44.9	5.1	49.9	0.0	100.0	506
Middle	51.6	5.4	43.0	0.0	100.0	562
Fourth	60.3	5.1	34.6	0.0	100.0	504
Highest	71.0	5.6	23.4	0.0	100.0	428
Total 15-49	52.8	4.7	42.5	0.0	100.0	2,441
50-59	74.9	3.9	21.0	0.2	100.0	597
Total 15-59	57.1	4.6	38.3	0.0	100.0	3,038

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes men who have a house with a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title/deed for the house (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.6.1 Ownership of title or deed for land: Women

Among women age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Land has a title or deed and:		Does not have a title/deed	Don't know/missing ¹	Total	Number who own land ²
	Woman's name is on title/deed	Woman's name is not on title/deed				
Age						
15-19	25.4	12.7	61.7	0.1	100.0	107
20-24	18.8	20.3	60.1	0.8	100.0	291
25-29	24.6	19.9	54.4	1.0	100.0	497
30-34	50.1	13.8	35.7	0.3	100.0	867
35-39	64.4	8.5	26.6	0.5	100.0	1,110
40-44	71.4	6.3	21.6	0.7	100.0	844
45-49	75.8	5.7	17.8	0.7	100.0	757
Residence						
Urban	62.8	9.6	27.2	0.4	100.0	452
Rural	55.8	10.9	32.6	0.6	100.0	4,023
Province						
City of Kigali	56.6	10.4	33.0	0.0	100.0	346
South	50.0	13.4	35.9	0.6	100.0	933
West	65.2	7.9	26.4	0.5	100.0	989
North	59.3	10.5	29.7	0.5	100.0	995
East	52.3	11.5	35.3	0.9	100.0	1,213
Education						
No education	59.4	10.1	28.9	1.5	100.0	638
Primary	57.7	9.9	31.9	0.5	100.0	3,110
Secondary	42.7	15.6	41.2	0.6	100.0	546
More than secondary	68.6	13.3	18.0	0.0	100.0	180
Wealth quintile						
Lowest	41.4	9.3	48.9	0.4	100.0	755
Second	50.1	11.2	37.5	1.1	100.0	941
Middle	59.4	11.1	28.7	0.8	100.0	1,070
Fourth	62.0	12.3	25.4	0.3	100.0	925
Highest	68.7	9.5	21.6	0.3	100.0	783
Total	56.6	10.8	32.1	0.6	100.0	4,475

¹ Includes women who have land with a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title/deed for the land (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.6.2 Ownership of title or deed for land: Men

Among men age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Land has a title or deed and:				Total	Number who own land ²
	Man's name is on title/deed	Man's name is not on title/deed	Does not have a title/deed	Don't know/missing ¹		
Age						
15-19	(16.6)	(4.9)	(78.4)	(0.0)	(100.0)	41
20-24	19.0	6.8	74.2	0.0	100.0	130
25-29	28.9	9.7	61.4	0.0	100.0	197
30-34	45.0	3.9	51.2	0.0	100.0	435
35-39	67.2	3.0	29.8	0.0	100.0	489
40-44	71.0	2.8	26.2	0.0	100.0	395
45-49	80.4	3.8	15.7	0.0	100.0	323
Residence						
Urban	59.0	4.3	36.7	0.0	100.0	277
Rural	57.1	4.2	38.7	0.0	100.0	1,733
Province						
City of Kigali	54.5	3.2	42.3	0.0	100.0	229
South	55.3	4.1	40.6	0.0	100.0	433
West	61.9	4.7	33.4	0.0	100.0	388
North	61.6	5.1	33.3	0.0	100.0	431
East	53.5	3.7	42.8	0.0	100.0	529
Education						
No education	59.4	4.4	36.1	0.0	100.0	224
Primary	57.6	3.6	38.8	0.0	100.0	1,436
Secondary	47.7	6.9	45.4	0.0	100.0	244
More than secondary	71.9	5.8	22.3	0.0	100.0	106
Wealth quintile						
Lowest	45.7	3.3	50.9	0.0	100.0	301
Second	50.8	4.8	44.4	0.0	100.0	372
Middle	58.3	4.5	37.1	0.0	100.0	484
Fourth	61.7	4.3	34.0	0.0	100.0	456
Highest	66.2	3.9	30.0	0.0	100.0	397
Total 15-49	57.4	4.2	38.4	0.0	100.0	2,010
50-59	82.5	2.2	15.3	0.0	100.0	528
Total 15-59	62.6	3.8	33.6	0.0	100.0	2,538

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes men who have land with a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title/deed for the land (or this information is missing)

² Includes sole, joint, or sole and joint ownership

Table 15.7.1 Ownership and use of bank accounts and mobile phones: Women

Percentage of women age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Have and use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
Age					
15-19	3.3	25.9	3,258	68.6	845
20-24	15.3	60.5	2,414	83.1	1,460
25-29	26.8	56.8	2,073	86.8	1,177
30-34	28.4	52.7	2,118	82.5	1,116
35-39	27.6	51.7	2,072	75.0	1,072
40-44	32.6	51.9	1,488	78.7	772
45-49	34.8	47.3	1,211	75.4	573
Residence					
Urban	37.8	75.7	2,909	91.0	2,201
Rural	17.2	41.1	11,725	74.3	4,814
Province					
City of Kigali	36.2	76.8	2,166	90.6	1,664
South	19.6	39.9	3,065	81.2	1,223
West	20.3	43.5	3,174	76.5	1,382
North	20.2	43.1	2,226	63.3	959
East	15.9	44.7	4,003	79.1	1,788
Education					
No education	14.7	23.6	1,377	62.2	325
Primary	16.9	42.9	8,529	72.5	3,663
Secondary	22.7	58.4	4,086	87.4	2,386
More than secondary	85.0	99.8	642	99.5	641
Wealth quintile					
Lowest	9.5	15.9	2,741	63.5	435
Second	12.4	31.5	2,756	67.0	869
Middle	15.6	42.3	2,757	67.8	1,166
Fourth	22.3	60.0	2,966	79.9	1,779
Highest	41.7	81.0	3,414	90.7	2,766
Total	21.3	47.9	14,634	79.5	7,016

Table 15.7.2 Ownership and use of bank accounts and mobile phones: Men

Percentage of men age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among men who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Have and use a bank account	Own a mobile phone	Number of men	Use mobile phone for financial transactions	Number of men who own a mobile phone
Age					
15-19	4.4	32.6	1,526	71.1	497
20-24	26.3	73.4	960	88.2	705
25-29	44.6	70.5	710	88.8	500
30-34	53.4	72.0	835	87.1	601
35-39	54.0	72.7	793	84.9	576
40-44	58.9	71.9	575	82.3	413
45-49	62.2	69.0	447	81.0	309
Residence					
Urban	53.3	81.2	1,115	95.4	905
Rural	32.4	57.0	4,731	80.1	2,697
Province					
City of Kigali	52.8	83.9	879	95.7	737
South	31.4	51.5	1,239	83.1	638
West	34.9	59.3	1,268	81.9	752
North	38.2	57.2	886	77.0	506
East	31.4	61.5	1,574	80.6	968
Education					
No education	30.0	39.8	420	60.7	167
Primary	33.9	58.7	3,569	80.6	2,095
Secondary	33.3	67.1	1,562	90.0	1,048
More than secondary	91.7	99.0	295	99.1	292
Wealth quintile					
Lowest	14.5	24.5	924	70.4	227
Second	24.5	48.4	1,076	72.1	521
Middle	31.2	62.6	1,227	77.4	768
Fourth	43.9	74.1	1,278	85.3	947
Highest	58.6	84.9	1,342	95.2	1,139
Total 15-49	36.4	61.6	5,846	83.9	3,602
50-59	58.0	56.9	667	78.8	380
Total 15-59	38.6	61.1	6,513	83.4	3,981

Table 15.8 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Rwanda DHS 2019-20

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number of women
WOMEN							
Own health care	29.4	52.9	17.5	0.2	0.0	100.0	7,401
Major household purchases	8.3	69.7	21.9	0.1	0.1	100.0	7,401
Visits to her family or relatives	18.6	68.3	12.9	0.1	0.0	100.0	7,401
MEN							
Own health care	2.7	49.2	48.1	0.0	0.0	100.0	2,860
Major household purchases	5.5	67.2	27.3	0.0	0.0	100.0	2,860

Table 15.9.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	67.3	61.0	73.9	47.0	17.4	73
20-24	73.8	70.7	79.9	58.2	10.3	750
25-29	80.4	77.6	85.1	66.1	6.7	1,297
30-34	82.8	78.5	87.1	68.0	5.2	1,642
35-39	83.0	78.1	88.5	68.9	5.2	1,690
40-44	86.7	82.0	90.4	74.2	4.3	1,139
45-49	85.6	79.6	89.4	72.4	5.6	809
Employment (past 12 months)						
Not employed	82.9	79.6	87.6	70.3	6.2	1,167
Employed for cash	84.1	79.3	87.9	70.0	5.0	4,311
Employed not for cash	77.8	74.0	84.4	62.5	8.0	1,924
Number of living children						
0	73.4	73.6	82.2	57.9	7.2	363
1-2	81.5	77.1	85.1	66.7	6.8	2,782
3-4	82.9	79.1	88.4	69.6	5.4	2,610
5+	84.5	78.5	88.8	70.3	5.3	1,647
Residence						
Urban	86.1	82.1	88.9	72.5	3.9	1,288
Rural	81.5	77.1	86.5	67.2	6.4	6,114
Province						
City of Kigali	82.0	81.2	86.1	68.1	4.7	1,006
South	87.6	79.1	88.9	72.3	4.9	1,559
West	77.8	71.7	85.4	61.5	8.5	1,628
North	78.7	77.9	85.8	65.8	6.0	1,201
East	84.0	80.5	87.8	71.6	5.5	2,007
Education						
No education	78.8	72.7	84.8	63.0	8.7	952
Primary	81.3	76.6	86.3	66.5	6.4	4,834
Secondary	85.5	83.0	87.9	72.5	3.8	1,250
More than secondary	93.1	92.5	97.6	87.6	1.0	365
Wealth quintile						
Lowest	81.0	74.6	85.4	65.6	7.3	1,443
Second	79.4	74.1	83.9	64.7	9.0	1,397
Middle	79.4	75.0	86.4	63.8	6.4	1,509
Fourth	83.7	80.2	87.2	69.4	4.7	1,520
Highest	87.5	85.3	91.6	76.4	2.8	1,532
Total	82.3	78.0	86.9	68.1	6.0	7,401

Table 15.9.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Specific decisions			Neither of the two decisions	Number of men
	Man's own health	Making major household purchases	Both decisions		
Age					
15-19	*	*	*	*	3
20-24	95.8	89.7	86.9	1.5	130
25-29	98.7	93.7	92.9	0.5	361
30-34	97.1	94.6	92.8	1.1	691
35-39	97.8	95.5	94.1	0.8	719
40-44	98.0	95.4	93.9	0.5	534
45-49	95.8	93.6	90.6	1.2	422
Employment (past 12 months)					
Not employed	*	*	*	*	10
Employed for cash	97.1	94.5	92.5	0.9	2,466
Employed not for cash	99.0	95.3	95.0	0.7	384
Number of living children					
0	96.8	94.5	91.3	0.0	136
1-2	97.6	94.1	92.8	1.1	1,087
3-4	97.6	94.6	92.9	0.7	1,023
5+	96.6	94.9	92.4	1.0	614
Residence					
Urban	97.8	93.0	91.7	1.0	466
Rural	97.3	94.8	92.9	0.9	2,394
Province					
City of Kigali	95.7	93.2	90.5	1.6	384
South	98.8	94.2	93.2	0.3	584
West	96.4	94.0	91.6	1.2	634
North	97.8	95.1	93.4	0.4	477
East	97.5	95.3	93.8	1.0	782
Education					
No education	96.5	94.4	92.9	2.0	339
Primary	97.2	94.8	92.7	0.7	2,022
Secondary	99.1	93.2	92.7	0.4	360
More than secondary	96.3	93.5	91.7	1.9	139
Wealth quintile					
Lowest	96.8	92.5	90.4	1.0	541
Second	98.2	94.0	93.4	1.2	545
Middle	97.1	95.5	93.2	0.6	624
Fourth	96.7	95.4	92.6	0.5	604
Highest	98.0	94.8	93.8	1.1	546
Total 15-49	97.3	94.5	92.7	0.9	2,860
50-59	96.6	92.9	90.6	1.1	620
Total 15-59	97.2	94.2	92.3	0.9	3,480

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.10.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Husband is justified in hitting or beating his wife if she:							Percentage who agree with at least one of the first five specified reasons	Percentage who agree with at least one of the seven specified reasons	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Has sex with someone else	Looks in his phone			
Age										
15-19	17.0	29.1	37.2	42.1	28.7	61.9	12.9	52.9	66.7	3,258
20-24	18.1	30.4	36.7	39.0	29.3	57.5	15.0	48.6	62.0	2,414
25-29	16.7	29.7	35.9	38.0	29.3	60.0	15.1	46.3	63.1	2,073
30-34	18.3	31.9	38.6	39.5	30.6	61.1	15.8	49.1	64.5	2,118
35-39	19.1	33.5	39.1	40.8	33.4	63.4	18.0	49.9	65.7	2,072
40-44	18.0	30.5	37.6	37.0	30.7	62.1	17.3	47.1	64.4	1,488
45-49	18.7	32.5	39.2	41.0	35.1	66.0	18.6	51.5	68.9	1,211
Employment (past 12 months)										
Not employed	13.6	26.6	33.5	37.3	26.7	57.1	11.3	46.7	61.4	3,908
Employed for cash	18.5	30.2	37.0	38.2	30.7	60.5	16.6	48.0	63.6	7,588
Employed not for cash	21.7	37.6	44.3	47.0	35.0	68.7	18.7	56.9	72.3	3,138
Number of living children										
0	16.4	27.9	35.3	39.0	27.8	57.9	13.0	49.2	62.5	5,368
1-2	18.0	31.2	37.7	39.3	29.8	61.4	15.5	48.2	64.5	4,150
3-4	18.9	32.9	39.1	40.5	32.5	63.4	18.2	49.7	66.2	3,184
5+	20.0	34.8	41.5	42.3	36.5	67.8	19.0	53.3	70.2	1,932
Marital status										
Never married	17.4	28.6	35.8	39.3	28.4	58.0	13.9	49.1	62.8	5,914
Married or living together	17.1	31.7	37.6	39.4	30.8	63.5	15.8	49.0	66.1	7,401
Divorced/separated/widowed	24.2	36.1	46.5	44.9	38.5	64.7	22.4	54.7	67.9	1,318
Residence										
Urban	9.3	17.3	20.8	22.5	17.5	42.7	9.6	29.7	45.3	2,909
Rural	20.0	34.2	41.8	44.2	33.8	66.0	17.1	54.5	69.8	11,725
Province										
City of Kigali	8.9	16.6	19.9	20.4	16.2	40.1	10.4	27.3	42.8	2,166
South	22.3	38.0	46.5	48.6	38.7	70.4	19.8	59.0	73.5	3,065
West	20.6	37.5	45.1	47.9	38.5	70.2	16.1	58.5	73.7	3,174
North	22.8	40.0	45.6	47.5	35.3	69.5	20.5	57.9	73.2	2,226
East	14.5	22.7	30.1	33.1	23.1	54.5	12.2	42.6	58.7	4,003
Education										
No education	27.8	44.3	52.7	53.7	47.4	77.6	25.5	65.5	80.3	1,377
Primary	21.0	36.1	43.6	45.2	35.2	68.1	18.5	55.8	71.6	8,529
Secondary	10.6	19.7	25.3	29.3	19.3	48.6	8.2	37.7	52.9	4,086
More than secondary	1.5	3.4	4.2	5.4	4.2	18.3	3.1	7.9	19.1	642
Wealth quintile										
Lowest	30.7	47.6	56.6	57.6	48.6	78.3	25.9	68.3	81.5	2,741
Second	23.9	39.2	48.0	50.5	38.2	72.8	19.4	61.1	76.2	2,756
Middle	17.2	31.8	37.8	40.5	31.2	64.6	15.6	52.3	68.8	2,757
Fourth	13.5	25.4	32.3	35.3	24.6	57.1	11.6	44.0	60.8	2,966
Highest	7.0	14.6	18.5	20.4	14.5	39.7	7.8	27.8	42.9	3,414
Total	17.9	30.8	37.6	39.9	30.5	61.4	15.6	49.6	64.9	14,634

Table 15.10.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Rwanda DHS 2019-20

Background characteristic	Husband is justified in hitting or beating his wife if she:							Percentage who agree with at least one of the first five specified reasons	Percentage who agree with at least one of the seven specified reasons	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Has sex with someone else	Looks in his phone			
Age										
15-19	3.2	7.3	9.6	16.8	8.7	40.4	2.7	23.8	44.2	1,526
20-24	2.7	6.1	10.0	12.9	7.0	33.9	1.9	19.6	38.2	960
25-29	1.6	4.9	7.6	11.9	5.1	36.6	2.1	15.5	38.5	710
30-34	1.5	5.8	8.1	11.0	5.2	34.2	2.7	16.1	36.7	835
35-39	1.9	5.3	7.2	11.1	3.0	34.7	2.4	15.1	38.0	793
40-44	1.2	3.9	7.5	10.4	3.4	36.1	2.8	14.6	37.9	575
45-49	0.9	3.1	5.8	7.6	2.7	32.0	1.9	11.0	35.6	447
Employment (past 12 months)										
Not employed	1.4	3.3	5.0	9.8	6.1	29.1	1.6	14.5	31.6	646
Employed for cash	1.8	5.3	7.9	12.0	4.6	34.9	2.1	17.1	37.9	4,175
Employed not for cash	4.2	8.8	12.6	16.9	10.0	45.6	4.0	23.8	50.1	1,025
Number of living children										
0	2.8	6.5	9.1	14.2	7.5	36.6	2.5	20.6	40.3	2,936
1-2	1.4	4.5	8.1	11.3	4.2	34.2	1.3	15.7	36.7	1,229
3-4	1.6	4.9	6.5	9.6	3.4	35.2	2.1	13.6	37.8	1,051
5+	1.4	5.5	9.1	12.7	4.1	39.2	4.3	17.1	42.6	630
Marital status										
Never married	2.7	6.5	9.1	14.4	7.6	36.5	2.5	20.8	40.2	2,867
Married or living together	1.6	4.8	7.7	10.8	3.8	35.5	2.3	14.9	38.1	2,860
Divorced/separated/widowed	1.1	4.9	7.6	14.7	6.6	44.4	1.5	22.3	48.8	119
Residence										
Urban	1.0	3.3	5.4	7.8	3.1	23.5	1.9	11.4	25.5	1,115
Rural	2.4	6.2	9.1	13.8	6.3	39.1	2.5	19.5	42.6	4,731
Province										
City of Kigali	0.9	2.9	6.1	8.0	3.7	24.2	1.9	11.0	25.3	879
South	1.4	3.3	8.0	13.1	4.6	43.7	1.3	18.7	46.3	1,239
West	3.5	8.8	13.7	19.7	9.2	43.1	3.5	26.7	46.8	1,268
North	2.5	7.6	8.1	12.6	5.9	30.2	3.4	18.0	34.4	886
East	2.1	5.5	5.8	9.2	4.8	34.5	2.0	14.2	38.4	1,574
Education										
No education	1.7	6.6	10.9	14.6	4.9	41.8	2.0	20.6	46.1	420
Primary	2.3	6.2	8.4	13.0	6.0	38.4	2.4	19.1	42.0	3,569
Secondary	2.0	4.8	8.2	12.4	5.8	32.5	2.3	16.0	35.0	1,562
More than secondary	1.0	2.8	5.2	6.2	3.3	19.6	2.6	10.4	21.0	295
Wealth quintile										
Lowest	2.0	6.2	9.6	14.2	5.6	41.2	2.4	22.0	46.1	924
Second	3.8	8.1	10.0	16.4	8.7	41.4	3.0	22.3	44.8	1,076
Middle	2.2	5.9	8.8	12.4	5.9	38.1	2.2	17.8	41.1	1,227
Fourth	1.9	5.1	8.3	13.6	5.4	38.5	2.7	18.6	41.8	1,278
Highest	1.0	3.7	6.0	7.8	3.6	24.4	1.8	11.2	26.4	1,342
Total 15-49	2.1	5.7	8.4	12.6	5.7	36.1	2.4	17.9	39.3	5,846
50-59	0.9	3.3	4.7	6.8	2.1	28.7	1.3	11.2	31.3	667
Total 15-59	2.0	5.4	8.0	12.0	5.3	35.4	2.3	17.3	38.5	6,513

Table 15.11 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women			Men		
	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15-24	69.0	90.0	5,672	77.8	92.9	2,486
15-19	67.8	88.6	3,258	75.1	91.2	1,526
20-24	70.5	91.8	2,414	82.2	95.8	960
25-29	74.9	92.2	2,073	86.6	96.1	710
30-39	75.0	92.7	4,190	89.5	96.1	1,628
40-49	74.6	92.8	2,699	93.3	97.0	1,022
Marital status						
Never married	69.6	89.6	5,914	79.0	93.0	2,867
Ever had sex	73.0	92.2	1,964	81.9	96.0	1,109
Never had sex	68.0	88.3	3,950	77.2	91.1	1,759
Married or living together	74.3	92.8	7,401	90.4	96.7	2,860
Divorced/separated/ widowed	76.1	93.3	1,318	93.0	98.8	119
Residence						
Urban	73.9	91.4	2,909	87.1	96.7	1,115
Rural	72.3	91.6	11,725	84.3	94.5	4,731
Province						
City of Kigali	74.9	90.9	2,166	88.1	96.3	879
South	73.9	91.9	3,065	85.8	92.2	1,239
West	74.4	92.4	3,174	80.0	93.0	1,268
North	65.2	90.8	2,226	83.7	96.2	886
East	73.0	91.5	4,003	86.8	97.1	1,574
Education						
No education	74.8	90.3	1,377	90.4	93.9	420
Primary	72.5	91.9	8,529	85.3	94.8	3,569
Secondary	71.2	91.7	4,086	81.6	95.2	1,562
More than secondary	78.1	88.8	642	89.1	95.8	295
Wealth quintile						
Lowest	71.4	90.0	2,741	84.5	91.2	924
Second	71.7	91.0	2,756	85.0	94.4	1,076
Middle	72.3	93.5	2,757	83.4	96.0	1,227
Fourth	73.6	92.7	2,966	83.8	95.8	1,278
Highest	73.7	90.8	3,414	87.4	96.1	1,342
Total 15-49	72.6	91.6	14,634	84.9	94.9	5,846
50-59	na	na	na	92.6	95.7	667
Total 15-59	na	na	na	85.6	95.0	6,513

na = Not applicable

Table 15.12 Ability to negotiate sexual relations with husband

Percentage of currently married women age 15-49 who can say no to their husband if they do not want to have sexual intercourse, and percentage who can ask their husband to use a condom, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who can say no to their husband if they do not want to have sexual intercourse	Percentage who can ask their husband to use a condom	Number of women
Age			
15-24	77.7	78.8	824
15-19	69.5	71.2	73
20-24	78.5	79.5	750
25-29	78.0	79.1	1,297
30-39	76.5	78.0	3,333
40-49	75.0	72.0	1,948
Residence			
Urban	78.0	80.3	1,288
Rural	76.2	75.9	6,114
Province			
City of Kigali	76.8	78.3	1,006
South	78.6	74.1	1,559
West	76.9	77.6	1,628
North	74.5	77.3	1,201
East	75.6	76.7	2,007
Education			
No education	71.1	67.5	952
Primary	76.6	76.7	4,834
Secondary	80.2	82.0	1,250
More than secondary	76.5	81.9	365
Wealth quintile			
Lowest	74.4	71.4	1,443
Second	77.5	75.0	1,397
Middle	76.8	76.0	1,509
Fourth	77.3	79.9	1,520
Highest	76.4	80.7	1,532
Total	76.5	76.7	7,401

Table 15.13 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Rwanda DHS 2019-20

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all of the reasons justifying wife beating	Number of women
Number of decisions in which women participate¹			
0	na	21.4	444
1-2	na	25.6	1,917
3	na	38.2	5,040
Number of reasons for which wife beating is justified²			
0	76.7	na	2,511
1-2	68.6	na	2,014
3-4	58.9	na	1,054
5-7	61.0	na	1,823

na = Not applicable

¹ See Table 15.9.1 for the list of decisions.

² See Table 15.10.1 for the list of reasons.

Table 15.14 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Rwanda DHS 2019-20

Empowerment indicator	Any method	Any modern method ¹	Modern methods				Any traditional method	Not currently using	Total	Number of women
			Female sterilization	Male sterilization	Temporary modern female methods ²	Male condom				
Number of decisions in which women participate ³										
0	59.1	54.5	1.7	0.0	50.8	2.0	4.5	40.9	100.0	444
1-2	65.7	60.7	1.9	0.2	55.3	3.2	5.0	34.3	100.0	1,917
3	64.0	57.9	2.0	0.2	51.8	4.0	6.0	36.0	100.0	5,040
Number of reasons for which wife beating is justified ⁴										
0	63.4	57.5	2.3	0.2	51.0	4.0	5.9	36.6	100.0	2,511
1-2	63.9	58.8	1.9	0.0	52.6	4.4	5.1	36.1	100.0	2,014
3-4	64.5	58.4	1.9	0.3	53.0	3.1	6.1	35.5	100.0	1,054
5-7	65.1	59.3	1.6	0.2	54.8	2.7	5.8	34.9	100.0	1,823
Total	64.1	58.4	2.0	0.2	52.7	3.7	5.7	35.9	100.0	7,401

Note: If more than one method is used, only the most effective method is considered in this tabulation.

¹ Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods

² Pill, IUD, injectables, implants, female condom, emergency contraception, standard days method, lactational amenorrhea method, and other modern methods

³ See Table 15.9.1 for the list of decisions.

⁴ See Table 15.10.1 for the list of reasons.

Table 15.15 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Rwanda DHS 2019-20

Empowerment indicator	Mean ideal number of children ¹	Number of women	Percentage of currently married women with an unmet need for family planning ²			Number of women
			For spacing	For limiting	Total	
Number of decisions in which women participate³						
0	3.8	437	8.3	7.4	15.7	444
1-2	3.7	1,868	6.8	5.9	12.8	1,917
3	3.8	4,903	6.2	7.6	13.8	5,040
Number of reasons for which wife beating is justified⁴						
0	3.4	5,029	6.5	7.7	14.3	2,511
1-2	3.5	3,757	6.1	7.7	13.8	2,014
3-4	3.5	2,092	7.2	5.2	12.5	1,054
5-7	3.6	3,474	6.6	6.7	13.3	1,823
Total	3.5	14,352	6.5	7.1	13.6	7,401

¹ Mean excludes respondents who gave non-numeric responses.

² Figures for unmet need correspond to the revised definition described in Bradley et al. 2012.

³ Restricted to currently married women. See Table 15.9.1 for the list of decisions.

⁴ See Table 15.10.1 for the list of reasons.

Table 15.16 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, according to indicators of women's empowerment, Rwanda DHS 2019-20

Empowerment indicator	Percentage receiving antenatal care from a skilled provider ¹	Percentage receiving delivery care from a skilled provider ¹	Percentage with a postnatal check during the first 2 days after birth ²	Number of women with a child born in the last 5 years
Number of decisions in which women participate³				
0	96.3	91.6	65.9	333
1-2	97.9	93.9	64.3	1,341
3	98.4	95.2	71.6	3,420
Number of reasons for which wife beating is justified⁴				
0	98.4	96.8	75.7	2,102
1-2	98.2	94.6	69.9	1,643
3-4	97.1	93.4	66.3	897
5-7	96.8	91.7	62.3	1,660
Total	97.7	94.4	69.3	6,302

¹ "Skilled provider" includes doctor, nurse, midwife, auxiliary nurse/midwife community health worker, community health mother and child.

² Includes women who received a postnatal checkup from a doctor, nurse, midwife, community health worker, or traditional birth attendant in the first 2 days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.

³ Restricted to currently married women. See Table 15.9.1 for the list of decisions.

⁴ See Table 15.10.1 for the list of reasons.

Table 15.17 Early childhood mortality rates by women's status

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to indicators of women's empowerment, Rwanda DHS 2019-20

Empowerment indicator	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Number of decisions in which women participate¹			
0	44	17	60
1-2	32	15	46
3	33	13	45
Number of reasons for which wife beating is justified²			
0	29	10	39
1-2	38	17	55
3-4	35	12	47
5-7	38	22	59

¹ Restricted to currently married women. See Table 15.9.1 for the list of decisions.

² See Table 15.10.1 for the list of reasons.

Key Findings

- **Experience of violence:** Among women age 15-49, 37% have experienced physical violence since age 15 and 23% have ever experienced sexual violence. The corresponding proportions among men are 30% and 6%.
- **Spousal violence:** 46% of ever-married women and 18% of ever-married men have experienced spousal physical, sexual, or emotional violence.
- **Trends in spousal violence:** The prevalence of any spousal violence among ever-married women increased from 40% in 2014-15 to 46% in 2019-20 but declined slightly from 20% to 18% among men over the same period.
- **Injuries due to spousal violence:** 41% of ever-married women and 39% of ever-married men who have experienced spousal physical or sexual violence have sustained injuries.
- **Help seeking:** 40% of women and 38% of men who have experienced physical or sexual violence have never sought help to stop the violence or told someone about it; only 43% of women and 40% of men have sought help. The most common sources of help are neighbors and family members.

Gender-based violence against women has been acknowledged worldwide as a violation of basic human rights. Increasing research has highlighted the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations 2006). Gender-based violence is defined by the United Nations as any act of violence that results in physical, sexual, or psychological harm or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty. This chapter focuses on domestic violence, mainly intimate partner violence, a significant component of gender-based violence.

In Rwanda, domestic violence is widely acknowledged to be of great concern not just from a human rights perspective but also from an economic and health perspective. Nationally representative data on the prevalence of different forms of violence can help monitor progress towards the elimination of violence against persons in Rwanda.

The 2019-20 RDHS included a module of questions designed to obtain information on the extent to which women and men in Rwanda experience domestic violence, including both intimate partner violence and violence by perpetrators other than spouses or other intimate partners. The module on domestic violence was administered in the subsample of households that were selected for the men's survey. The module for women was administered in half of the households selected for the men's survey, and the module for men was administered in the other half. In accordance with the World Health Organization (WHO) guidelines on the ethical collection of information on domestic violence, only one eligible woman age 15-49 or man

age 15-59 per household was randomly selected for the module, and the module was not implemented if privacy could not be obtained (WHO 2001). In total, 2,788 women and 2,167 men completed the module. Less than 1% of women and men eligible for the domestic violence module could not be successfully interviewed with the module because privacy could not be obtained or for other reasons. Special weights were used to adjust for the selection of only one woman or man per household and to ensure that the domestic violence subsample was nationally representative.

This chapter presents findings for women and men age 15-49 on their experience of physical or sexual violence. It also provides detailed information for ever-married women and men on their experience of spousal physical, sexual, and emotional violence at any time and in the past 12 months; the physical consequences of the violence; and when the violence first began in the relationship. Finally, it documents whether and from whom help was sought to stop the violence.

16.1 MEASUREMENT OF VIOLENCE

In the 2019-20 Rwanda DHS, information was obtained from never-married women and men on their experience of violence committed by anyone and from ever-married women and men on their experience of violence committed by their current and former spouses/partners and by others. More specifically, violence committed by the current spouse/partner (for currently married women or men) and by the most recent spouse/partner (for formerly married women or men) was measured by asking all ever-married women and men if their spouse/partner ever did the following to them:

Physical spousal violence: push you, shake you, or throw something at you; slap you; twist your arm or pull your hair; punch you with his/her fist or with something that could hurt you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you with a knife, gun, or any other weapon

Sexual spousal violence: physically force you to have sexual intercourse with him/her even when you did not want to, physically force you to perform any other sexual acts you did not want to, or force you with threats or in any other way to perform sexual acts you did not want to

Emotional spousal violence: say or do something to humiliate you in front of others, threaten to hurt or harm you or someone close to you, or insult you or make you feel bad about yourself

In addition, information was obtained from all women and men (married and unmarried) about physical violence committed by anyone (other than a current or most recent spouse/partner) since they were age 15 by asking if anyone had hit, slapped, kicked, or done something else to hurt them physically. Similarly, information was gathered on experiences of sexual violence committed by anyone (other than a current or most recent spouse/partner) by asking respondents if at any time in their life, as a child or as an adult, they were forced in any way to have sexual intercourse or to perform any other sexual acts when they did not want to.

In this chapter, married women and men include those who said they were married and those who said they were living with a man or woman, respectively, as if married. Correspondingly, husbands include both husbands of married women and partners of women who are not married but are living with a man as if married, and wives include both wives of married men and partners of men who are not married but are living with a woman as if married.

16.2 EXPERIENCE OF PHYSICAL VIOLENCE

Physical violence by anyone

Percentage of respondents who have experienced any physical violence (committed by a spouse or anyone else) since age 15 and in the 12 months before the survey.

Sample: Women and men age 15-49

16.2.1 Prevalence of Physical Violence

Thirty-seven percent of women and 30% men age 15-49 have ever experienced physical violence, and 16% and 9%, respectively, experienced physical violence in the 12 months preceding the survey (**Table 16.1.1** and **Table 16.1.2**).

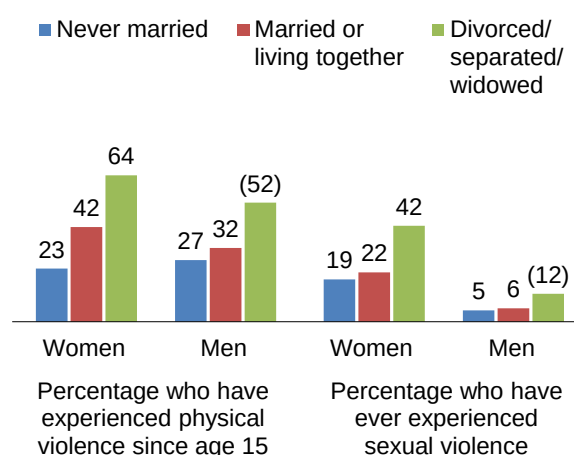
Six percent of women who have ever been pregnant have experienced physical violence during pregnancy (**Table 16.7**).

Trends: The percentage of women who have experienced physical violence since age 15 increased from 35% in 2014-15 to 37% in 2019-20. Among men, the percentage decreased from 39% to 30%.

Patterns by background characteristic

- Respondents who are divorced, separated, or widowed are most likely to have experienced physical violence (64% among women and (52%) among men), followed by currently married respondents (42% and 32%, respectively). Never-married respondents are least likely (23% and 27%, respectively) to report having experienced physical violence (**Figure 16.1**).
- A higher percentage of women and men who are employed and earn cash have experienced physical violence since age 15 (41% and 33%, respectively) than those who are employed but do not earn cash (38% and 28%, respectively) and those who are not employed (27% and 14%, respectively).
- The percentage of women and men who have experienced physical violence since age 15 declines with increasing education, from 49% and 37%, respectively, among those who have no education to 22% and 23%, respectively, among those who have more than a secondary education.
- The percentage of women and men who have experienced physical violence also declines with increasing household wealth (**Table 16.1.1** and **Table 16.1.2**).

Figure 16.1 Experience of violence by marital status



16.2.2 Perpetrators of Physical Violence

Ever-married women age 15-49 who have experienced physical violence since age 15 most often name their current husband/partner (60%), their former husband/partner (27%), and their mother/stepmother (10%) as the perpetrators of the violence. Never married women most often name their mother/stepmother (42%) and teacher (23%) as perpetrators of the violence.

The most commonly mentioned perpetrators among ever-married men are unspecified (other) perpetrators (35%), followed by their current wife/partner (22%), police or soldiers (19%), and their former wife/partner (11%). Never-married men who have experienced physical violence most commonly mention (unspecified) other perpetrators (33%) and teacher (19%) (**Table 16.2.1** and **Table 16.2.2**).

16.3 EXPERIENCE OF SEXUAL VIOLENCE

Sexual violence

Percentage of respondents who have experienced any sexual violence (committed by a spouse or anyone else) ever and in the 12 months before the survey.

Sample: Women and men age 15-49

16.3.1 Prevalence of Sexual Violence

Twenty-three percent of women and 6% of men age 15-49 reported that they had ever experienced sexual violence, and 8% and 1%, respectively, said that they had experienced sexual violence in the past 12 months (**Table 16.3.1** and **Table 16.3.2**). Ten percent of women and 2% of men first experienced sexual violence before age 18 (**Table 16.5.1** and **Table 16.5.2**).

Patterns by background characteristics

- As was the case for physical violence, divorced, separated, or widowed women and men are more likely (42% and (12%), respectively) to have experienced sexual violence than currently married women and men (22% and 6%, respectively) and never-married women and men (19% and 5%, respectively) (**Table 16.3.1** and **Table 16.3.2**).
- Fourteen percent of never-married women and 3% of never-married men report having experienced sexual violence by age 18, compared with 8% of ever-married women and 1% of ever-married men (**Table 16.5.1** and **Table 16.5.2**).

16.3.2 Perpetrators of Sexual Violence

Ever-married women age 15-49 who have experienced sexual violence most often name their current husband/partner (43%), their former husband/partner (27%), and an own friend/acquaintance (19%) as the perpetrators of the violence. Among ever-married men, the most commonly mentioned perpetrators are a family friend (20%), their former wife/partner (19%), and their current wife/partner (18%). Own friend/acquaintance is the most frequently named perpetrator by both never-married women (52%) and never-married men (42%) who report sexual violence (**Table 16.4.1** and **Table 16.4.2**).

16.4 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Physical violence and sexual violence may not occur in isolation; rather, women and men may experience a combination of different forms of violence. Overall, 45% of women age 15-49 in Rwanda have experienced physical or sexual violence: 23% have experienced only physical violence, 9% have experienced only sexual violence, and 14% have experienced both physical and sexual violence (**Table 16.6.1**). Thirty-two percent of men age 15-49 have experienced physical or sexual violence: 27% have experienced only physical violence, 2% have experienced only sexual violence, and 3% have experienced both physical and sexual violence (**Table 16.6.2**).

16.5 MARITAL CONTROL BY SPOUSE

Marital control

Percentage of women and men whose current spouse/partner (if currently married) or most recent spouse/partner (if formerly married) demonstrates at least one of the following controlling behaviors: is jealous or angry if she/he talks to other men/women, frequently accuses her/him of being unfaithful, does not permit her/him to meet her/his female/male friends, tries to limit her/his contact with her/his family, and insists on knowing where she/he is at all times.

Sample: Ever-married women and men age 15-49

Marital control in the form of a spouse trying to control or monitor his/her wife/husband's activities can be a warning sign of the potential for violence in a relationship. With respect to the five specified controlling behaviors, 40% of ever-married women said that their husband/partner is jealous or angry if they talk to other men, 37% said that he insists on knowing where they are at all times, 19% said that he does not permit them to meet their female friends, 15% said that he frequently accuses them of being unfaithful, and 9% said that he tries to limit their contact with their family. Overall, 19% of women reported that their husband displays at least three of the specified marital control behaviors, and 48% said that their husband does not display any of the behaviors (**Table 16.8.1**).

Forty percent of ever-married men reported that their wife/partner is jealous or angry if they talk to other women, 23% said that she insists on knowing where they are at all times, 16% said that she accuses them of being unfaithful, 6% said that she does not permit them to meet their male friends, and 4% said that she tries to limit their contact with their family. Overall, 11% of men reported that their wife displays at least three of the specified marital control behaviors, while 53% said that she does not display any of the behaviors (**Table 16.8.2**).

Patterns by background characteristics

- By province, the proportion of women who report that their husband displays three or more of the specified behaviors is highest in South and City of Kigali (26% and 23%, respectively) and lowest in North (13%) (**Table 16.8.1**). Among men, the proportion is highest in East (17%) and lowest in South and North (7% each) (**Table 16.8.2**).
- Women with more than a secondary education are less likely (5%) than women in the other education groups (19%-23%) to report that their husband displays three or more of the specified behaviors. A similar pattern is observed among men (7% versus 8%-13%).
- Formerly married women and men are more likely (40% and 27%, respectively) than currently married women and men (15% and 11%, respectively) to report that their spouse displays three or more of the specified behaviors.
- Sixty-three percent of women who say they are afraid of their husband most of the time report that their husband displays at least three of the specified behaviors, compared with only 32% of women who say they are sometimes afraid of their husband and 8% of women who say they are never afraid of their husband. Similarly, 26% of men who say they are sometimes afraid of their wife report that their wife displays at least three of the specified behaviors, compared with 9% of men who say they are never afraid of their wife.

16.6 FORMS OF SPOUSAL VIOLENCE

Spousal violence

Percentage of women and men who have experienced any of the specified acts of physical, sexual, or emotional violence committed by their current spouse/partner (if currently married) or most recent spouse/partner (if formerly married), ever and in the 12 months preceding the survey.

Sample: Ever-married women and men age 15-49

16.6.1 Prevalence of Spousal Violence

Forty-six percent of ever-married women and 18% of ever-married men have experienced emotional, sexual, or physical violence from their current or most recent spouse/partner (**Tables 16.9.1** and **16.9.2**), and 30% and 12%, respectively, experienced such violence in the 12 months preceding the survey (**Tables 16.12.1** and **16.12.2**). Specifically, 36% of women and 9% of men reported experiencing spousal physical violence, 35% of women and 17% of men reported experiencing spousal emotional violence, and 16% of women and 1% of men reported experiencing sexual violence.

The most common form of physical violence reported by all ever-married women is that their husband slapped them (33%), followed by pushed, shook, or threw something at them (17%), kicked, dragged, or beat them up (15%), punched them with his fist or with something else that could hurt them (14%), or twisted their arm or pulled their hair (11%). Men most frequently reported that their wife pushed, shook, or threw something at them (7%). Five percent of women and 2% of men said that their spouse threatened or attacked them with a knife, gun, or other weapon (**Figures 16.2.1** and **16.2.2**).

Figure 16.2.1 Forms of spousal violence (women)

Percentage of ever-married women age 15-49 who have ever experienced specific acts of violence by their husband/partner

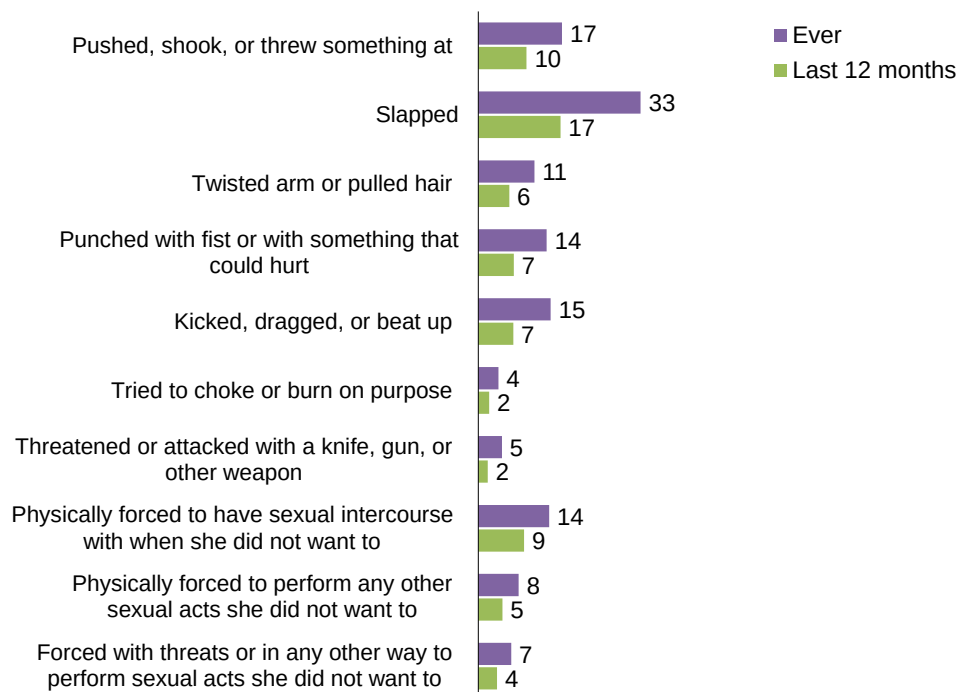
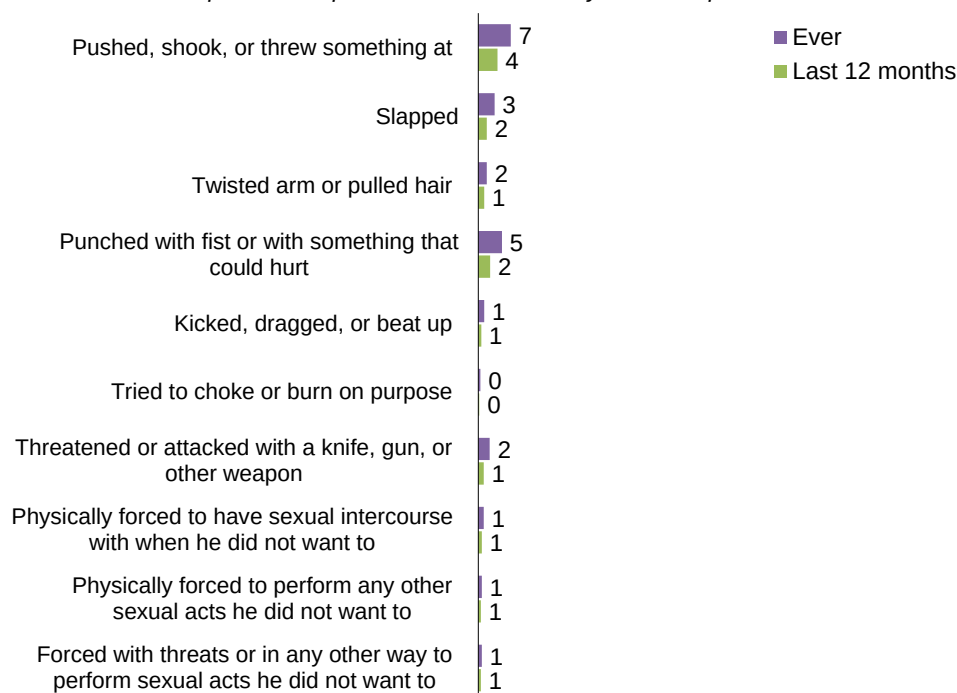


Figure 16.2.2 Forms of spousal violence (men)

Percentage of ever-married men age 15-49 who have ever experienced specific acts of violence by their wife/partner



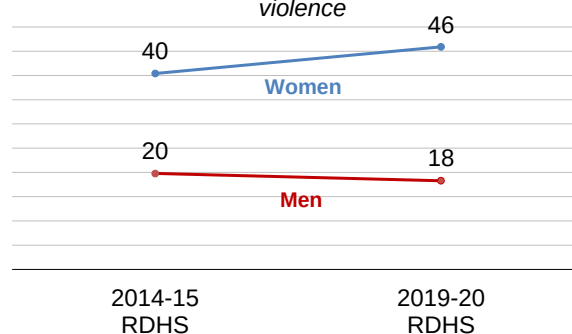
The most common form of spousal emotional violence reported by women and men was that their spouse insulted them or made them feel bad about themselves (30% and 12%, respectively), followed by their spouse saying or doing something to humiliate them in front of others (20% and 11%, respectively).

Fifteen percent of women and 5% of men said that their spouse threatened to hurt or harm them or someone close to them. The most common form of spousal sexual violence reported by women (14%) and men (1%) was being physically forced to have sexual intercourse by their spouse when they did not want to (Tables 16.9.1 and 16.9.2).

Women and men who have been married (or cohabited as if married with a partner) more than once were also asked about spousal violence committed by any previous spouse or partner. Forty-seven percent of women and 21% of men have ever experienced physical, sexual, or emotional violence committed by any current or previous spouse (Tables 16.9.1 and 16.9.2).

Figure 16.3 Trends in experience of spousal violence

Percentage of ever-married women and men who have experienced any form of emotional and/or physical and/or sexual violence



Trends: The prevalence of spousal physical, sexual or emotional violence among women increased from 40% in 2014-15 to 46% in 2019-20. Over the same period, the prevalence among men declined slightly from 20% to 18% (Figure 16.3).

Patterns by background characteristics

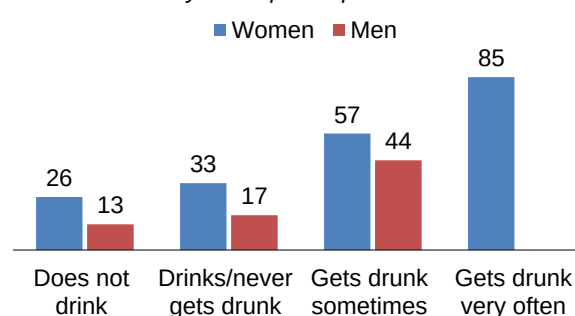
- Women and men who are currently married are less likely (41% and 17%, respectively) to have experienced spousal physical, sexual, or emotional violence than those who are formerly married (70% and 56%, respectively) (Tables 16.10.1 and 16.10.2).
- Women and men who have more than a secondary education (19% and 6%, respectively) are less likely than women and men who have no education (54% and 24%, respectively) to have experienced spousal physical, sexual, or emotional violence.
- The prevalence of spousal physical, sexual, or emotional violence varies by province. The prevalence among women is lower in East (42%) than in the other provinces (46%-48%). Among men, the prevalence ranges from a low of 14% in City of Kigali to a high of 21% in South.

Patterns by spouse's characteristics and empowerment indicators

- The likelihood of experiencing any form of violence increases with spouses' alcohol consumption. Overall, 85% of women whose husbands are often drunk have ever experienced physical, sexual, or emotional violence, compared with 26% of women whose husbands do not drink alcohol. Similarly, 44% of men whose wives are sometimes drunk have experienced physical, sexual, or emotional violence, compared with 13% of men whose wives do not drink alcohol (Tables 16.11.1 and 16.11.2 and Figure 16.4).

Figure 16.4 Spousal violence by spouse's alcohol consumption

Percentage of ever-married respondents who have ever experienced spousal (physical, sexual, or emotional) violence by their spouse/partner



- Women whose husbands have no education are more likely to report any form of violence (50%) than those whose husbands have more than a secondary education (13%).
- Women and men who report that their fathers beat their mothers are more likely (54% and 22%, respectively) than those who report that their fathers did not beat their mothers (39% and 15%, respectively) to have themselves experienced spousal physical, sexual, or emotional violence (Tables 16.11.1 and 16.11.2).
- Women who say that they are afraid of their husband most of the time are much more likely to have ever experienced spousal physical, sexual, or emotional violence (95%) than women who are never afraid of their husband (30%). Men who say that they are sometimes afraid of their wife are much more likely to have experienced spousal physical, sexual, or emotional violence (41%) than men who are never afraid of their wife (15%).

16.6.2 Onset of Spousal Violence

Tables 16.13.1 and 16.13.2 show when spousal violence first occurred in relation to the start of marriage among women and men married only once. Among currently married women age 15-49 who have been married only once, 11% first experienced spousal physical or sexual violence within the first 2 years of marriage, 22% by 5 years of marriage, and 29% by 10 years of marriage. The corresponding percentages among men are 1%, 3%, and 5%.

16.7 INJURIES DUE TO SPOUSAL VIOLENCE

Injuries due to spousal violence

Percentage of women and men who have the following types of injuries from spousal violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; or deep wounds, broken bones, broken teeth, or any other serious injury.

Sample: Ever-married women and men age 15-49 who have experienced physical or sexual violence committed by their current spouse (if currently married) or most recent spouse (if formerly married)

Among ever-married women and men who have experienced spousal physical or sexual violence, 41% and 39%, respectively, have sustained injuries (**Table 16.14.1** and **16.14.2**). Forty-eight percent of women who have experienced spousal sexual violence reported having sustained injuries. Cuts, bruises, or aches are the most common type of injury among women (38%) and men (36%) who have experienced physical or sexual violence. Twenty-three percent of women and 17% of men reported that they have sustained eye injuries, sprains, dislocations, or burns, while 10% and 8%, respectively, said that they have sustained deep wounds, broken bones, broken teeth, and other serious injuries. Forty-two percent of women and 45% of men who reported experiencing spousal physical or sexual violence in the 12 months preceding the survey said that they had sustained injuries.

16.8 VIOLENCE INITIATED BY RESPONDENTS AGAINST SPOUSES

Initiation of physical violence by respondents

Percentage of female and male respondents who have ever hit, slapped, kicked, or done anything else to physically hurt their current (if currently married) or most recent (if formerly married) spouse at times when he/she was not already beating or physically hurting them.

Sample: Ever-married women and men age 15-49

Either spouse can play a role in instigating domestic violence. All ever-married women and men were asked if they had ever initiated acts of physical violence against their spouses. Two percent of women and 15% of men said that they had hit, slapped, kicked, or done anything else to physically hurt their spouse at times when he/she was not already beating or physically hurting them (**Tables 16.15.1** and **16.15.2**).

Trends: The percentage of women who have ever initiated physical violence against their husband has not changed since 2014-15 (2%). Over the same period, the percentage among men declined from 21% to 15%.

Patterns by background characteristics

- The likelihood of initiating violence is higher among women and men who themselves have experienced spousal violence. Four percent of women who have ever experienced spousal physical violence and 6% who have experienced spousal physical violence in the past 12 months have initiated violence against their husband, compared with less than 1% of women who have never experienced spousal physical violence (**Table 16.15.1**). By contrast, 41% of men who have experienced spousal physical violence and 12% of men who have never experienced such violence have initiated violence against their wife (**Table 16.15.2**).
- Three percent of women and 20% of men who report that their father beat their mother have initiated violence against their husband, compared with 2% of women and 11% of men who report that their father did not beat their mother (**Tables 16.16.1** and **16.16.2**).

- Given that women and men who have ever initiated violence are primarily those who have ever experienced it, variations in their initiation of violence by background characteristics are largely the same as variations in their own experiences of violence by background characteristics.

16.9 HELP SEEKING AMONG WOMEN WHO HAVE EXPERIENCED VIOLENCE

Forty-three percent of women and 40% of men who have ever experienced physical or sexual violence have sought help to stop the violence. Eighteen percent of women and 22% of men have never sought help but told someone about the violence, and 40% of women and 38% of men have never sought help or told anyone about the violence (Tables 16.17.1 and 16.17.2).

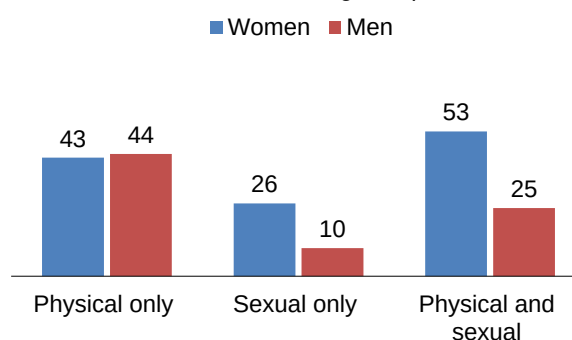
Trends: There was a decline from 2014-15 to 2019-20 in the percentage of women and men who have experienced physical or sexual violence and sought help (from 48% to 43% among women and from 45% to 40% among men).

Patterns by background characteristics

- Women who have experienced both physical and sexual violence are more likely to have sought help (53%) than women who have experienced only sexual violence (26%) or only physical violence (43%). However, men who have experienced only physical violence are more likely to have sought help (44%) than those who have experienced only sexual violence (10%) and those who have experienced both physical and sexual violence (25%) (Figure 16.5).
- For both women and men, the percentage who have sought help decreases as the level of education increases; from 49% and 61% among women and men respectively with no education to 26% and 17% among those with more than secondary education.

Figure 16.5 Help seeking by type of violence experienced

Percentage of respondents age 15-49 who have experienced physical or sexual violence and sought help



Sources for Help

Among women and men who have experienced physical or sexual violence and sought help, the most common sources for help were their neighbors (40% and 32%, respectively) and their own family (33% and 24%, respectively) (Tables 16.18.1 and 16.18.2). Eighteen percent each of women sought help from their husband/partner's family and the local authorities, and 11% sought help from the police. Seventeen percent each of men sought help from the police and the local authorities, while 15% sought help from a friend.

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Table 16.1.1 Experience of physical violence: Women

Percentage of women age 15-49 who have experienced physical violence since age 15 and percentage who experienced physical violence during the 12 months preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who have experienced physical violence since age 15 ¹	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes ²	
Age					
15-19	21.8	0.2	12.6	12.8	610
20-24	33.2	0.9	14.0	14.9	427
25-29	38.7	1.6	15.1	16.9	381
30-39	43.2	2.5	15.0	17.7	838
40-49	45.1	1.7	14.5	16.2	532
Residence					
Urban	32.9	0.9	9.7	10.7	526
Rural	37.6	1.6	15.3	17.0	2,262
Province					
City of Kigali	34.8	1.5	11.8	13.3	391
South	38.2	1.3	15.6	16.9	604
West	39.0	2.0	15.9	18.1	614
North	37.7	1.0	16.4	17.5	411
East	34.2	1.5	12.1	13.5	767
Marital status					
Never married	23.4	0.2	8.6	8.8	1,085
Married or living together	41.6	2.0	18.4	20.5	1,431
Divorced/separated/ widowed	64.4	3.7	15.5	19.2	272
Employment					
Employed for cash	41.0	1.7	15.2	17.0	1,449
Employed not for cash	37.5	1.7	14.2	16.0	644
Not employed	27.2	0.7	12.5	13.2	695
Number of living children					
0	23.0	0.2	10.3	10.5	1,015
1-2	41.1	2.2	16.2	18.4	754
3-4	49.5	2.6	18.2	20.8	634
5+	43.4	1.6	14.5	16.5	384
Education					
No education	49.2	2.9	19.0	21.8	257
Primary	40.1	1.8	15.9	17.8	1,608
Secondary	28.5	0.6	10.9	11.6	787
More than secondary	21.5	0.0	4.7	4.7	136
Wealth quintile					
Lowest	44.6	1.7	19.3	21.3	496
Second	40.7	2.0	18.2	20.2	529
Middle	38.6	2.2	13.3	15.6	514
Fourth	32.7	1.7	12.6	14.2	621
Highest	29.6	0.0	9.5	9.6	627
Total	36.7	1.5	14.3	15.8	2,788

¹ Includes violence in the past 12 months. For women who were married before age 15 and reported physical violence only by their husband/partner, the violence could have occurred before age 15.

² Includes women for whom frequency in the past 12 months is not known

Table 16.1.2 Experience of physical violence: Men

Percentage of men age 15-49 who have experienced physical violence since age 15 and percentage who experienced physical violence during the 12 months preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who have experienced physical violence since age 15 ¹	Percentage who have experienced physical violence in the past 12 months			Number of men
		Often	Sometimes	Often or sometimes ²	
Age					
15-19	23.2	0.0	12.8	12.8	538
20-24	33.6	0.4	9.8	10.2	323
25-29	29.5	0.0	3.2	3.2	227
30-39	34.1	0.3	7.7	8.0	520
40-49	31.9	0.3	5.5	5.8	339
Residence					
Urban	26.0	0.0	5.1	5.1	362
Rural	31.0	0.2	9.3	9.6	1,586
Province					
City of Kigali	21.1	0.0	3.1	3.1	293
South	26.9	0.2	8.2	8.3	414
West	33.5	0.0	9.3	9.3	408
North	35.1	0.2	10.4	10.6	294
East	32.1	0.5	10.2	10.6	539
Marital status					
Never married	27.1	0.1	10.0	10.2	987
Married or living together	32.4	0.3	6.9	7.2	924
Divorced/separated/ widowed	(52.4)	(0.0)	(9.1)	(9.1)	37
Employment					
Employed for cash	33.4	0.2	7.9	8.2	1,376
Employed not for cash	28.1	0.2	12.1	12.3	339
Not employed	13.5	0.0	6.9	6.9	233
Number of living children					
0	27.7	0.1	10.2	10.3	1,006
1-2	34.0	0.2	5.7	5.9	399
3-4	29.9	0.2	6.1	6.3	349
5+	34.5	0.6	10.3	10.9	193
Education					
No education	36.7	0.0	15.2	15.2	144
Primary	32.0	0.3	9.0	9.4	1,209
Secondary	24.8	0.0	6.6	6.6	510
More than secondary	23.0	0.0	1.8	1.8	85
Wealth quintile					
Lowest	33.6	0.0	9.9	9.9	306
Second	33.9	0.2	13.1	13.3	374
Middle	31.1	0.2	7.7	7.8	420
Fourth	27.0	0.6	6.3	6.9	401
Highest	26.2	0.0	6.6	6.6	446
Total 15-49	30.1	0.2	8.5	8.7	1,948
50-59	27.3	0.6	6.0	6.6	219
Total 15-59	29.8	0.2	8.3	8.5	2,167

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes violence in the past 12 months. For men who were married before age 15 and reported physical violence only by their wife/partner, the violence could have occurred before age 15.

² Includes men for whom frequency in the past 12 months is not known

Table 16.2.1 Persons committing physical violence: Women

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, by the respondent's current marital status, Rwanda DHS 2019-20

Person	Marital status		Total
	Ever-married	Never married	
Current husband/partner	59.9	na	45.1
Former husband/partner	26.9	na	20.2
Current boyfriend	0.4	1.8	0.7
Former boyfriend	1.0	3.5	1.6
Father/step-father	1.2	1.8	1.4
Mother/step-mother	9.5	41.5	17.4
Sister/brother	5.8	16.8	8.5
Daughter/son	0.2	0.6	0.3
Other relative	2.9	7.0	3.9
Father-in-law	0.1	Na	0.1
Other in-law	0.4	Na	0.3
Teacher	2.6	23.4	7.8
Employer/someone at work	0.3	0.1	0.2
Police/soldier	0.1	0.6	0.2
Other	7.0	12.9	8.5
Number of women who have experienced physical violence since age 15	770	254	1,024

Note: Women can report more than one person who committed the violence.
na = Not applicable

Table 16.2.2 Persons committing physical violence: Men

Among men age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, by the respondent's current marital status, Rwanda DHS 2019-20

Person	Marital status		Total
	Ever-married	Never married	
Current wife/partner	21.8	Na	11.9
Former wife/partner	11.3	Na	6.2
Current girlfriend	0.3	2.0	1.1
Former girlfriend	0.5	0.7	0.6
Father/step-father	2.0	1.6	1.8
Mother/step-mother	5.9	14.7	9.9
Sister/brother	3.0	6.3	4.5
Daughter/son	0.2	0.0	0.1
Other relative	8.0	11.8	9.8
Father-in-law	0.2	Na	0.1
Other in-law	1.3	Na	1.0
Teacher	1.8	19.1	9.7
Employer/someone at work	7.1	5.9	6.6
Police/soldier	18.6	8.8	14.1
Other	35.0	33.3	34.2
Number of men who have experienced physical violence since age 15	319	267	586

Note: Men can report more than one person who committed the violence.
na = Not applicable

Table 16.3.1 Experience of sexual violence: Women

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who experienced sexual violence in the 12 months preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who have experienced sexual violence:		Number of women
	Ever ¹	In the past 12 months	
Age			
15-19	13.3	5.4	610
20-24	23.6	8.0	427
25-29	25.5	7.9	381
30-39	25.0	10.7	838
40-49	26.0	8.3	532
Residence			
Urban	26.3	6.0	526
Rural	21.6	8.8	2,262
Province			
City of Kigali	27.3	6.8	391
South	24.2	9.8	604
West	23.1	8.5	614
North	20.8	8.4	411
East	19.1	7.6	767
Marital status			
Never married	18.6	4.1	1,085
Married or living together	21.7	10.6	1,431
Divorced/separated/ widowed	42.2	12.6	272
Employment			
Employed for cash	24.7	8.4	1,449
Employed not for cash	23.2	9.4	644
Not employed	17.2	7.0	695
Number of living children			
0	17.8	5.2	1,015
1-2	24.9	10.1	754
3-4	25.6	10.1	634
5+	25.1	9.8	384
Education			
No education	26.2	9.4	257
Primary	24.3	9.0	1,608
Secondary	17.0	7.0	787
More than secondary	26.5	4.8	136
Wealth quintile			
Lowest	25.0	9.5	496
Second	23.0	10.4	529
Middle	24.6	9.1	514
Fourth	18.7	6.9	621
Highest	22.1	6.2	627
Total	22.5	8.3	2,788

¹ Includes violence in the past 12 months

Table 16.3.2 Experience of sexual violence: Men

Percentage of men age 15-49 who have ever experienced sexual violence and percentage who experienced sexual violence in the 12 months preceding the survey, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who have experienced sexual violence:		Number of men
	Ever ¹	In the past 12 months	
Age			
15-19	3.2	0.8	538
20-24	6.6	0.6	323
25-29	4.8	0.5	227
30-39	7.8	1.1	520
40-49	5.4	1.4	339
Residence			
Urban	5.5	1.2	362
Rural	5.6	0.9	1,586
Province			
City of Kigali	6.5	1.7	293
South	4.4	1.3	414
West	6.7	1.4	408
North	5.4	0.7	294
East	5.2	0.0	539
Marital status			
Never married	5.0	0.8	987
Married or living together	5.9	1.1	924
Divorced/separated/ widowed	(12.3)	(1.9)	37
Employment			
Employed for cash	6.2	0.9	1,376
Employed not for cash	4.6	0.9	339
Not employed	3.0	1.0	233
Number of living children			
0	5.1	0.7	1,006
1-2	6.8	0.7	399
3-4	5.2	1.5	349
5+	5.9	1.5	193
Education			
No education	1.1	0.3	144
Primary	4.9	0.8	1,209
Secondary	8.2	1.5	510
More than secondary	6.7	0.0	85
Wealth quintile			
Lowest	3.4	0.6	306
Second	3.9	0.8	374
Middle	4.9	0.9	420
Fourth	7.4	1.6	401
Highest	7.4	0.8	446
Total 15-49	5.6	0.9	1,948
50-59	5.3	0.8	219
Total 15-59	5.5	0.9	2,167

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes violence in the past 12 months

Table 16.4.1 Persons committing sexual violence: Women

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence according to respondent's current marital status, Rwanda DHS 2019-20

Person	Marital status		Total
	Ever-married	Never married	
Current husband/partner	42.9	na	29.1
Former husband/partner	27.0	na	18.3
Current/former boyfriend	0.0	5.1	1.6
Father/step father	0.9	2.3	1.3
Brother/step brother	0.0	6.4	2.1
Other relative	1.7	0.7	1.4
In-law	1.5	Na	2.1
Own friend/acquaintance	19.4	51.7	29.8
Family friend	5.3	8.5	6.3
Teacher	1.1	1.6	1.3
Employer/someone at work	2.7	4.3	3.3
Police/soldier	2.6	1.2	2.1
Priest/religious leader	0.1	0.0	0.1
Stranger	9.3	17.6	12.0
Other	1.5	1.5	1.5
Missing	0.7	0.9	0.7
Number women who have experienced sexual violence	425	202	627

Note: Ever-married women can report up to three perpetrators: a current husband, former husband, or one other person who is not a current or former husband. Never married women can report only the one person who was the first to commit the violence.

na = Not applicable

Table 16.4.2 Persons committing sexual violence: Men

Among men age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence according to respondent's current marital status, Rwanda DHS 2019-20

Person	Marital status		Total
	Ever-married	Never married	
Current wife/partner	18.0	na	9.9
Former wife/partner	18.7	na	10.3
Current/former girlfriend	0.0	(1.6)	0.7
Father/step father	0.0	(0.0)	0.0
Brother/step brother	0.0	(1.6)	0.7
Other relative	0.0	(4.6)	2.1
In-law	0.0	na	1.4
Own friend/acquaintance	9.9	(41.7)	24.2
Family friend	20.1	(14.2)	17.5
Teacher	3.8	(0.0)	2.1
Employer/someone at work	11.9	(18.5)	14.9
Police/soldier	0.0	(0.0)	0.0
Priest/religious leader	1.0	(0.6)	0.8
Stranger	6.9	(7.4)	7.1
Other	10.7	(8.3)	9.6
Missing	0.0	(0.0)	0.0
Number men who have experienced sexual violence	59	49	108

Note: Figures in parentheses are based on 25-49 unweighted cases.

Ever-married men can report up to three perpetrators: a current wife, former wife, or one other person who is not a current or former wife. Never married men can report only the one person who was the first to commit the violence.

na = Not applicable

Table 16.5.1 Age at first experience of sexual violence: Women

Percentage of women age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Rwanda DHS 2019-20

Background characteristic	Percentage who first experienced sexual violence by exact age:					Percentage who have not experienced sexual violence	Number of women
	10	12	15	18	22		
Age							
15-19	0.9	2.5	6.1	na	Na	86.7	610
20-24	0.8	1.0	3.7	13.2	Na	76.4	427
25-29	0.1	1.1	4.2	8.5	18.8	74.5	381
30-39	0.3	0.3	2.4	8.8	15.4	75.0	838
40-49	0.3	0.5	2.3	8.9	13.2	74.0	532
Marital status							
Never married	0.9	2.2	6.3	14.1	17.8	81.4	1,085
Ever married	0.2	0.3	1.9	7.7	14.8	75.0	1,703
Total	0.5	1.0	3.6	10.2	16.0	77.5	2,788

na = Not applicable

Table 16.5.2 Age at first experience of sexual violence: Men

Percentage of men age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Rwanda DHS 2019-20

Background characteristic	Percentage who first experienced sexual violence by exact age:					Percentage who have not experienced sexual violence	Number of men
	10	12	15	18	22		
Age							
15-19	0.4	1.2	1.7	na	na	96.8	538
20-24	0.2	2.2	2.7	3.2	na	93.4	323
25-29	1.3	1.3	1.6	2.8	3.8	95.2	227
30-39	0.0	0.3	0.4	1.6	3.9	92.2	520
40-49	0.0	0.0	0.0	0.0	0.6	94.6	339
Marital status							
Never married	0.6	1.7	2.2	3.3	4.6	95.0	987
Ever married	0.0	0.2	0.2	1.0	2.5	93.8	961
Total 15-49	0.3	0.9	1.2	2.2	3.5	94.4	1,948
50-59	0.3	0.3	0.6	2.3	3.1	94.7	219
Total 15-59	0.3	0.9	1.1	2.2	3.5	94.5	2,167

na = Not applicable

Table 16.6.1 Experience of different forms of violence: Women

Percentage of women age 15-49 who have ever experienced different forms of violence, by current age, Rwanda DHS 2019-20

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	15.6	7.1	6.2	28.9	610
15-17	15.5	6.8	4.2	26.5	377
18-19	15.8	7.7	9.4	32.9	233
20-24	21.6	12.0	11.6	45.2	427
25-29	23.5	10.3	15.2	49.0	381
30-39	25.6	7.4	17.6	50.6	838
40-49	27.6	8.6	17.5	53.6	532
Total	22.9	8.6	13.8	45.4	2,788

Table 16.6.2 Experience of different forms of violence: Men

Percentage of men age 15-49 who have ever experienced different forms of violence, by current age, Rwanda DHS 2019-20

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of men
15-19	21.9	2.0	1.3	25.1	538
15-17	21.1	2.5	1.1	24.7	378
18-19	23.7	0.7	1.7	26.2	160
20-24	29.2	2.2	4.4	35.8	323
25-29	26.1	1.4	3.4	30.9	227
30-39	29.7	3.4	4.4	37.5	520
40-49	28.3	1.9	3.5	33.7	339
Total 15-49	26.8	2.3	3.3	32.4	1,948
50-59	24.4	2.4	2.9	29.7	219
Total 15-59	26.6	2.3	3.2	32.1	2,167

Table 16.7 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	(6.6)	43
20-24	7.6	204
25-29	4.2	301
30-39	5.4	789
40-49	6.4	512
Residence		
Urban	4.6	304
Rural	6.0	1,545
Province		
City of Kigali	8.8	241
South	4.4	408
West	3.2	405
North	4.5	273
East	8.0	522
Marital status		
Never married	5.0	189
Married or living together	4.8	1,392
Divorced/separated/ widowed	11.3	268
Number of living children		
0	8.3	76
1-2	4.6	754
3-4	6.9	634
5+	5.7	384
Education		
No education	5.0	247
Primary	5.6	1,186
Secondary	8.4	329
More than secondary	0.5	87
Wealth quintile		
Lowest	5.0	384
Second	6.4	364
Middle	7.7	359
Fourth	5.4	392
Highest	4.3	350
Total	5.8	1,849

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 16.8.1 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviors, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of women whose husband/partner:							Number of ever-married women
	Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviors	Displays none of the specific behaviors	
Age								
15-19	*	*	*	*	*	*	*	22
20-24	48.5	15.3	22.5	8.1	42.6	19.7	38.3	166
25-29	46.2	19.0	19.4	7.9	37.4	20.0	41.4	262
30-39	39.1	16.3	19.3	9.3	37.4	19.3	48.2	755
40-49	36.4	12.3	17.4	9.3	34.2	18.4	53.0	498
Residence								
Urban	45.9	16.7	24.6	9.1	38.5	21.9	44.9	281
Rural	39.1	15.0	18.0	8.8	36.5	18.6	48.1	1,422
Province								
City of Kigali	47.7	16.0	27.6	8.6	39.0	22.9	44.0	228
South	47.5	17.7	25.1	10.5	43.4	25.5	41.5	368
West	43.2	13.1	17.0	10.2	38.1	18.4	43.9	373
North	31.2	11.0	12.3	6.7	30.0	13.3	57.2	254
East	33.6	17.2	15.5	7.9	33.5	16.2	51.8	479
Marital status								
Married or living together	37.7	12.4	15.6	6.1	33.3	15.2	50.5	1,431
Divorced/separated/widowed	53.4	30.9	37.0	23.2	55.4	40.2	32.2	272
Number of living children								
0	36.6	12.2	25.8	4.6	41.8	20.2	43.6	98
1-2	43.9	16.5	20.2	8.7	37.2	19.8	44.3	614
3-4	41.5	14.9	18.8	10.0	39.2	19.6	46.8	609
5+	33.2	14.8	15.9	8.5	31.3	17.3	55.2	382
Employment								
Employed for cash	41.5	16.8	19.9	9.4	38.4	19.8	45.6	1,032
Employed not for cash	36.2	13.9	15.4	8.0	32.6	17.9	53.3	429
Not employed	41.8	11.6	22.2	8.0	37.7	18.7	45.9	241
Education								
No education	41.7	19.1	20.9	11.4	40.0	22.7	46.7	238
Primary	39.7	15.0	18.2	8.9	36.7	18.7	47.8	1,083
Secondary	42.8	15.9	23.0	8.8	38.6	21.9	45.8	296
More than secondary	33.9	6.6	10.8	1.4	24.7	5.4	53.4	85
Wealth quintile								
Lowest	50.4	23.0	22.0	12.8	44.3	26.1	37.1	349
Second	38.8	16.0	17.8	6.0	37.0	18.4	47.1	334
Middle	37.0	15.8	18.9	9.9	36.0	19.4	50.3	326
Fourth	35.8	10.7	17.2	9.0	32.0	15.3	54.1	359
Highest	38.9	11.1	19.4	6.5	35.0	16.5	49.5	336
Woman afraid of husband/partner								
Afraid most of the time	72.5	42.9	56.0	38.9	74.0	62.9	13.7	156
Sometimes afraid	58.6	23.3	31.1	14.8	54.9	31.7	27.6	447
Never afraid	28.2	8.2	9.0	2.2	24.3	7.9	60.5	1,100
Total	40.2	15.3	19.1	8.9	36.9	19.2	47.6	1,703

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.8.2 Marital control exercised by wives

Percentage of ever-married men age 15-49 whose wives/partners have ever demonstrated specific types of controlling behaviors, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of men whose wife/partner:							Number of ever-married men
	Is jealous or angry if he talks to other women	Frequently accuses him of being unfaithful	Does not permit him to meet his male friends	Tries to limit his contact with his family	Insists on knowing where he is at all times	Displays 3 or more of the specific behaviors	Displays none of the specific behaviors	
Age								
20-24	46.0	11.3	1.9	0.0	36.3	8.7	44.4	43
25-29	41.1	12.7	3.7	2.9	18.5	7.3	53.8	118
30-39	40.7	17.8	6.9	4.9	24.5	11.9	53.1	468
40-49	37.5	15.5	5.7	5.0	20.7	11.9	54.9	332
Residence								
Urban	39.6	16.1	9.2	4.1	29.1	13.1	49.9	154
Rural	39.9	16.1	5.2	4.5	21.8	10.8	54.1	807
Province								
City of Kigali	32.4	11.8	8.0	2.6	21.2	9.0	59.8	124
South	38.8	12.3	3.0	3.4	14.7	6.9	57.1	200
West	45.9	15.9	5.8	6.7	31.8	12.0	45.0	212
North	32.9	10.2	3.4	1.3	18.5	7.4	60.2	161
East	43.7	24.7	8.6	6.2	25.8	17.1	50.3	265
Marital status								
Married or living together	39.5	15.7	5.5	4.1	22.8	10.6	53.7	924
Divorced/separated/ widowed	(48.5)	(27.0)	(14.2)	(12.5)	(28.5)	(26.8)	(46.6)	37
Number of living children								
0	32.5	11.3	7.1	1.5	28.3	9.9	56.0	47
1-2	39.0	12.0	5.8	2.5	22.9	8.1	55.0	371
3-4	39.1	18.8	5.3	6.0	20.7	12.7	54.0	349
5+	44.9	20.4	6.7	6.0	25.9	14.8	48.6	193
Employment								
Employed for cash	40.2	15.9	5.7	4.2	23.0	11.0	52.8	832
Employed not for cash	39.5	18.8	7.0	6.2	24.3	13.5	55.2	122
Not employed	*	*	*	*	*	*	*	7
Education								
No education	37.9	15.4	5.3	3.6	14.9	7.6	54.9	116
Primary	40.0	17.1	5.0	4.7	23.4	11.8	53.7	685
Secondary	43.0	15.1	11.5	5.1	27.7	12.5	48.3	122
More than secondary	35.0	4.0	5.5	0.2	24.2	7.1	61.0	38
Wealth quintile								
Lowest	39.6	14.0	3.7	3.1	16.9	9.9	56.6	186
Second	42.4	19.2	5.5	4.5	20.9	12.0	51.8	187
Middle	42.9	20.0	7.2	6.5	24.7	13.8	49.9	230
Fourth	42.3	13.1	4.7	2.9	27.2	9.8	50.5	198
Highest	30.0	13.1	8.2	4.9	24.8	9.7	60.4	160
Man afraid of wife/partner								
Afraid most of the time	*	*	*	*	*	*	*	13
Sometimes afraid	53.7	28.5	17.3	15.5	32.7	25.7	39.3	89
Never afraid	37.9	14.2	4.1	2.7	21.4	9.0	55.4	859
Total 15-49	39.9	16.1	5.9	4.4	23.0	11.2	53.4	961
50-59	33.5	11.1	7.2	5.9	14.8	7.9	61.4	218
Total 15-59	38.7	15.2	6.1	4.7	21.5	10.6	54.9	1,180

Note: Wife/partner refers to the current wife/partner for currently married men and the most recent wife/partner for divorced, separated, or widowed men. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.9.1 Forms of spousal violence: Women

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their current or most recent husband/partner, Rwanda DHS 2019-20

Type of violence experienced	Ever experienced	Experienced in the past 12 months	Frequency in the past 12 months	
			Often	Sometimes
Physical violence				
Any physical violence	36.3	19.6	2.3	17.4
Pushed her, shook her, or threw something at her	17.0	9.8	1.4	8.5
Slapped her	33.0	16.7	1.5	15.3
Twisted her arm or pulled her hair	11.4	6.3	0.8	5.5
Punched her with his fist or with something that could hurt her	13.9	7.2	0.7	6.6
Kicked her, dragged her, or beat her up	14.7	7.1	0.8	6.3
Tried to choke her or burn her on purpose	4.1	2.2	0.1	2.1
Threatened her or attacked her with a knife, gun, or other weapon	4.8	1.9	0.3	1.5
Sexual violence				
Any sexual violence	15.6	10.3	0.7	9.5
Physically forced her to have sexual intercourse with him when she did not want to	14.4	9.3	0.7	8.6
Physically forced her to perform any other sexual acts she did not want to	8.2	4.9	0.4	4.5
Forced her with threats or in any other way to perform sexual acts she did not want to	6.7	3.8	0.3	3.5
Emotional violence				
Any emotional violence	34.6	23.4	3.4	20.0
Said or did something to humiliate her in front of others	20.0	12.8	2.3	10.4
Threatened to hurt or harm her or someone she cared about	15.3	9.3	1.2	8.1
Insulted her or made her feel bad about herself	29.6	19.7	2.6	17.2
Any form of physical and/or sexual violence	40.3	23.6	2.7	21.0
Any form of emotional and/or physical and/or sexual violence	45.9	29.7	4.3	25.4
Spousal violence committed by any husband/partner				
Physical violence	37.6	19.7	na	na
Sexual violence	16.6	10.3	na	na
Emotional violence	35.8	23.6	na	na
Any form of physical or sexual violence	41.5	23.8	na	na
Any form of emotional or physical or sexual violence	47.2	30.0	na	na
Number of ever-married women	1,703	1,703	1,703	1,703

na = Not available

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

Table 16.9.2 Forms of spousal violence: Men

Percentage of ever-married men age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their current or most recent wife/partner, Rwanda DHS 2019-20

Type of violence experienced	Ever experienced	Experienced in the past 12 months	Frequency in the past 12 months	
			Often	Sometimes
Physical violence				
Any physical violence	8.7	5.1	0.2	4.9
Pushed him, shook him, or threw something at him	6.6	3.9	0.0	3.9
Slapped him	3.3	1.7	0.0	1.7
Twisted his arm or pulled his hair	1.7	1.2	0.0	1.2
Punched him with her fist or with something that could hurt him	4.8	2.4	0.1	2.3
Kicked him, dragged him, or beat him up	1.2	0.6	0.0	0.6
Tried to choke him or burn him on purpose	0.4	0.2	0.0	0.2
Threatened him or attacked him with a knife, gun, or other weapon	2.3	1.1	0.1	1.0
Sexual violence				
Any sexual violence	1.3	0.8	0.0	0.8
Physically forced him to have sexual intercourse with her when he did not want to	1.1	0.7	0.0	0.7
Physically forced him to perform any other sexual acts he did not want to	0.7	0.5	0.0	0.5
Forced him with threats or in any other way to perform sexual acts he did not want to	0.7	0.5	0.0	0.5
Emotional violence				
Any emotional violence	16.5	11.6	2.2	9.4
Said or did something to humiliate him in front of others	10.7	6.9	1.1	5.8
Threatened to hurt or harm him or someone he cared about	5.3	3.7	0.5	3.1
Insulted him or made him feel bad about himself	12.4	8.5	1.7	6.8
Any form of physical and/or sexual violence	9.1	5.4	0.2	5.2
Any form of emotional and/or physical and/or sexual violence	18.3	12.4	2.4	10.0
Spousal violence committed by any wife/partner				
Physical violence	10.4	5.1	na	na
Sexual violence	2.1	0.9	na	na
Emotional violence	18.5	12.0	na	na
Any form of physical or sexual violence	11.1	5.4	na	na
Any form of emotional or physical or sexual violence	20.7	12.9	na	na
Number of ever-married men	961	961	961	961

na = Not available

Note: Wife/partner refers to the current wife/partner for currently married men and the most recent wife/partner for divorced, separated, or widowed men.

Table 16.10.1 Spousal violence by background characteristics: Women

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Age								
15-19	*	*	*	*	*	*	*	22
20-24	35.9	36.4	16.8	11.6	10.6	41.6	48.1	166
25-29	29.3	33.1	10.6	7.8	7.6	35.9	40.4	262
30-39	37.1	36.2	16.2	12.0	11.2	40.5	47.0	755
40-49	33.4	39.0	17.2	13.3	11.8	42.9	47.5	498
Residence								
Urban	31.9	30.2	15.6	10.7	8.9	35.1	42.4	281
Rural	35.1	37.5	15.6	11.8	11.1	41.3	46.6	1,422
Province								
City of Kigali	37.0	32.6	15.1	10.1	8.1	37.6	45.8	228
South	36.3	36.8	18.5	13.4	13.2	41.9	47.2	368
West	32.5	38.1	16.8	12.7	11.7	42.1	48.3	373
North	33.5	40.5	14.5	11.6	9.9	43.4	47.6	254
East	34.3	34.0	13.4	10.2	9.8	37.2	42.3	479
Marital status								
Married or living together	29.3	32.0	12.2	8.4	7.3	35.8	41.4	1,431
Divorced/separated/ widowed	62.4	59.1	33.6	28.8	28.8	63.8	70.0	272
Number of living children								
0	27.0	24.3	14.9	10.8	10.1	28.4	34.4	98
1-2	32.5	31.9	14.7	11.0	10.5	35.6	42.1	614
3-4	39.6	42.2	15.6	11.6	10.1	46.1	51.8	609
5+	31.8	37.0	17.4	12.9	12.3	41.5	45.8	382
Employment								
Employed for cash	36.8	38.1	16.4	12.8	12.3	41.7	47.5	1,032
Employed not for cash	30.6	33.3	13.9	9.0	7.7	38.2	44.2	429
Not employed	32.2	34.1	15.4	11.6	9.3	38.0	42.2	241
Education								
No education	41.9	46.2	19.0	15.8	15.4	49.4	54.1	238
Primary	35.9	38.2	16.4	12.6	11.6	42.0	48.1	1,083
Secondary	29.7	28.4	13.5	8.3	6.7	33.6	39.4	296
More than secondary	14.6	11.7	3.6	0.0	0.0	15.3	19.0	85
Wealth quintile								
Lowest	44.1	46.2	18.8	15.4	14.2	49.6	56.4	349
Second	37.7	40.0	17.7	13.7	13.0	44.0	49.1	334
Middle	31.6	37.8	18.4	13.7	12.7	42.5	46.7	326
Fourth	30.8	31.2	12.0	8.6	8.3	34.6	39.8	359
Highest	28.4	26.3	11.5	7.0	5.5	30.8	37.7	336
Total	34.6	36.3	15.6	11.6	10.7	40.3	45.9	1,703

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.10.2 Spousal violence by background characteristics: Men

Percentage of ever-married men age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent wife/partner, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married men
Age								
20-24	15.1	10.4	0.0	0.0	0.0	10.4	18.7	43
25-29	9.8	4.6	1.2	0.7	0.7	5.1	11.8	118
30-39	16.9	8.4	1.3	0.8	0.8	9.0	18.8	468
40-49	18.4	10.4	1.4	1.1	1.1	10.7	19.9	332
Residence								
Urban	15.6	10.4	2.4	1.1	1.1	11.7	19.2	154
Rural	16.6	8.4	1.0	0.8	0.8	8.7	18.1	807
Province								
City of Kigali	11.5	8.4	1.3	0.0	0.0	9.7	13.7	124
South	18.4	10.4	1.7	1.2	1.2	11.0	20.8	200
West	18.5	8.4	2.3	1.9	1.9	8.7	19.9	212
North	13.1	5.4	0.9	0.4	0.4	5.9	15.0	161
East	17.7	9.9	0.3	0.3	0.3	9.9	19.3	265
Marital status								
Married or living together	14.9	7.5	1.0	0.6	0.6	7.9	16.8	924
Divorced/separated/ widowed	(54.5)	(39.4)	(7.6)	(7.6)	(7.6)	(39.4)	(55.8)	37
Number of living children								
0	11.8	6.9	2.1	2.1	2.1	6.9	13.7	47
1-2	13.5	7.3	1.0	0.6	0.6	7.8	15.2	371
3-4	17.4	8.6	1.5	0.8	0.8	9.2	19.2	349
5+	21.6	12.2	1.2	1.2	1.2	12.2	23.6	193
Employment								
Employed for cash	17.3	8.9	1.5	1.0	1.0	9.4	19.3	832
Employed not for cash	9.1	5.8	0.0	0.0	0.0	5.8	9.9	122
Not employed	*	*	*	*	*	*	*	7
Education								
No education	21.6	14.6	0.0	0.0	0.0	14.6	24.0	116
Primary	17.2	8.8	1.3	1.0	1.0	9.0	18.5	685
Secondary	11.3	5.0	2.6	0.8	0.8	6.8	15.3	122
More than secondary	3.7	2.2	0.0	0.0	0.0	2.2	5.9	38
Wealth quintile								
Lowest	23.4	11.4	0.7	0.3	0.3	11.7	25.0	186
Second	20.8	10.2	1.3	1.3	1.3	10.2	21.2	187
Middle	15.9	8.0	1.2	0.9	0.9	8.3	18.3	230
Fourth	9.0	6.1	1.4	1.1	1.1	6.4	10.9	198
Highest	13.4	8.3	1.7	0.4	0.4	9.6	16.3	160
Total 15-49	16.5	8.7	1.3	0.8	0.8	9.1	18.3	961
50-59	17.7	8.4	0.4	0.0	0.0	8.8	19.1	218
Total 15-59	16.7	8.7	1.1	0.7	0.7	9.1	18.4	1,180

Note: Wife/partner refers to the current wife/partner for currently married men and the most recent wife/partner for divorced, separated, or widowed men. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.11.1 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to the husband's characteristics and women's empowerment indicators, Rwanda DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Husband's/partner's education¹								
No education	35.7	40.7	10.9	10.2	9.1	41.4	49.9	188
Primary	31.2	33.5	14.1	9.3	8.5	38.3	43.5	970
Secondary	21.3	25.6	6.8	6.1	2.9	26.3	32.7	175
More than secondary	8.2	6.5	5.6	0.0	0.0	12.1	13.4	88
Don't know/missing	*	*	*	*	*	*	*	10
Husband's/partner's alcohol consumption¹								
Does not drink alcohol	17.7	17.1	9.5	5.0	4.9	21.6	26.1	626
Drinks alcohol but is never drunk	21.9	25.3	6.2	4.3	3.5	27.3	32.9	234
Is sometimes drunk	42.2	46.5	16.7	12.7	11.4	50.5	57.3	632
Is often drunk	75.7	74.7	40.8	36.4	33.9	79.1	85.0	212
Spousal education difference¹								
Husband better educated	26.5	29.6	12.1	7.8	7.0	33.9	38.4	587
Wife better educated	31.5	32.0	12.4	8.3	7.8	36.1	42.8	543
Both equally educated	28.4	33.4	13.5	10.8	7.8	36.1	41.8	234
Neither educated	37.8	45.3	7.2	7.2	5.6	45.3	51.2	50
Don't know/missing	*	*	*	*	*	*	*	17
Spousal age difference¹								
Wife older	24.2	30.9	13.9	9.3	7.4	35.5	40.1	219
Wife is same age	38.9	38.2	15.8	10.9	9.5	43.1	53.4	127
Wife 1-4 years younger	28.1	30.3	13.2	8.4	7.1	35.1	40.2	498
Wife 5-9 years younger	27.9	31.5	8.8	5.5	5.1	34.8	39.7	377
Wife 10 or more years younger	34.0	33.9	12.1	11.0	10.2	35.0	40.9	209
Number of marital control behaviors displayed by husband/partner²								
0	11.1	16.9	4.6	2.6	1.9	18.9	21.5	811
1-2	41.1	42.0	14.2	9.4	8.7	46.8	56.1	566
3-4	77.6	71.0	40.4	32.7	30.5	78.7	86.8	255
5	95.6	87.2	63.2	57.1	57.1	93.4	96.9	71
Number of decisions in which women participate³								
0	31.8	38.8	20.0	14.3	11.4	44.4	49.4	93
1-2	38.9	40.4	16.2	11.9	10.4	44.7	52.0	377
3	25.2	28.0	9.9	6.4	5.7	31.4	36.4	961
Number of reasons for which wife beating is justified⁴								
0	27.9	28.7	14.0	10.4	9.1	32.3	37.6	846
1-2	37.2	42.0	16.9	13.7	13.2	45.2	50.5	283
3-4	40.9	44.9	15.1	11.6	10.8	48.4	56.8	271
5-7	45.1	44.5	19.4	13.2	13.0	50.7	55.3	302
Father beat mother								
Yes	39.8	44.2	19.5	15.7	14.5	48.0	53.7	626
No	29.1	30.0	12.2	8.8	7.9	33.4	38.9	970
Don't know/missing	53.0	46.7	24.1	14.1	14.1	56.7	64.2	107
Woman afraid of husband/partner								
Afraid most of the time	86.0	87.6	53.3	49.2	48.3	91.7	94.7	156
Sometimes afraid	57.5	54.4	23.7	17.7	17.0	60.4	68.2	447
Never afraid	18.0	21.7	7.0	3.9	2.9	24.8	30.0	1,100
Total	34.6	36.3	15.6	11.6	10.7	40.3	45.9	1,703

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes only currently married women.

² According to the wife's report. See Table 16.8.1 for list of behaviors.

³ According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.

⁴ According to the wife's report. See Table 15.10.1 for list of reasons.

Table 16.11.2 Spousal violence by wife's characteristics and empowerment indicators

Percentage of ever-married men age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent wife/partner, according to the wife's characteristics and women's empowerment indicators, Rwanda DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married men
Wife's/partner's alcohol consumption¹								
Does not drink alcohol	11.0	5.3	0.8	0.4	0.4	5.7	12.7	678
Drinks alcohol but is never drunk	14.7	8.7	0.0	0.0	0.0	8.7	17.1	141
Is sometimes drunk	41.9	22.1	3.7	2.5	2.5	23.3	44.1	134
Is often drunk	*	*	*	*	*	*	*	8
Number of marital control behaviors displayed by wife/partner²								
0	6.0	3.6	0.2	0.1	0.1	3.7	7.0	514
1-2	17.6	8.8	1.4	0.4	0.4	9.8	20.8	340
3-4	58.6	27.2	4.2	4.2	4.2	27.2	60.1	95
5	*	*	*	*	*	*	*	13
Number of reasons for which wife beating is justified³								
0	15.2	8.0	1.4	0.9	0.9	8.4	17.1	814
1-2	16.5	9.0	0.0	0.0	0.0	9.0	19.0	108
3-4	(36.7)	(20.3)	(2.5)	(2.5)	(2.5)	(20.3)	(36.7)	33
5-7	*	*	*	*	*	*	*	6
Father beat mother								
Yes	19.5	10.3	1.5	1.1	1.1	10.8	21.8	381
No	13.6	7.4	1.2	0.8	0.8	7.8	15.1	530
Don't know/missing	24.3	11.3	0.0	0.0	0.0	11.3	25.7	50
Man afraid of wife/partner								
Afraid most of the time	*	*	*	*	*	*	*	13
Sometimes afraid	40.5	28.2	4.0	4.0	4.0	28.2	41.2	89
Never afraid	13.0	6.2	0.8	0.4	0.4	6.7	14.9	859
Total 15-49	16.5	8.7	1.3	0.8	0.8	9.1	18.3	961
50-59	17.7	8.4	0.4	0.0	0.0	8.8	19.1	218
Total 15-59	16.7	8.7	1.1	0.7	0.7	9.1	18.4	1,180

Note: Wife/partner refers to the current wife/partner for currently married men and the most recent wife/partner for divorced, separated, or widowed men. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes only currently married men.

² According to the husband's report. See Table 16.8.2 for list of behaviors.

³ According to the husband's report. Includes only currently married men. See Table 15.9.2 for list of decisions.

Table 16.12.1 Violence by any husband/partner in the last 12 months

Percentage of ever-married women who have experienced emotional, physical, or sexual violence by any husband/partner in the past 12 months, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Age								
15-19	*	*	*	*	*	*	*	22
20-24	32.3	30.1	15.5	10.3	9.2	35.3	42.7	166
25-29	22.5	22.4	8.4	5.6	5.0	25.2	29.3	262
30-39	25.4	18.9	11.2	6.2	5.7	23.9	30.9	755
40-49	18.7	16.4	8.3	5.4	5.0	19.3	25.1	498
Residence								
Urban	23.5	13.3	7.9	4.0	3.8	17.2	27.0	281
Rural	23.6	21.0	10.8	6.7	6.2	25.0	30.5	1,422
Province								
City of Kigali	26.4	17.5	9.4	5.3	5.3	21.6	30.2	228
South	25.2	20.0	11.7	6.9	6.7	24.9	30.8	368
West	23.5	23.1	12.2	7.4	7.0	27.9	33.7	373
North	21.2	22.5	9.8	6.9	5.4	25.5	30.0	254
East	22.3	16.5	8.4	5.1	4.5	19.8	26.3	479
Education								
No education	24.9	21.9	9.1	6.2	5.5	24.9	30.9	238
Primary	24.5	21.4	11.1	7.0	6.4	25.4	32.0	1,083
Secondary	22.5	15.6	10.8	5.5	5.5	20.8	26.8	296
More than secondary	11.8	7.5	2.2	0.0	0.0	9.7	12.5	85
Wealth quintile								
Lowest	29.3	25.3	10.6	7.3	6.4	28.6	36.1	349
Second	26.1	24.5	12.8	7.8	6.8	29.5	34.7	334
Middle	19.8	19.6	13.0	8.2	7.7	24.4	28.5	326
Fourth	24.5	18.4	8.7	5.3	5.3	21.8	29.2	359
Highest	17.7	10.7	6.7	2.8	2.7	14.5	21.2	336
Total	23.6	19.7	10.3	6.3	5.8	23.8	30.0	1,703

Note: Any husband/partner includes all current, most recent, and former husbands/partners. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.12.2 Violence by any wife/partner in the last 12 months

Percentage of ever-married men who have experienced emotional, physical, or sexual violence by any wife/partner in the past 12 months, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married men
Age								
20-24	15.1	10.4	0.0	0.0	0.0	10.4	18.7	43
25-29	6.8	1.6	0.0	0.0	0.0	1.6	6.8	118
30-39	13.3	5.5	0.8	0.4	0.4	5.9	14.2	468
40-49	11.7	5.1	1.4	1.1	1.1	5.4	12.5	332
Residence								
Urban	11.4	5.0	1.8	0.5	0.5	6.3	13.6	154
Rural	12.2	5.1	0.7	0.6	0.6	5.2	12.8	807
Province								
City of Kigali	7.0	2.4	1.3	0.0	0.0	3.7	8.4	124
South	12.7	6.0	1.3	1.1	1.1	6.2	13.1	200
West	13.9	4.7	1.7	1.3	1.3	5.0	14.2	212
North	9.5	3.1	0.4	0.4	0.4	3.1	10.8	161
East	14.0	7.3	0.0	0.0	0.0	7.3	15.1	265
Education								
No education	17.5	8.1	0.0	0.0	0.0	8.1	18.8	116
Primary	12.3	5.6	1.0	0.8	0.8	5.7	13.0	685
Secondary	7.9	0.8	1.3	0.0	0.0	2.1	9.2	122
More than secondary	3.7	1.9	0.0	0.0	0.0	1.9	5.6	38
Wealth quintile								
Lowest	17.1	8.2	0.7	0.7	0.7	8.2	17.4	186
Second	14.0	6.7	0.8	0.8	0.8	6.7	14.4	187
Middle	12.8	3.7	0.3	0.0	0.0	4.0	14.4	230
Fourth	6.4	3.0	1.1	1.1	1.1	3.0	6.8	198
Highest	9.8	4.3	1.7	0.4	0.4	5.6	11.3	160
Total 15-49	12.0	5.1	0.9	0.6	0.6	5.4	12.9	961
50-59	10.5	4.9	0.0	0.0	0.0	4.9	10.5	218
Total 15-59	11.8	5.1	0.7	0.5	0.5	5.3	12.5	1,180

Note: Any wife/partner includes all current, most recent, and former wives/partners.

Table 16.13.1 Experience of spousal violence by duration of marriage: Women

Among currently married women age 15-49 who have been married only once, percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage, according to marital duration, Rwanda DHS 2019-20

Years since marriage	Percentage who first experienced spousal physical or sexual violence by exact marital duration				Percentage who have not experienced sexual or physical violence	Number of currently married women who have been married only once
	Before marriage	2 years	5 years	10 years		
<2	0.0	na	na	na	79.9	128
2-4	0.0	15.2	na	na	71.0	185
5-9	0.0	8.5	24.8	na	69.3	302
10+	0.1	9.2	20.6	31.9	58.9	679
Total	0.1	10.6	21.8	29.3	65.1	1,295

na = Not applicable

Table 16.13.2 Experience of spousal violence by duration of marriage: Men

Among currently married men age 15-49 who have been married only once, percentage who first experienced physical or sexual violence committed by their current wife/partner by specific exact years since marriage, according to marital duration, Rwanda DHS 2019-20

Years since marriage	Percentage who first experienced spousal physical or sexual violence by exact marital duration				Percentage who have not experienced sexual or physical violence	Number of currently married men who have been married only once
	Before marriage	2 years	5 years	10 years		
<2	0.0	na	na	na	95.5	88
2-4	0.5	4.0	na	na	91.9	108
5-9	0.0	1.5	2.6	na	96.3	219
10+	0.0	0.4	2.3	4.5	92.1	394
Total 15-49	0.1	1.4	3.1	4.7	93.6	808
50-59	0.0	0.0	1.0	2.1	92.0	149
Total 15-59	0.1	1.2	2.8	4.3	93.4	958

na = Not applicable

Table 16.14.1 Injuries to women due to spousal violence

Among ever-married women age 15-49 who have experienced violence committed by their current or most recent husband/partner, percentage who have been injured as a result of the violence, by types of injuries, according to type of violence, Rwanda DHS 2019-20

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have experienced physical or sexual violence
Physical violence¹					
Ever ²	41.6	24.8	10.5	44.4	618
Past 12 months	45.3	25.9	10.7	48.4	334
Sexual violence					
Ever ²	44.7	29.7	14.2	48.0	266
Past 12 months	40.3	26.0	12.5	43.1	175
Physical or sexual violence¹					
Ever ²	38.2	22.7	9.5	40.6	686
Past 12 months	39.7	22.7	8.9	42.4	403

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

¹ Excludes women who reported violence only in response to a direct question on violence during pregnancy

² Includes in the past 12 months

Table 16.14.2 Injuries to men due to spousal violence

Among ever-married men age 15-49 who have experienced violence committed by their current or most recent wife/partner, percentage who have been injured as a result of the violence, by types of injuries, according to type of violence, Rwanda DHS 2019-20

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married men who have experienced physical or sexual violence
Physical violence					
Ever ¹	37.1	17.3	8.2	41.1	102
Past 12 months	41.6	19.1	8.1	46.6	60
Sexual violence					
Ever ¹	*	*	*	*	13
Past 12 months	*	*	*	*	8
Physical or sexual violence					
Ever ¹	35.5	16.6	7.8	39.3	107
Past 12 months	39.8	18.3	7.8	44.6	63

Note: Wife/partner refers to the current wife/partner for currently married men and the most recent wife/partner for divorced, separated, or widowed men. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes in the past 12 months

Table 16.15.1 Violence by women against their husband by women's background characteristics

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever ¹	Past 12 months	
Women's experience of spousal physical violence			
Ever ¹	4.3	2.8	618
In the past 12 months	5.9	5.1	334
Never	0.6	0.0	1,085
Age			
15-19	*	*	22
20-24	2.7	2.1	166
25-29	1.1	1.1	262
30-39	2.2	0.8	755
40-49	1.9	0.8	498
Residence			
Urban	1.8	0.4	281
Rural	2.0	1.1	1,422
Province			
City of Kigali	2.0	0.5	228
South	3.0	1.7	368
West	2.6	1.6	373
North	0.4	0.2	254
East	1.6	0.7	479
Marital status			
Married or living together	1.9	1.0	1,431
Divorced/separated/widowed	2.6	1.2	272
Employment			
Employed for cash	1.9	0.8	1,032
Employed not for cash	1.2	0.7	429
Not employed	3.4	2.3	241
Number of living children			
0	0.0	0.0	98
1-2	1.9	1.1	614
3-4	2.1	1.0	609
5+	2.4	1.0	382
Education			
No education	2.1	1.1	238
Primary	2.0	1.0	1,083
Secondary	2.3	1.1	296
More than secondary	0.3	0.0	85
Wealth quintile			
Lowest	3.1	1.3	349
Second	2.5	1.3	334
Middle	1.2	0.5	326
Fourth	1.3	1.1	359
Highest	1.7	0.8	336
Total	2.0	1.0	1,703

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes in the past 12 months

Table 16.15.2 Violence by men against their wife by men's background characteristics

Percentage of ever-married men who have committed physical violence against their current or most recent wife/partner when she was not already beating or physically hurting them, ever and in the past 12 months, according to men's own experience of spousal violence and background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage who committed physical violence against their wife/partner		Number of ever-married men
	Ever ¹	Past 12 months	
Men's experience of spousal physical violence			
Ever ¹	41.3	16.0	84
In the past 12 months	42.3	27.3	49
Never	11.9	2.9	877
Age			
20-24	8.9	7.2	43
25-29	12.6	4.0	118
30-39	15.1	5.1	468
40-49	15.0	2.3	332
Residence			
Urban	15.4	6.3	154
Rural	14.3	3.6	807
Province			
City of Kigali	12.5	4.4	124
South	11.6	2.9	200
West	12.0	2.7	212
North	18.6	5.0	161
East	17.1	5.3	265
Marital status			
Married or living together	14.6	4.1	924
Divorced/separated/widowed	(10.7)	(3.5)	37
Employment			
Employed for cash	14.8	4.3	832
Employed not for cash	13.0	2.4	122
Not employed	*	*	7
Number of living children			
0	8.2	6.7	47
1-2	12.1	4.5	371
3-4	14.9	3.2	349
5+	19.7	4.2	193
Education			
No education	15.1	3.2	116
Primary	15.0	4.1	685
Secondary	12.4	3.6	122
More than secondary	11.1	7.1	38
Wealth quintile			
Lowest	12.4	4.8	186
Second	17.4	5.1	187
Middle	17.5	4.2	230
Fourth	10.6	2.3	198
Highest	13.8	4.1	160
Total 15-49	14.5	4.1	961
50-59	14.2	2.6	218
Total 15-59	14.4	3.8	1,180

Note: Wife/partner refers to the current wife/partner for currently married men and the most recent wife/partner for divorced, separated, or widowed men. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes in the past 12 months

Table 16.16.1 Violence by women against their husband by husband's characteristics and empowerment indicators

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to their husband's characteristics and women's empowerment indicators, Rwanda DHS 2019-20

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever ¹	Past 12 months	
Husband's/partner's education²			
No education	2.6	1.7	188
Primary	1.9	1.0	970
Secondary	1.0	0.3	175
More than secondary	1.6	0.0	88
Don't know/missing	*	*	10
Husband's/partner's alcohol consumption			
Does not drink alcohol	1.1	0.3	626
Drinks alcohol but is never drunk	0.0	0.0	234
Is sometimes drunk	2.7	1.6	632
Is often drunk	4.8	2.1	212
Spousal education difference²			
Husband better educated	2.0	0.6	587
Wife better educated	1.9	1.2	543
Both equally educated	1.3	0.9	234
Neither educated	3.2	2.6	50
Don't know/missing	*	*	17
Spousal age difference²			
Wife older	1.3	0.6	219
Wife is same age	1.8	1.1	127
Wife 1-4 years younger	2.0	0.9	498
Wife 5-9 years younger	1.0	0.2	377
Wife 10 or more years younger	3.6	2.7	209
Number of marital control behaviors displayed by husband/partner³			
0	0.6	0.2	811
1-2	3.2	1.5	566
3-4	2.8	2.3	255
5	5.4	0.9	71
Number of decisions in which women participate⁴			
0	0.7	0.7	93
1-2	2.8	2.1	377
3	1.6	0.5	961
Number of reasons for which wife beating is justified⁵			
0	1.4	0.5	846
1-2	3.4	1.0	283
3-4	2.0	1.7	271
5-7	2.4	1.7	302
Father beat mother			
Yes	2.7	1.2	626
No	1.6	0.9	970
Don't know/missing	1.6	0.6	107
Woman afraid of husband/partner			
Afraid most of the time	5.8	4.4	156
Sometimes afraid	2.8	1.9	447
Never afraid	1.1	0.2	1,100
Total	2.0	1.0	1,703

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes in the past 12 months

² Includes only currently married women

³ According to the wife's report. See 16.8.1 for list of behaviors.

⁴ According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.

⁵ According to the wife's report. See Table 15.10.1 for list of reasons.

Table 16.16.2 Violence by men against their wife by wife's characteristics and empowerment indicators

Percentage of ever-married men who have committed physical violence against their current or most recent wife/partner when she was not already beating or physically hurting them, ever and in the past 12 months, according to their wife's characteristics and women's empowerment indicators, Rwanda DHS 2019-20

Background characteristic	Percentage who committed physical violence against their wife/partner		Number of ever-married men
	Ever ¹	Past 12 months	
Wife's/partner's alcohol consumption			
Does not drink alcohol	12.0	3.4	678
Drinks alcohol but is never drunk	12.3	2.6	141
Is sometimes drunk	27.8	8.6	134
Is often drunk	*	*	8
Number of marital control behaviors displayed by wife/partner²			
0	8.3	1.7	514
1-2	16.8	4.9	340
3-4	39.3	14.4	95
5	*	*	13
Number of reasons for which wife beating is justified³			
0	13.7	3.8	814
1-2	19.5	4.6	108
3-4	(18.6)	(10.5)	33
5-7	*	*	6
Father beat mother			
Yes	19.7	6.1	381
No	10.9	2.5	530
Don't know/missing	12.7	5.2	50
Man afraid of wife/partner			
Afraid most of the time	*	*	13
Sometimes afraid	15.3	6.5	89
Never afraid	14.2	3.8	859
Total 15-49	14.5	4.1	961
50-59	14.2	2.6	218
Total 15-59	14.4	3.8	1,180

Note: Wife/partner refers to the current wife/partner for currently married men and the most recent wife/partner for divorced, separated, or widowed men. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes in the past 12 months

² According to the husband's report. See 16.8.2 for list of behaviors.

³ According to the husband's report. See Table 15.10.2 for list of reasons.

Table 16.17.1 Help seeking to stop violence: Women

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behavior, according to type of violence and background characteristics, Rwanda DHS 2019-20

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced					
Physical only	43.0	14.5	42.5	100.0	638
Sexual only	26.4	25.1	48.4	100.0	241
Both physical and sexual	52.5	17.7	29.8	100.0	386
Age					
15-19	31.0	22.1	46.9	100.0	176
20-24	34.2	18.5	47.3	100.0	193
25-29	39.5	21.5	39.0	100.0	186
30-39	48.1	16.9	35.0	100.0	424
40-49	49.8	12.5	37.7	100.0	286
Residence					
Urban	37.9	22.0	40.0	100.0	241
Rural	43.9	16.5	39.7	100.0	1,024
Province					
City of Kigali	36.9	20.8	42.4	100.0	188
South	40.1	22.4	37.4	100.0	279
West	42.3	16.1	41.6	100.0	292
North	40.3	14.5	45.1	100.0	192
East	50.4	14.4	35.2	100.0	314
Marital status					
Never married	27.1	24.7	48.2	100.0	371
Married or living together	45.4	15.6	39.0	100.0	702
Divorced/separated/widowed	63.0	11.0	26.1	100.0	192
Number of living children					
0	29.6	23.4	47.0	100.0	334
1-2	43.7	17.6	38.7	100.0	374
3-4	52.7	13.7	33.6	100.0	358
5+	45.0	14.4	40.6	100.0	199
Employment					
Employed for cash	47.0	18.9	34.1	100.0	710
Employed not for cash	37.0	12.7	50.3	100.0	318
Not employed	37.6	20.0	42.4	100.0	237
Education					
No education	48.9	13.9	37.2	100.0	145
Primary	45.9	15.6	38.5	100.0	779
Secondary	34.1	22.7	43.2	100.0	287
More than secondary	(26.3)	(27.8)	(45.9)	100.0	54
Wealth quintile					
Lowest	49.4	15.3	35.3	100.0	254
Second	43.1	17.0	39.9	100.0	253
Middle	39.9	16.8	43.3	100.0	251
Fourth	40.4	17.2	42.4	100.0	251
Highest	40.8	21.3	37.9	100.0	256
Total	42.7	17.5	39.7	100.0	1,265

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 16.17.2 Help seeking to stop violence: Men

Percent distribution of men age 15-49 who have ever experienced physical or sexual violence by their help-seeking behavior, according to type of violence and background characteristics, Rwanda DHS 2019-20

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Total	Number of men who have ever experienced any physical or sexual violence
Type of violence experienced					
Physical only	44.3	22.4	33.3	100.0	522
Sexual only	(10.2)	(21.7)	(68.1)	100.0	45
Both physical and sexual	24.7	20.1	55.2	100.0	64
Age					
15-19	27.3	25.1	47.6	100.0	135
20-24	31.8	24.4	43.8	100.0	116
25-29	29.3	29.6	41.1	100.0	70
30-39	46.3	20.0	33.8	100.0	195
40-49	58.7	15.5	25.8	100.0	114
Residence					
Urban	32.3	22.0	45.6	100.0	104
Rural	41.4	22.2	36.4	100.0	527
Province					
City of Kigali	41.8	12.1	46.1	100.0	72
South	36.0	15.4	48.5	100.0	118
West	32.8	24.5	42.8	100.0	150
North	46.6	25.7	27.7	100.0	107
East	43.6	26.4	30.0	100.0	184
Marital status					
Never married	30.5	23.7	45.8	100.0	287
Married or living together	46.5	21.0	32.5	100.0	323
Divorced/separated/widowed	*	*	*	100.0	21
Number of living children					
0	30.2	23.5	46.2	100.0	301
1-2	39.0	28.6	32.4	100.0	147
3-4	59.5	11.1	29.3	100.0	112
5+	52.1	20.1	27.8	100.0	71
Employment					
Employed for cash	42.8	22.7	34.5	100.0	494
Employed not for cash	25.5	20.8	53.7	100.0	103
Not employed	(42.4)	(17.6)	(40.0)	100.0	33
Education					
No education	61.1	7.1	31.7	100.0	53
Primary	43.3	22.6	34.2	100.0	409
Secondary	26.4	22.5	51.1	100.0	144
More than secondary	(17.1)	(45.3)	(37.6)	100.0	24
Wealth quintile					
Lowest	51.7	16.5	31.8	100.0	107
Second	38.7	26.4	35.0	100.0	133
Middle	43.9	19.3	36.8	100.0	139
Fourth	34.3	23.4	42.2	100.0	122
Highest	32.4	24.2	43.3	100.0	129
Total 15-49	39.9	22.1	38.0	100.0	631
50-59	42.1	31.2	26.6	100.0	65
Total 15-59	40.1	23.0	36.9	100.0	696

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 16.18.1 Sources for help to stop the violence: Women

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Rwanda DHS 2019-20

Source	Type of violence experienced			
	Physical only	Sexual only	Both physical and sexual	Physical or sexual violence
Own family	31.0	46.9	31.9	33.3
Husband/partner's family	21.2	12.8	16.2	18.3
Husband/partner	0.9	0.0	0.7	0.7
Boyfriend	1.2	0.0	0.0	0.6
Friend	4.3	12.9	9.2	7.2
Neighbor	42.5	26.8	41.0	40.1
Religious leader	2.4	2.8	3.8	3.0
Doctor/medical personnel	1.4	2.5	0.0	1.0
Police	10.1	4.4	15.3	11.4
Lawyer	5.4	0.0	6.6	5.2
Social work organization	0.0	0.2	1.3	0.5
Local authority	17.4	5.6	21.5	17.6
Other	0.7	4.1	1.3	1.3
Number of women who have sought help	274	64	203	541

Note: Women can report more than one source from which they sought help.

Table 16.18.2 Sources for help to stop the violence: Men

Percentage of men age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that men reported, Rwanda DHS 2019-20

Source	Type of violence experienced			
	Physical only	Sexual only	Both physical and sexual	Physical or sexual violence
Own family	23.7	*	*	24.2
Wife/partner's family	6.0	*	*	7.2
Girlfriend	0.4	*	*	0.3
Friend	13.5	*	*	14.8
Neighbor	32.3	*	*	32.4
Religious leader	4.2	*	*	4.7
Doctor/medical personnel	4.1	*	*	3.8
Police	17.3	*	*	16.6
Lawyer	6.8	*	*	6.7
Social work organization	4.2	*	*	3.8
Local authority	16.8	*	*	17.1
Number of men who have sought help	257	5	18	279

Note: Men can report more than one source from which they sought help. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Key Findings

- **Disability by domain:** 14% of household members age 5 or above have some level of difficulty in at least one functional domain, while 6% have a lot of difficulty or cannot function at all in at least one domain.
- **Disability by age:** The proportion of household members who have a lot of difficulty or cannot function at all in at least one domain increases from 2% among those age 5-9 and 4% among those age 30-39 to 32% among those age 60 and above.
- **Disability by marital status:** Widowed women and men are more likely to have difficulty in each of the domains than their counterparts in the other marital status categories. For example, 54% of women and 56% of men who are widowed have difficulty seeing, while 36% of widowed women and 38% of widowed men have difficulty walking or climbing steps.

The 2019-20 RDHS included The DHS Program's disability module, a series of questions based on the Washington Group on Disability Statistics (WG) questions (Washington Group on Disability Statistics, 2020) which in turn are based on the framework of the World Health Organization's International Classification of Functioning, Disability, and Health. The questions address six core functional domains—seeing, hearing, communication, cognition, walking, and self-care—and provide basic necessary information on disability comparable to that being collected worldwide via the WG disability tools.

17.1 DISABILITY BY DOMAIN AND AGE

The respondent to the Household Questionnaire provided information for all household members and visitors on whether they had no difficulty, some difficulty, a lot of difficulty, or no ability at all in the specified domain. The results, based on 47,245 people, are presented in **Table 17.1** for the de facto household population age 5 and older.

Functional domains

Seeing, hearing, communicating, remembering or concentrating, walking or climbing steps, and washing all over or dressing.

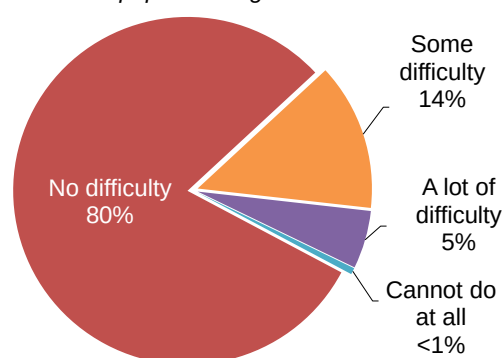
Sample: De facto household population age 5 or above

Eighty percent of de facto household members age 5 or older have no difficulty in any of the functional domains. Fourteen percent have some level of difficulty in at least one domain (**Figure 17.1 and Table 17.1**), while 5% have a lot of difficulty and less than 1% cannot function at all in at least one domain.

Forty percent of the population age 60 or older is reported to have some difficulty in at least one domain, while 30% have a lot of difficulty and 3% cannot function at all in at least one domain (**Table 17.1**). Disability generally rises with increasing age. For instance, about 2% to 3% of household members below age 30 have a lot of difficulty or cannot function at all in at least one domain, as compared with 16% of those age 50-59 and 32% of those age 60 and above.

Figure 17.1 Degree of difficulty

Percent distribution of de facto household population age 5 and over



17.2 DISABILITY AMONG ADULTS BY OTHER BACKGROUND CHARACTERISTICS

Functional domains

Seeing, hearing, communicating, remembering or concentrating, walking or climbing steps, and washing all over or dressing.

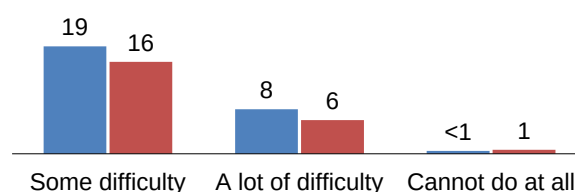
Sample: De facto household population age 15 or above

Tables 17.2.1 and 17.2.2 present disability data for de facto household members age 15 and older by background characteristics. Seventy-three percent of women and 77% of men have no difficulty in any domain. Nineteen percent of women and 15% of men have difficulty seeing, the most common type of difficulty in the population. Overall, 19% of women and 16% of men have some difficulty in at least one domain (**Figure 17.2**).

Figure 17.2 Level of difficulty in at least one domain

Percent distribution of women and men age 15 and above

■ Women ■ Men



Patterns by background characteristics

- The data show that widowed women and widowed men are more likely to have difficulty in any domain than other women and men. Thirty-nine percent of widowed women and 36% of widowed men have some difficulty in at least one domain, whereas 29% of widowed women and 32% of widowed men have a lot of difficulty or cannot function at all in at least one domain (**Tables 17.2.1 and 17.2.2**).
- By province, women in West and South (22% each) are most likely to have difficulty seeing. Similarly, 17% of men in West and 16% in South have difficulty seeing.
- Women with no education (39%) are more likely to have difficulty seeing than women at other educational levels (9%-18%). Similarly, women with no education (16%) are more likely than women at other educational levels (1%-5%) to have difficulty hearing. Men with no education are more likely to have difficulty seeing (24%) and hearing (11%) than other men (8%-16% and 2%-5%, respectively).

- Women and men in the highest wealth quintile are less likely to have difficulty seeing (15% and 12%, respectively) than those in the lowest wealth quintile (22% and 16%, respectively) (**Tables 17.2.1 and 17.2.2**).

LIST OF TABLES

For more information on disability, see the following tables:

- **Table 17.1** **Disability by domain and age**
- **Table 17.2.1** **Disability among adults according to background characteristics: Women**
- **Table 17.2.2** **Disability among adults according to background characteristics: Men**

Table 17.1 Disability by domain and age

Percent distribution of the de facto household population age 5 and over by degree of difficulty in functioning according to domain, and percent distribution by highest degree of difficulty in functioning in at least one domain by age, Rwanda DHS 2019-20

Domain and age	Degree of difficulty					Total	A lot of difficulty or cannot do at all	Number of persons
	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Don't know/missing			
Domain								
Difficulty seeing	87.2	9.8	2.9	0.0	0.0	100.0	3.0	47,245
Difficulty hearing	95.9	3.1	0.9	0.1	0.0	100.0	1.0	47,245
Difficulty communicating	98.7	0.9	0.3	0.1	0.0	100.0	0.5	47,245
Difficulty remembering or concentrating	94.8	3.8	1.2	0.2	0.0	100.0	1.4	47,245
Difficulty walking or climbing steps	93.8	4.1	1.9	0.2	0.0	100.0	2.1	47,245
Difficulty washing all over or dressing	98.3	1.0	0.4	0.3	0.0	100.0	0.7	47,245
Difficulty in at least one domain¹								
5-9	93.3	4.8	1.3	0.6	0.0	100.0	1.9	7,434
10-14	92.1	5.3	2.3	0.4	0.0	100.0	2.6	7,330
15-19	92.0	5.8	1.8	0.3	0.0	100.0	2.2	6,243
20-29	88.0	9.3	2.4	0.3	0.0	100.0	2.7	7,908
30-39	81.9	14.5	3.3	0.3	0.0	100.0	3.6	7,527
40-49	67.2	25.4	6.9	0.5	0.0	100.0	7.3	4,708
50-59	47.7	36.2	15.3	0.7	0.1	100.0	16.0	2,880
60+	27.2	40.3	29.6	2.8	0.0	100.0	32.4	3,213
Don't know/missing	*	*	*	*	*	*	*	2
Age 15 and over	74.8	17.6	7.0	0.6	0.0	100.0	7.6	32,479
Total	80.4	13.7	5.4	0.6	0.0	100.0	5.9	47,245

¹ If a person was reported to have difficulty in more than one domain, only the highest level of difficulty is shown. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.2.1 Disability among adults according to background characteristics: Women

Percentage of de facto female household members age 15 and over who have difficulty in functioning according to domain, and by highest degree of difficulty in at least one domain, and percentage who have a lot of difficulty or cannot function at all in more than one domain, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	No difficulty in any domain	Domain						Difficulty in at least one domain ¹				A lot of difficulty or cannot do at all in more than one domain	Number of persons
		Seeing	Hearing	Communicating	Remembering or concentrating	Walking or climbing steps	Washing all over or dressing	Some difficulty	A lot of difficulty	Cannot do at all	A lot of difficulty or cannot do at all		
Marital status													
Never married	88.1	6.6	2.0	0.9	3.1	2.9	0.8	8.6	2.9	0.5	3.4	0.8	6,016
Married/living together	72.9	19.3	4.7	1.0	6.6	7.9	1.2	20.2	6.6	0.2	6.8	1.3	8,977
Divorced or separated	65.8	23.3	6.8	1.1	12.0	13.7	2.9	24.7	8.9	0.6	9.5	2.7	1,140
Widowed	31.5	53.9	20.9	3.8	25.0	35.6	10.1	39.4	26.8	2.2	29.0	11.8	2,069
Residence													
Urban	77.0	17.0	3.2	0.6	6.0	7.0	1.3	16.8	5.8	0.5	6.3	1.6	3,305
Rural	71.9	19.8	6.3	1.4	8.3	10.4	2.4	19.3	8.3	0.5	8.8	2.6	14,897
Province													
City of Kigali	79.7	14.7	2.8	0.4	5.8	5.6	1.0	14.7	5.3	0.3	5.6	1.0	2,439
South	71.8	22.0	6.4	1.8	6.3	9.0	2.6	20.0	7.6	0.6	8.2	2.5	4,116
West	68.0	22.1	6.6	1.1	11.4	12.8	2.2	21.9	9.5	0.6	10.1	3.1	3,983
North	71.8	17.2	7.3	1.2	8.6	13.0	2.7	18.3	9.2	0.6	9.9	3.1	2,813
East	74.6	18.1	5.2	1.5	7.1	8.0	2.1	17.8	7.2	0.4	7.6	2.1	4,852
Education													
No education	47.9	38.7	16.2	3.8	19.4	25.4	7.3	31.1	18.8	2.2	21.0	8.9	3,106
Primary	74.1	17.9	4.6	1.0	6.9	8.3	1.5	18.9	6.8	0.3	7.0	1.5	10,231
Secondary	86.6	9.0	1.6	0.3	2.6	2.7	0.2	10.5	2.9	0.0	2.9	0.2	4,186
More than secondary	82.3	13.9	0.9	0.3	2.1	3.2	0.6	13.6	4.1	0.0	4.1	0.2	673
Missing	*	*	*	*	*	*	*	*	*	*	*	*	7
Wealth quintile													
Lowest	67.2	22.2	8.8	2.2	10.4	12.9	3.2	22.2	9.7	0.8	10.5	3.5	3,550
Second	70.8	20.5	6.6	1.6	9.2	11.0	2.3	19.9	8.7	0.5	9.2	2.8	3,627
Middle	73.4	19.3	6.1	1.2	7.4	9.6	2.2	18.6	7.4	0.6	8.0	2.7	3,473
Fourth	72.6	19.4	5.4	0.7	7.9	9.5	2.4	19.3	7.7	0.4	8.1	2.2	3,619
Highest	79.2	15.4	2.3	0.6	4.8	6.2	0.9	14.6	5.8	0.4	6.2	1.2	3,934
Total	72.8	19.3	5.8	1.3	7.9	9.7	2.2	18.8	7.8	0.5	8.4	2.4	18,203

¹ If a person was reported to have difficulty in more than one domain, only the highest level of difficulty is shown. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.2.2 Disability among adults according to background characteristics: Men

Percentage of de facto male household members age 15 and over who have difficulty in functioning according to domain, and by highest degree of difficulty in at least one domain, and percentage who have a lot of difficulty or cannot function at all in more than one domain, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	No difficulty in any domain	Domain						Difficulty in at least one domain ¹				A lot of difficulty or cannot do at all in more than one domain	Number of persons
		Seeing	Hearing	Communicating	Remembering or concentrating	Walking or climbing steps	Washing all over or dressing	Some difficulty	A lot of difficulty	Cannot do at all	A lot of difficulty or cannot do at all		
Marital status													
Never married	90.6	4.0	2.2	1.5	2.8	1.9	0.9	6.3	2.4	0.8	3.2	1.0	5,732
Married/living together	69.2	20.9	5.5	1.6	6.8	9.7	1.9	22.4	7.8	0.6	8.4	1.9	8,134
Divorced or separated	66.6	21.2	7.4	1.0	10.4	12.2	2.5	23.3	9.8	0.3	10.1	3.6	230
Widowed	32.2	55.7	25.1	4.3	24.8	37.8	9.2	35.8	29.3	2.7	32.0	13.0	180
Residence													
Urban	81.5	11.8	2.7	0.9	3.4	4.6	1.3	14.1	4.0	0.4	4.4	0.9	2,617
Rural	76.3	15.2	4.9	1.7	5.9	7.5	1.6	16.5	6.4	0.8	7.1	1.9	11,660
Province													
City of Kigali	83.2	9.7	2.5	1.0	4.0	4.4	1.3	13.1	3.3	0.4	3.7	0.8	2,046
South	76.5	16.4	4.8	1.9	4.0	6.4	1.6	16.6	6.1	0.8	6.9	1.7	3,157
West	74.5	16.5	4.8	1.3	7.5	8.8	1.6	18.1	6.7	0.7	7.4	1.9	3,017
North	75.2	14.3	4.9	1.4	6.2	9.0	1.5	16.8	7.2	0.7	7.9	1.9	2,205
East	78.0	14.2	4.7	1.9	5.4	6.2	1.6	15.3	5.9	0.8	6.7	2.1	3,852
Education													
No education	60.9	24.3	10.5	4.6	12.6	14.5	4.2	25.1	11.4	2.5	14.0	5.3	1,581
Primary	75.6	15.6	4.6	1.6	5.6	7.6	1.6	17.4	6.4	0.6	7.0	1.7	8,753
Secondary	88.0	7.6	1.7	0.4	2.4	2.5	0.6	9.3	2.5	0.2	2.7	0.4	3,268
More than secondary	85.5	11.2	1.5	0.5	1.3	2.5	0.1	10.8	3.5	0.2	3.7	0.2	660
Missing	*	*	*	*	*	*	*	*	*	*	*	*	14
Wealth quintile													
Lowest	73.4	15.8	7.3	1.9	8.7	8.7	2.3	18.0	7.7	0.9	8.6	2.6	2,371
Second	74.4	16.0	5.9	2.0	5.8	8.5	1.7	17.9	6.7	0.9	7.6	2.4	2,724
Middle	76.5	15.2	4.0	1.5	5.2	7.6	1.6	17.1	5.9	0.6	6.5	1.8	2,964
Fourth	77.5	14.4	4.0	1.8	5.7	6.6	1.6	15.6	6.1	0.7	6.9	1.5	2,985
Highest	83.0	11.8	2.0	0.8	2.7	4.2	0.8	12.7	3.9	0.4	4.3	0.8	3,233
Total	77.3	14.5	4.5	1.6	5.4	7.0	1.6	16.1	5.9	0.7	6.6	1.7	14,277

¹ If a person was reported to have difficulty in more than one domain, only the highest level of difficulty is shown. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Key Findings

- **Early childhood education:** 24% of children age 24-59 months are currently attending an organized early childhood education program.
- **Early childhood learning:** 36% of children age 0-59 months engaged with adult household members in four or more activities that promote learning and school readiness during the 3 days before the survey.
- **Learning materials:** 2% of children under age 5 have three or more children's or picture books in the household.
- **Child care arrangements:** 28% of children under age 5 were left alone or left in the care of another child younger than age 10 for more than 1 hour during the week preceding the survey.

Information obtained in the 2019-20 RDHS allows for an assessment of several key aspects of the welfare of Rwandan children. Questions were included on birth registration and living arrangements and the survival status of parents. A child's access to education is critical, and the RDHS also obtained information on children's participation in primary and secondary school. These data were discussed in Chapter 2 of this report.

This chapter presents data on early childhood education and development collected in the 2019-20 RDHS using modules developed for UNICEF's Multiple Indicator Cluster Surveys. The early childhood development modules were administered in the entire sample of households selected for the survey.

These data are expected to help the Government of Rwanda, civil society, and other stakeholders design and implement programs and policies that will enhance opportunities for young children to reach their full potential by supporting families and communities and increasing access to quality early childhood care and education.

18.1 EARLY CHILDHOOD EDUCATION

Early childhood education programs are important in preparing children for school. The 2019-20 RDHS included questions designed to determine whether children age 24-59 months were attending organized learning programs. The questions were administered as part of the individual women's interview, and mothers were asked about their youngest child age 24-59 months.

The 2019-20 RDHS results show that 24% of children age 24-59 months living with their mothers are attending an organized early childhood education program (**Table 18.1**).

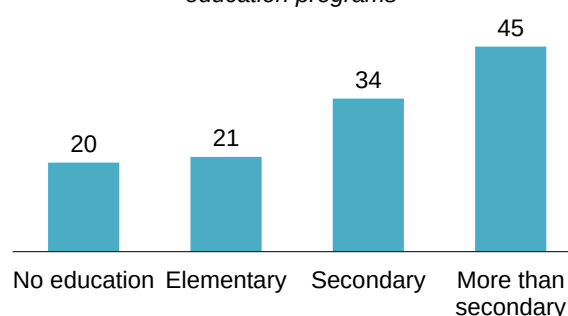
Trends: The percentage of children attending an organized early childhood education program increased from 13% in 2014-15 (among children age 36-59 months) to 24% in 2019-20 (among children age 24-59 months).

Patterns by background characteristics

- Participation in early childhood education programs increases from 7% among children age 24-35 months to 27% among those age 36-47 months and 44% among those age 48-59 months.
- Children living in the North province are less likely to attend an early childhood education program (20%) than children living in the other provinces.
- Children living in urban areas (32%) are more likely to attend an early childhood education program than children living in rural areas (22%).
- Children of mothers with more than a secondary education are much more likely to attend a childhood education program than children of mothers with less education (45% versus 20%-34%) (**Figure 18.1**).
- Children from households in the highest wealth quintile are more likely to attend early childhood education programs than children from households in the other wealth quintiles (41% versus 17%-27%).

Figure 18.1 Early childhood education by mother's education

Percentage of youngest children age 24-59 months living with their mother attending early childhood education programs



18.2 CHILDHOOD LEARNING

It is recognized that a period of rapid brain development occurs in the early years of life and that quality of home care is the major determinant of a child's development during this period. In this context, adults spending "quality time" with children, the presence of children's books in the home, and opportunities for play to stimulate the imagination are all important indicators of quality of home care. Questions in all of these areas were included in the Woman's Questionnaire; mothers were asked about their youngest child age 0-59 months. The information gathered is useful in assessing the extent to which the home care received by children in Rwanda is supportive of early childhood development.

18.2.1 Support for Learning

Support for early learning

Percentage of children with whom any adult household member (age 15+) has (within the previous 3 days) engaged in four or more of the following activities to promote learning and school readiness: reading books or looking at picture books; telling stories; singing songs; taking the children outside the home, compound, or yard; playing with the children; and spending time with the children naming, counting, or drawing things.

Sample: Youngest children age 0-59 months living with their mothers

Father's and mother's support for early learning

Percentage of children with whom the natural father or natural mother engaged in four or more activities to promote learning and school readiness in the 3 days before the survey.

Sample: Youngest children age 0-59 months living with their mothers

Thirty-six percent of children age 0-59 months living with their mothers were engaged by adult household members in four or more activities that promote learning and school readiness during the 3 days before the survey. The mean number of activities in which adult household members engaged with children was 2.9. Only 4% of children engaged in four or more early learning activities with their fathers, while 25% engaged in at least four activities with their mothers (**Table 18.2**).

Patterns by background characteristics

- Children age 0-23 months (25%) are less likely to have engaged in four or more learning activities than children age 24-47 months (46%) and children age 48-59 months (51%).
- Children whose mothers have no education are much less likely to have engaged in four or more activities with adult household members than children whose mothers have more than a secondary education (26% versus 61%). Similarly, 29% of children whose fathers have no education engaged in four or more activities, as compared with 61% of children whose fathers have more than a secondary education.
- The proportion of children who engaged in four or more activities with adult household members increases with increasing wealth, from 27% in the lowest quintile to 50% in the highest quintile. Similar patterns are observed in the proportions of children who engaged in four or more activities with their fathers and their mothers.

18.2.2 Children's Books and Playthings

Exposure to books in the early years not only provides children with a greater understanding of the nature of print but may also give them opportunities to see others reading (e.g., older siblings doing school work). The presence of books is also important for later school performance. Mothers were asked about the number of children's books or picture books they have for their youngest child under age 5. The results show that most young children in Rwanda do not have access to books in the household. Only 2% of children under age 5 have three or more children's books in the household, and less than 1% have 10 or more children's books (**Table 18.3**).

By stimulating the imagination, play also contributes to brain development. Mothers were asked what items children play with, including homemade toys, toys purchased from a shop, and other household objects or objects found around the home. Thirty-nine percent of youngest children under age 5 living with their mother play with homemade toys (including dolls and cars). Overall, 37% of children play with two or more types of playthings, including homemade toys, toys purchased from a store, household objects (such as pots and bowls), and objects found outside (such as sticks, rocks, animals, shells, and leaves) (**Table 18.3**).

Trends: The proportion of children under age 5 living in households with three or more children's books increased from less than 1% in 2014-15 to 2% in 2019-20.

Patterns by background characteristics

- The percentage of children who play with two or more types of playthings increases with age. Twenty-five percent of children age 0-23 months have two or more types of playthings, as compared with 50% of children age 24-47 months and 54% of children age 48-59 months.
- Urban children are more likely than rural children to have three or more children's books in the household (5% versus 2%).
- The percentage of children with three or more children's books in the household varies by province, from a high of 5% in City of Kigali to a low of 1% in South.

- The percentage of children living in households with three or more children's books increases with increasing mother's education, from 1% among children whose mothers have no education to 14% among children whose mothers have more than a secondary education.
- Access to children's books also increases with increasing household wealth; 7% of children in the highest wealth quintile live in households with three or more books, as compared with less than 1% of children in the lowest quintile.

18.3 ADEQUATE CARE FOR YOUNG CHILDREN

Leaving children alone or only in the presence of other young children is known to increase the risk of accidents, abuse, and neglect. In the 2019-20 RDHS, mothers were asked questions to establish whether their youngest child under age 5 had been left alone during the week preceding the interview for 1 hour or more and whether the child had been left in the care of another child under age 10 for 1 hour or more.

Inadequate care

Number of children under age 5 left alone or in the care of another child younger than age 10 for more than 1 hour at least once in the last week.

Sample: Youngest children under age 5 living with their mother

Nine percent of youngest children under age 5 living with their mother were left alone and 25% were left in the care of another child younger than age 10 for more than 1 hour during the week before the survey. Overall, 28% of children were left alone or left in the care of another child younger than age 10 for more than 1 hour at least once during the week before the survey (**Table 18.4**).

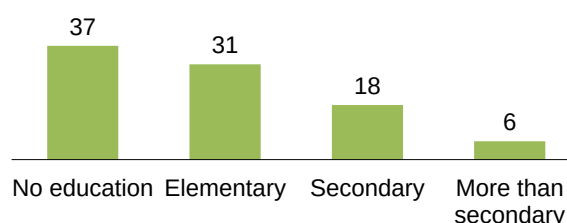
Trends: The percentage of young children left alone or in the care of another child under age 10 decreased from 35% in 2014-15 to 28% in 2019-20.

Patterns by background characteristics

- Children age 24-47 months (37%) and 48-59 months (40%) were more likely to be left with inadequate care than children age 0-23 months (20%).
- The proportion of children left with inadequate care is higher among those whose mothers have no education (37%) than among those whose mothers have more than a secondary education (6%) (**Figure 18.2**).
- The proportion of children left with inadequate care decreases with increasing household wealth; 35% of children in the lowest wealth quintile were left with inadequate care, as compared with 13% of children in the highest quintile.

Figure 18.2 Inadequate care by mother's education

Percentage of children under age 5 left alone or with a child under age 10



18.4 DEVELOPMENTALLY ON TRACK

In the 2019-20 RDHS, mothers were asked a series of 10 questions about the youngest child age 24-59 months living with them that were designed to ascertain if the child was developmentally on track in four domains of development: literacy-numeracy, physical, social-emotional, and learning. An early child development index was created by combining all four domains.

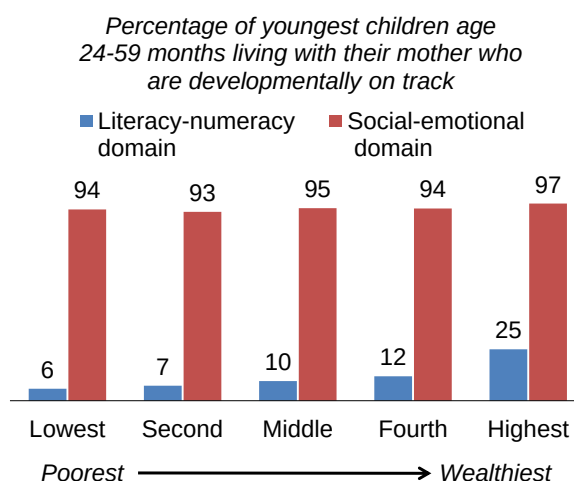
The results show that 95% of children age 24-59 months are on track for their age in terms of physical development; 12% are on track in the literacy-numeracy domain, 94% are on track in the social-emotional domain, and 80% are on track in the learning domain. Seventy-six percent of children are on track in their development as measured in at least three of the four developmental domains (**Table 18.5**).

Trends: The percentage of children considered to be developmentally on track has increased since 2014-15, from 63% (among children age 36-59 months) to 76% (among children age 24-59 months).

Patterns by background characteristics

- Girls are more likely than boys to be developmentally on track (78% and 74%, respectively).
- Urban children are more likely than rural children to be on track in their development (81% versus 75%).
- The percentage of children developmentally on track in the literacy-numeracy domain increases sharply with increasing mother's education, from 6% among children whose mothers have no education to 32% among those whose mothers have more than a secondary education.
- The percentage of children developmentally on track increases with increasing household wealth, from 69% among those in the lowest wealth quintile to 85% among those in the highest quintile (**Figure 18.3**).

Figure 18.3 Developmentally on track by household wealth



LIST OF TABLES

For more information on early child development, see the following tables:

- **Table 18.1 Early childhood education**
- **Table 18.2 Support for learning**
- **Table 18.3 Learning materials**
- **Table 18.4 Inadequate care**
- **Table 18.5 Early child development index**

Table 18.1 Early childhood education

Percentage of children age 24-59 months who are attending an organized early childhood education program, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of children attending early childhood education ¹	Number of children age 24-59 months
Age in months		
24-35	6.8	1,557
36-47	27.1	1,432
48-59	43.7	1,146
Sex		
Male	22.8	2,120
Female	25.4	2,016
Residence		
Urban	31.9	729
Rural	22.4	3,406
Province		
City of Kigali	26.6	567
South	23.1	822
West	28.1	1,002
North	19.8	668
East	22.3	1,076
Mother's education		
No education	19.7	527
Primary	21.0	2,731
Secondary	33.9	710
More than secondary	45.4	168
Wealth quintile		
Lowest	17.3	983
Second	19.0	787
Middle	18.1	816
Fourth	26.7	774
Highest	41.3	775
Total	24.1	4,135

¹ Not including day care and baby-sitting

Table 18.2 Support for learning

Percentage of children age 0-59 months with whom adult household members engaged in activities that promote learning and school readiness during the last 3 days, and engagement in such activities by fathers and mothers, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Adult household members			Percentage of children living with their:		Father		Mother		Number of children age 0-59 months
	Percentage of children with whom adult household members have engaged in four or more activities ^{1,2}	Mean number of activities with adult household members	Percentage of children with whom no adult household members have engaged in any activity	Father	Mother	Percentage of children with whom fathers have engaged in four or more activities ²	Mean number of activities with fathers	Percentage of children with whom mothers have engaged in four or more activities ²	Mean number of activities with mothers	
Age in months										
0-23	24.5	2.6	11.2	73.7	100.0	3.2	0.7	18.3	2.3	3,145
24-47	46.3	3.3	7.3	71.2	100.0	5.3	0.8	32.7	2.7	2,218
48-59	51.0	3.3	9.8	73.6	100.0	5.9	0.9	33.6	2.6	685
Sex										
Male	34.7	2.9	10.0	73.4	100.0	4.1	0.8	24.2	2.4	3,062
Female	36.2	3.0	9.2	72.2	100.0	4.4	0.7	26.5	2.5	2,985
Residence										
Urban	46.5	3.3	7.9	68.3	100.0	4.6	0.7	33.0	2.7	1,054
Rural	33.2	2.8	10.0	73.7	100.0	4.2	0.8	23.7	2.4	4,993
Province										
City of Kigali	38.5	3.0	10.1	70.0	100.0	3.1	0.6	26.6	2.5	807
South	36.7	3.0	8.6	71.4	100.0	3.2	0.6	27.8	2.6	1,259
West	28.0	2.6	14.2	75.9	100.0	3.3	0.6	16.2	2.1	1,390
North	37.3	3.0	10.4	76.8	100.0	5.2	0.9	24.4	2.4	963
East	38.3	3.0	5.7	70.1	100.0	5.9	0.9	31.2	2.7	1,628
Mother's education										
No education	25.7	2.5	14.1	76.4	100.0	2.6	0.6	15.9	2.0	679
Primary	31.8	2.8	9.8	74.4	100.0	3.4	0.7	22.4	2.4	3,910
Secondary	47.6	3.3	7.2	65.3	100.0	6.6	0.9	35.7	2.9	1,187
More than secondary	60.5	3.8	6.9	72.8	100.0	10.8	1.2	46.2	3.3	270
Father's education										
No education	29.3	2.7	11.9	100.0	100.0	2.6	0.8	21.8	2.3	531
Primary	33.5	2.8	9.6	100.0	100.0	4.9	0.9	22.5	2.4	3,046
Secondary	40.8	3.1	9.8	100.0	100.0	9.3	1.3	27.6	2.6	601
More than secondary	60.6	3.8	6.1	100.0	100.0	14.6	1.7	38.0	3.0	217
Biological father not in the household	35.9	2.9	9.3	0.0	100.0	0.3	0.1	29.1	2.6	1,646
Don't know	*	*	*	*	*	*	*	*	*	6
Wealth quintile										
Lowest	26.5	2.6	10.8	65.7	100.0	2.1	0.5	19.8	2.2	1,395
Second	31.8	2.8	10.5	74.1	100.0	3.6	0.7	22.0	2.3	1,172
Middle	35.2	2.9	9.0	78.4	100.0	4.4	0.8	24.5	2.4	1,191
Fourth	36.6	3.0	9.8	74.6	100.0	4.4	0.9	26.3	2.5	1,174
Highest	49.8	3.5	7.6	72.3	100.0	7.3	0.9	35.7	2.9	1,115
Total	35.5	2.9	9.6	72.8	100.0	4.3	0.8	25.4	2.5	6,047

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Including parents or other adult members of the household

² Including the following activities: reading books or looking at picture books; telling stories; singing songs; taking the children outside the home, compound, or yard; playing with the children; and spending time with the children naming, counting, or drawing things

Table 18.3 Learning materials

Percentage of children under age 5 by number of children's books present in the household and by playthings that the child plays with, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of children living in households that have for the child:		Percentage of children who play with:				Number of children
	3 or more children's books	10 or more children's books	Homemade toys	Toys from a shop/manufactured toys	Household objects/objects found outside	Two or more types of playthings	
Age in months							
0-23	1.3	0.1	27.0	14.0	39.2	25.4	3,145
24-47	3.2	0.5	50.3	18.8	69.1	49.5	2,218
48-59	3.5	0.5	55.4	17.3	73.5	53.6	685
Sex							
Male	2.2	0.4	39.7	15.7	54.2	38.4	3,062
Female	2.3	0.2	37.9	16.6	53.8	36.5	2,985
Residence							
Urban	4.9	1.0	42.8	43.5	53.2	46.8	1,054
Rural	1.7	0.1	38.0	10.4	54.2	35.5	4,993
Province							
City of Kigali	5.4	1.1	39.8	43.4	54.2	45.2	807
South	1.4	0.1	40.6	10.4	59.4	38.6	1,259
West	2.1	0.2	35.0	12.6	49.8	33.3	1,390
North	2.0	0.1	39.2	12.6	52.9	37.4	963
East	1.6	0.2	39.9	12.1	54.1	36.2	1,628
Mother's education							
No education	0.7	0.0	35.5	4.2	54.7	32.5	679
Primary	1.1	0.1	38.3	8.9	56.0	35.6	3,910
Secondary	4.4	0.7	40.5	34.2	51.0	42.5	1,187
More than secondary	13.8	2.0	47.0	71.7	38.3	53.5	270
Wealth quintile							
Lowest	0.4	0.0	32.0	1.4	55.6	28.8	1,395
Second	0.6	0.1	33.9	4.7	51.3	30.1	1,172
Middle	1.3	0.2	43.0	8.0	57.1	39.7	1,191
Fourth	2.3	0.1	40.4	20.0	55.1	39.9	1,174
Highest	7.2	1.1	46.3	51.1	50.6	50.9	1,115
Total	2.2	0.3	38.8	16.1	54.0	37.4	6,047

Table 18.4 Inadequate care

Percentage of children under age 5 left alone or under the supervision of another child younger than age 10 for more than 1 hour at least once during the past week, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of children:			Number of children
	Left alone in the past week	Left under the supervision of another child younger than age 10 in the past week	Left with inadequate care in the past week ¹	
Age in months				
0-23	6.3	17.2	19.8	3,145
24-47	11.1	33.5	36.6	2,218
48-59	16.7	33.4	39.7	685
Sex				
Male	10.2	26.9	30.4	3,062
Female	8.2	23.1	26.0	2,985
Residence				
Urban	8.4	14.6	18.4	1,054
Rural	9.4	27.2	30.3	4,993
Province				
City of Kigali	9.2	13.8	18.7	807
South	10.2	27.7	30.6	1,259
West	10.6	31.5	34.8	1,390
North	9.0	29.9	32.5	963
East	7.4	20.1	22.9	1,628
Mother's education				
No education	10.8	34.3	37.4	679
Primary	9.6	28.3	31.3	3,910
Secondary	8.3	14.0	17.9	1,187
More than secondary	4.5	2.8	6.0	270
Wealth quintile				
Lowest	10.8	31.9	34.9	1,395
Second	10.1	30.2	33.2	1,172
Middle	10.3	29.0	32.3	1,191
Fourth	8.7	21.3	25.1	1,174
Highest	5.8	10.7	13.4	1,115
Total	9.2	25.0	28.2	6,047

¹ A child under age 5 left only in the care of another child or left alone is considered inadequately cared for.

Table 18.5 Early child development index

Percentage of children age 2-4 who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and early child development index score, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Percentage of children age 2-4 who are developmentally on track for indicated domains				Early child development index score ²	Number of children age 2-4
	Literacy-numeracy ¹	Physical ¹	Social-emotional ¹	Learning ¹		
Age in months						
24-35	4.3	93.2	94.6	70.4	65.4	1,557
36-47	10.7	96.5	94.1	84.2	79.5	1,432
48-59	23.1	97.2	94.5	89.4	85.9	1,146
Sex						
Male	11.2	95.3	93.2	79.2	74.1	2,120
Female	12.3	95.6	95.8	81.7	77.9	2,016
Residence						
Urban	18.3	95.8	95.4	84.3	80.9	729
Rural	10.3	95.3	94.2	79.6	74.9	3,406
Province						
City of Kigali	16.2	98.1	93.2	84.8	80.7	567
South	11.0	94.7	96.2	80.1	76.3	822
West	11.0	93.0	90.9	75.0	68.0	1,002
North	12.3	97.0	96.2	84.4	80.7	668
East	10.2	95.8	95.9	80.9	77.7	1,076
Attending early childhood education						
Yes	29.5	97.2	94.9	88.4	86.0	995
No	6.1	94.8	94.3	77.9	72.8	3,140
Mother's education						
No education	5.7	94.7	91.7	72.3	67.4	527
Primary	9.1	95.2	94.5	79.7	74.8	2,731
Secondary	21.3	96.6	96.0	88.1	85.1	710
More than secondary	32.3	96.2	95.8	85.3	83.3	168
Wealth quintile						
Lowest	5.9	94.2	93.9	74.8	69.3	983
Second	7.4	93.9	92.7	78.8	73.5	787
Middle	9.7	96.3	94.5	80.0	75.4	816
Fourth	12.0	96.5	94.4	82.9	78.6	774
Highest	25.3	96.5	96.8	87.1	84.9	775
Total	11.7	95.4	94.4	80.4	76.0	4,135

¹ **Literacy-numeracy:** 2+ of the followings: can identify or name at least 10 letters of the alphabet; can read at least four simple, popular words; and know the names and recognize the symbols of all numbers from 1 to 10. **Physical:** 1 of the followings: can pick up a small object from the ground with two fingers and/or the mother does not indicate that the child is sometimes too sick to play. **Social-emotional:** 2+ of the followings: get along well with other children; does not kick, bite, or hit other children; and does not become distracted easily. **Learning:** can follow simple directions correctly and independently.

² Percentage of children who are developmentally on track in at least three of the four domains

Key Findings

- **Modes of tuberculosis (TB) infection:** 68% each of women and men know that TB can be spread from person to person by air through coughing, sneezing, or talking.
- **Prevalence of signs or symptoms suggestive of TB:** 12% of women and 8% of men age 15-49 currently have at least one of the signs or symptoms suggestive of TB infection.
- **Help or care for TB:** Among women and men who say that they currently have at least one of the signs or symptoms suggestive of TB infection, 39% and 41%, respectively, have sought help or care.

Tuberculosis (TB) is a disease caused by bacteria called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but they can also damage other parts of the body. TB spreads through the air when a person with TB of the lungs or throat coughs, sneezes, or talks. In 2012, the World Health Organization (WHO) estimated the global TB prevalence rate to be 166 per 100,000 population and the incidence rate to be 122 per 100,000 population; the estimated rates for the African region were 303 and 255, respectively (WHO 2012). In Rwanda, TB incidence rates were estimated at 86 per 100,000 population. The first national TB prevalence survey in Rwanda conducted in 2012 revealed an estimated smear-positive TB prevalence of 74 per 100,000 adults and an estimated bacteriologically confirmed prevalence of 119 per 100,000 adults (Migambi P et al 2020).

The aim of this chapter is to present data concerning TB-related knowledge, the prevalence of suggestive signs and symptoms, and care seeking at the national and provincial levels and among adults age 15-49.

19.1 KNOWLEDGE OF TUBERCULOSIS**Knowledge of tuberculosis**

Women and men who have knowledge regarding modes of transmission and signs and symptoms of tuberculosis and who would seek care if they had symptoms suggestive of tuberculosis.

Sample: Women and men age 15-49

Overall, 68% each of women and men age 15-49 say that tuberculosis can be spread from person to person by air when someone with TB coughs, sneezes, or talks (**Table 19.1**).

Thirty-eight percent of women and 37% of men correctly say that any person can be at risk of having tuberculosis. However, only 55% of women and 59% of men would seek care when having symptoms suggestive of tuberculosis (**Table 19.2**).

Ninety-six percent of women and 97% of men say that a cough of more than 2 weeks is the main sign or symptom of TB; only 23% of women and 20% of men say that the main symptom is fever, and 15% of women and 16% of men say that the main symptom is chest pain (**Table 19.3**).

Patterns by background characteristics

- Knowledge of TB transmission among women and men is higher in urban areas (76% and 79%, respectively) than in rural areas (67% and 66%, respectively) (**Table 19.1**).
- Knowledge of TB transmission increases with increasing education and wealth. For example, 60% of women with no education know the modes of TB transmission, as compared with 85% of those who have more than a secondary education.

19.2 SIGNS AND SYMPTOMS SUGGESTIVE OF TUBERCULOSIS DISEASE AND TREATMENT

During the interview, women and men were asked if they currently have any signs or symptoms suggestive of tuberculosis disease.

Signs and symptoms of tuberculosis

Women and men who currently at least one sign or symptom suggestive of infection, and who have sought help or care.

Sample: Women and men age 15-49 and women and men age 15-49 with at least one sign or symptom suggestive of TB disease.

Only a very small proportion of women and men age 15-49 reported having any signs or symptoms suggestive of TB for at least 2 weeks. For example, only 2% of women reported that they have had a cough for 2 weeks or longer, 3% each say that they have had chest pain and fatigue/malaise, and 2% each say that they have had a sweat and have lost weight. Similarly, 2% each of men say that they have had chest pain and fatigue/malaise, and 1% or less reported having a cough, a sweat, weight loss, or a fever lasting at least 2 weeks (**Table 19.4.1** and **Table 19.4.2**).

Table 19.5 shows that 12% of women and 8% of men age 15-49 currently have at least one of the signs or symptoms suggestive of TB disease. Among women and men who say that they currently have at least one of the signs or symptoms, 39% and 41%, respectively, have sought help or care.

Patterns by background characteristics

- A higher percentage of women in rural areas (13%) than urban areas (7%) currently have at least one of the signs or symptoms suggestive of TB disease. A similar pattern is observed among men (8% and 5%, respectively) (**Table 19.5**).
- By province, the proportion of women who have at least one of the signs or symptoms is lowest in City of Kigali (6%) and highest in North (17%). Among men, the proportion is lower in City of Kigali and South (4% each) than in the other provinces (10% each).
- The proportion of women who have at least one of the signs or symptoms decreases with increasing education, from 15% among those who have no education to 4% among those who have more than a secondary education. Similarly, 10% of men who have no education have at least one of the signs or symptoms, as compared with 4% of those who have more than a secondary education (**Table 19.5**).

Source of Help or Care for Signs or Symptoms of TB Disease

Among women and men with signs or symptoms suggestive of TB disease who sought help or care, the large majority (93% and 84%, respectively) sought help or care from a public sector source; 5% of women and 11% of men sought help or care from a private sector source (**Table 19.6**). Health centers were the most prominent public sector source of help or care among both women (80%) and men (64%), while pharmacies were the primary sources in the private sector (3% and 7%, respectively).

LIST OF TABLES

For more information on tuberculosis, see the following tables:

- **Table 19.1** **Knowledge of tuberculosis transmission**
- **Table 19.2** **Risk of having tuberculosis and care seeking**
- **Table 19.3** **Knowledge of tuberculosis signs and symptoms**
- **Table 19.4.1** **Signs and symptoms suggestive of tuberculosis: Women**
- **Table 19.4.2** **Signs and symptoms suggestive of tuberculosis: Men**
- **Table 19.5** **Prevalence and treatment of suggestive tuberculosis signs/symptoms**
- **Table 19.6** **Source of care or help for adults with suggestive signs/symptoms of tuberculosis**

Table 19.1 Knowledge of tuberculosis transmission

Percentage of women and men age 15-49 who correctly say that tuberculosis can be spread from person to person by air when someone with tuberculosis coughs, sneezes, or talks, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women		Men	
	By air when someone with tuberculosis coughs, sneezes, or talks	Number of women	By air when someone with tuberculosis coughs, sneezes, or talks	Number of men
Age				
15-19	65.0	3,258	64.6	1,526
20-24	67.7	2,414	66.2	960
25-29	71.8	2,073	73.0	710
30-34	69.7	4,190	69.5	1,628
35-49	68.4	2,699	70.5	1,022
Residence				
Urban	76.0	2,909	79.3	1,115
Rural	66.5	11,725	65.7	4,731
Province				
City of Kigali	74.4	2,166	80.2	879
South	64.3	3,065	70.8	1,239
West	62.5	3,174	62.3	1,268
North	66.4	2,226	62.9	886
East	73.9	4,003	67.5	1,574
Education				
No education	60.1	1,377	58.5	420
Primary	65.2	8,529	63.9	3,569
Secondary	75.1	4,086	77.0	1,562
More than secondary	84.6	642	89.0	295
Wealth quintile				
Lowest	56.7	2,741	58.1	924
Second	64.5	2,756	62.1	1,076
Middle	68.6	2,757	67.4	1,227
Fourth	71.8	2,966	68.0	1,278
Highest	77.8	3,414	81.3	1,342
Total 15-49	68.4	14,634	68.3	5,846
50-59	na	na	72.3	667
Total 15-59	na	na	68.7	6,513

na = Not available

Table 19.2 Risk of having tuberculosis and care seeking

Percentage of women and men age 15-49 who say that any person can be at risk of having tuberculosis and percentage who would seek care when having symptoms suggestive of tuberculosis, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women			Men		
	Percentage who say that any person can be at risk of having tuberculosis	Percentage who would seek care when having symptoms suggestive of tuberculosis	Number of women	Percentage who say that any person can be at risk of having tuberculosis	Percentage who would seek care when having symptoms suggestive of tuberculosis	Number of men
Age						
15-19	32.3	46.7	3,258	29.3	51.4	1,526
20-24	37.4	52.4	2,414	35.7	57.3	960
25-29	39.0	55.5	2,073	37.7	61.6	710
30-34	42.1	58.2	4,190	40.9	64.5	1,628
35-49	40.5	59.6	2,699	40.3	63.9	1,022
Residence						
Urban	31.9	56.1	2,909	36.5	70.0	1,115
Rural	40.0	54.2	11,725	36.5	57.0	4,731
Province						
City of Kigali	29.1	51.2	2,166	40.2	72.6	879
South	38.5	54.7	3,065	39.1	61.9	1,239
West	38.4	57.9	3,174	31.5	52.8	1,268
North	41.1	51.6	2,226	37.9	57.6	886
East	41.8	55.3	4,003	35.6	56.6	1,574
Education						
No education	41.0	54.3	1,377	37.8	59.1	420
Primary	40.3	52.0	8,529	36.2	56.9	3,569
Secondary	34.4	57.3	4,086	35.8	61.7	1,562
More than secondary	32.5	71.5	642	42.1	79.4	295
Wealth quintile						
Lowest	39.9	48.4	2,741	35.6	55.1	924
Second	40.3	51.8	2,756	31.7	53.9	1,076
Middle	40.2	54.5	2,757	38.6	58.5	1,227
Fourth	38.7	56.2	2,966	37.1	57.0	1,278
Highest	33.9	60.4	3,414	38.5	70.1	1,342
Total 15-49	38.4	54.5	14,634	36.5	59.4	5,846
50-59	na	na	na	42.0	68.0	667
Total 15-59	na	na	na	37.1	60.3	6,513

na = Not available

Table 19.3 Knowledge of tuberculosis signs and symptoms

Among all women and men age 15-49, percentage who say that the main signs/symptoms of tuberculosis are a cough of more than 2 weeks, a fever, a drenching night sweat, weight loss, fatigue/malaise, or chest pain, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women							Men						
	Cough of more than 2 weeks	Fever	Drenching night sweat	Weight loss	Fatigue/malaise	Chest pain	Number of women	Cough of more than 2 weeks	Fever	Drenching night sweat	Weight loss	Fatigue/malaise	Chest pain	Number of men
Age														
15-19	93.2	19.9	4.6	7.5	7.2	15.4	3,258	94.8	18.0	4.0	5.6	8.3	15.6	1,526
20-24	95.2	21.2	4.8	8.9	8.2	15.7	2,414	96.7	20.8	5.1	9.9	10.5	17.7	960
25-29	96.5	22.5	5.2	11.1	8.9	15.4	2,073	97.4	21.7	6.5	8.9	11.5	16.5	710
30-34	97.3	23.6	7.5	14.5	9.5	13.7	4,190	98.0	18.6	8.6	11.2	10.5	14.7	1,628
35-49	97.2	25.8	9.1	20.1	11.9	16.7	2,699	98.5	22.5	8.0	17.4	15.3	18.0	1,022
Residence														
Urban	96.4	28.3	7.0	13.4	12.7	15.8	2,909	97.4	34.5	13.5	18.5	13.5	24.7	1,115
Rural	95.8	21.3	6.2	12.4	8.3	15.0	11,725	96.9	16.4	4.8	8.4	10.3	14.2	4,731
Province														
City of Kigali	96.6	23.5	4.5	11.2	12.1	15.2	2,166	98.4	38.1	18.5	21.8	14.5	29.9	879
South	95.7	20.0	6.0	12.3	7.7	15.5	3,065	98.3	17.9	5.5	11.8	9.5	12.6	1,239
West	94.3	23.5	6.1	14.0	7.7	14.8	3,174	94.7	16.9	5.1	7.3	9.2	11.5	1,268
North	95.9	15.8	3.9	8.0	6.4	9.6	2,226	95.5	15.9	2.9	6.4	12.9	17.1	886
East	96.9	27.4	9.2	15.0	11.2	18.3	4,003	97.8	15.9	3.7	7.5	10.3	14.7	1,574
Education														
No education	94.7	18.1	4.5	11.3	6.5	13.3	1,377	97.8	11.5	1.4	4.9	6.8	12.0	420
Primary	95.6	19.0	5.4	11.6	7.5	14.0	8,529	96.6	15.0	5.2	8.8	9.6	13.7	3,569
Secondary	96.6	28.4	7.1	12.4	11.3	17.8	4,086	97.2	28.2	7.6	11.3	12.8	20.9	1,562
More than secondary	98.7	44.2	18.9	30.0	22.6	19.1	642	98.5	46.3	23.4	32.3	22.4	27.9	295
Wealth quintile														
Lowest	95.2	14.2	3.9	8.6	4.7	12.0	2,741	96.1	12.5	3.1	6.6	7.5	11.4	924
Second	94.6	17.9	5.2	10.8	6.6	13.9	2,756	95.5	13.3	3.7	7.1	7.6	13.1	1,076
Middle	95.9	22.2	5.4	12.5	8.3	14.6	2,757	97.2	15.7	4.3	7.4	9.3	14.3	1,227
Fourth	97.0	25.5	7.2	13.8	10.0	17.5	2,966	97.6	19.9	5.8	10.1	12.8	15.7	1,278
Highest	96.6	31.2	9.4	16.2	14.6	17.3	3,414	97.9	34.1	13.5	18.5	15.5	24.3	1,342
Total 15-49	95.9	22.7	6.4	12.6	9.1	15.2	14,634	97.0	19.9	6.5	10.3	10.9	16.2	5,846
50-59	na	na	na	na	na	na	na	97.3	24.1	8.8	20.6	16.3	19.5	667
Total 15-59	na	na	na	na	na	na	na	97.0	20.3	6.7	11.4	11.5	16.6	6,513

na = Not available

Table 19.4.1 Signs and symptoms suggestive of tuberculosis: Women

Among all women age 15-49, percentage who say that they currently (for 2 weeks or longer or less than 2 weeks) have a cough, a fever, a drenching night sweat, weight loss, fatigue/malaise, or chest pain, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Cough		Fever		Drenching night sweat		Weight loss		Fatigue/malaise		Chest pain		Number of respondents
	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	
Age													
15-19	1.3	4.5	0.3	1.3	0.9	1.0	0.8	0.4	1.5	0.8	1.1	1.4	3,258
20-24	1.3	4.2	0.5	1.2	1.6	0.9	2.0	0.8	3.3	1.6	2.5	1.1	2,414
25-29	1.2	2.9	0.4	0.7	0.9	0.8	1.7	0.8	2.6	1.8	2.0	1.2	2,073
30-34	1.2	3.2	0.3	1.0	1.8	1.1	2.3	0.9	3.6	1.6	3.3	1.5	4,190
35-49	2.3	3.2	0.9	1.6	2.6	1.8	3.4	1.0	4.0	1.5	4.4	2.0	2,699
Residence													
Urban	0.6	2.9	0.2	0.6	0.5	0.5	1.1	0.4	1.5	0.4	1.2	0.5	2,909
Rural	1.7	3.8	0.5	1.3	1.9	1.3	2.3	0.8	3.4	1.7	3.0	1.7	11,725
Province													
City of Kigali	1.0	2.4	0.2	0.7	0.3	0.2	0.9	0.5	0.8	0.5	0.6	0.5	2,166
South	1.4	4.2	0.4	2.0	0.8	1.0	1.7	0.9	1.8	1.5	1.6	2.0	3,065
West	2.2	4.7	0.6	1.7	1.7	2.1	2.9	1.2	4.0	2.2	3.0	2.4	3,174
North	1.8	3.9	0.7	0.6	3.0	1.1	2.4	0.5	5.3	1.8	5.3	1.4	2,226
East	1.0	2.9	0.3	0.7	2.0	1.0	2.0	0.6	3.2	1.0	2.9	0.9	4,003
Education													
No education	2.5	3.9	0.8	2.1	2.6	2.3	3.8	1.7	4.1	2.4	4.6	2.7	1,377
Primary	1.6	3.7	0.5	1.2	1.9	1.1	2.3	0.7	3.7	1.6	3.0	1.6	8,529
Secondary	1.0	3.5	0.2	1.0	0.8	0.9	1.3	0.5	1.6	1.0	1.8	0.9	4,086
More than secondary	0.1	2.5	0.0	0.4	0.3	0.0	0.0	0.2	1.3	0.2	0.2	0.1	642
Wealth quintile													
Lowest	2.3	4.4	0.6	1.7	2.0	1.1	2.7	1.2	3.6	1.9	3.3	2.3	2,741
Second	1.8	4.4	0.7	1.4	2.0	1.4	2.7	0.9	4.1	2.0	4.3	2.0	2,756
Middle	1.4	3.4	0.4	0.8	1.9	1.4	2.5	0.6	3.5	1.4	2.7	1.1	2,757
Fourth	1.0	3.4	0.5	1.2	1.7	1.2	2.0	0.5	2.9	1.2	2.6	1.4	2,966
Highest	0.9	2.7	0.1	0.8	0.6	0.6	0.6	0.5	1.4	0.9	0.9	0.7	3,414
Total	1.5	3.6	0.4	1.2	1.6	1.1	2.0	0.7	3.0	1.4	2.7	1.5	14,634

Table 19.4.2 Signs and symptoms suggestive of tuberculosis: Men

Among all men age 15-49, percentage who say that they currently (for 2 weeks or longer or less than 2 weeks) have a cough, a fever, a drenching night sweat, weight loss, fatigue/malaise, or chest pain, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Cough		Fever		Drenching night sweat		Weight loss		Fatigue/malaise		Chest pain		Number of respondents
	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	2 weeks or longer	Less than 2 weeks	
Age													
15-19	0.8	2.3	0.2	0.9	0.2	0.6	0.1	0.1	0.8	1.0	1.0	1.2	1,526
20-24	0.5	2.4	0.3	1.0	0.5	0.7	0.5	0.2	1.4	0.9	0.7	0.8	960
25-29	0.7	1.8	0.4	0.4	0.6	1.4	0.8	0.5	1.4	1.4	1.6	0.8	710
30-34	0.8	2.0	0.3	0.2	1.1	0.3	1.3	0.3	1.6	0.7	2.3	0.9	1,628
35-49	1.4	2.5	0.3	0.9	1.8	1.3	1.7	0.4	2.8	0.7	3.0	1.4	1,022
Residence													
Urban	0.5	1.4	0.2	0.5	0.7	0.5	0.7	0.3	1.4	0.4	1.2	0.2	1,115
Rural	0.9	2.4	0.3	0.7	0.9	0.8	0.9	0.3	1.6	1.0	1.9	1.3	4,731
Province													
City of Kigali	0.3	0.2	0.1	0.3	0.8	0.1	1.0	0.0	1.2	0.0	1.2	0.1	879
South	0.5	1.3	0.3	0.5	0.6	0.2	0.7	0.2	0.4	0.6	0.8	0.6	1,239
West	1.5	3.0	0.4	1.1	1.5	0.7	1.4	0.3	2.8	0.8	2.8	1.0	1,268
North	0.5	3.0	0.3	0.8	0.7	1.7	0.5	0.3	1.6	1.4	2.0	1.7	886
East	1.2	3.1	0.2	0.6	0.6	0.9	0.7	0.4	1.5	1.4	1.7	1.5	1,574
Education													
No education	0.8	1.0	0.0	0.8	1.6	1.1	1.9	0.7	1.7	1.2	2.4	2.2	420
Primary	0.9	2.7	0.4	0.7	0.9	0.9	1.0	0.3	2.0	1.1	2.2	1.3	3,569
Secondary	0.8	1.6	0.1	0.6	0.6	0.3	0.4	0.2	0.7	0.5	0.7	0.3	1,562
More than secondary	1.2	2.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	295
Wealth quintile													
Lowest	1.6	2.4	0.8	1.2	1.3	1.1	1.9	0.5	2.0	1.5	2.7	2.0	924
Second	0.8	2.1	0.3	0.4	1.1	0.6	0.7	0.1	1.6	1.0	1.9	1.3	1,076
Middle	0.3	3.2	0.1	0.8	0.8	1.3	0.8	0.5	2.0	0.8	1.7	1.5	1,227
Fourth	0.6	2.1	0.2	0.7	0.7	0.4	0.8	0.3	1.4	1.0	1.6	0.5	1,278
Highest	1.2	1.4	0.1	0.4	0.5	0.4	0.5	0.1	0.9	0.3	1.0	0.3	1,342
Total 15-49	0.9	2.2	0.3	0.7	0.8	0.7	0.9	0.3	1.5	0.9	1.7	1.1	5,846
50-59	2.0	3.2	0.7	0.8	1.5	1.3	0.6	0.4	1.3	0.3	2.5	0.3	667
Total 15-59	1.0	2.3	0.3	0.7	0.9	0.8	0.8	0.3	1.5	0.8	1.8	1.0	6,513

Table 19.5 Prevalence and treatment of suggestive tuberculosis signs/symptoms

Among all women and men age 15-49, percentage who currently have at least one suggestive sign/symptom of tuberculosis, and among those with a suggestive sign/symptom of tuberculosis, percentage who have sought care or help, according to background characteristics, Rwanda DHS 2019-20

Background characteristic	Women				Men			
	Percentage with suggestive sign/symptom of tuberculosis	Number of women	Percentage who sought care or help	Number of women with sign/symptom	Percentage with suggestive sign/symptom of tuberculosis	Number of men	Percentage who sought care or help	Number of men with sign/symptom
Age								
15-19	9.8	3,258	30.5	320	6.5	1,526	27.8	99
20-24	12.1	2,414	37.5	292	6.6	960	50.2	63
25-29	10.7	2,073	37.3	221	6.9	710	37.4	49
30-34	11.8	4,190	37.4	494	7.9	1,628	41.5	128
35-49	14.4	2,699	48.5	390	11.1	1,022	48.0	113
Residence								
Urban	7.2	2,909	41.8	208	5.4	1,115	48.3	61
Rural	12.9	11,725	38.2	1,509	8.3	4,731	39.8	392
Province								
City of Kigali	6.0	2,166	41.0	129	4.3	879	(49.2)	38
South	10.7	3,065	38.9	327	3.9	1,239	41.4	48
West	14.7	3,174	40.1	467	9.7	1,268	46.1	123
North	16.7	2,226	41.1	371	9.9	886	37.4	88
East	10.6	4,003	33.9	423	9.9	1,574	36.6	156
Education								
No education	15.2	1,377	37.1	209	9.5	420	(44.5)	40
Primary	12.8	8,529	37.9	1,094	9.0	3,569	37.1	322
Secondary	9.4	4,086	41.1	386	5.1	1,562	47.0	80
More than secondary	4.4	642	(46.2)	28	3.5	295	*	10
Wealth quintile								
Lowest	15.1	2,741	29.7	415	10.1	924	33.3	93
Second	14.2	2,756	36.8	393	7.4	1,076	41.7	80
Middle	12.2	2,757	43.7	336	8.9	1,227	41.3	110
Fourth	11.3	2,966	42.6	335	7.7	1,278	40.4	98
Highest	7.0	3,414	44.4	239	5.4	1,342	49.9	72
Total 15-49	11.7	14,634	38.7	1,718	7.7	5,846	40.9	453
50-59	na	na	na	na	9.7	667	63.9	65
Total 15-59	na	na	na	na	7.9	6,513	43.8	518

Note: Figures in parentheses are based on 250-499 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not available

Table 19.6 Source of care or help for adults with suggestive signs/symptoms of tuberculosis

Among women and men age 15-49 with suggestive signs/symptoms of tuberculosis who sought care or help, percentage who sought care or help from specific sources, Rwanda DHS 2019-20

Source	Percentage who sought care or help from each source:	
	Among women with suggestive signs/symptoms of tuberculosis who sought care or help ¹	Among men with suggestive signs/symptoms of tuberculosis who sought care or help ¹
Public sector	92.6	84.2
Referral hospital	1.5	2.1
Provincial/district hospital	3.7	10.4
Health center	79.5	63.7
Health post	6.9	5.4
Outreach	0.0	1.4
Community health worker	1.0	1.1
Other public sector	0.1	0.0
Private medical sector	4.9	10.8
Polyclinic	0.2	1.3
Clinic	1.1	1.7
Dispensary	0.1	1.0
Pharmacy	3.4	6.8
Other private	0.2	0.0
Other source	2.2	4.9
Traditional healer	2.1	4.1
Church	0.1	0.8
Other	0.3	0.0
Missing	0.0	0.1
Total	100.0	100.0
Number	664	227

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A.1 INTRODUCTION

The 2019-20 Rwanda Demographic and Health Survey (2019-20 RDHS) follows those implemented in 1992, 2000, 2005, 2010, and 2014-15. A nationally representative sample of 500 clusters and 13,000 households were selected. All women age 15-49 who were usual residents of the selected households or who slept in the households the night before the survey were eligible for the survey. The survey expected to interview about 13,650 women age 15-49. As with the prior surveys, the main objectives of the 2019-20 RDHS survey are to provide up-to-date information on fertility and childhood mortality levels; fertility preferences; awareness, approval, and use of family planning methods; maternal and child health; knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs); and prevalence of HIV among the adult population.

Apart from the female survey, a male survey was also conducted at the same time in a subsample consisting of one household in every two selected for the female survey. All men age 15-59 who were usual residents of the selected households or who slept in the households the night before the survey were eligible for the male survey. The survey collected information on their basic demographic and social status, on their knowledge and use of family planning methods, and on their knowledge and attitudes regarding HIV/AIDS and other sexually transmitted infections. The survey expected to interview about 6,300 men age 15-59. In this subsample, all women and men eligible for the individual survey were also asked to provide a drop of blood for HIV testing. In that same subsample, all children under age 5 were measured and weighed, and all children age 6-59 months and all women age 15-49 were tested for anemia and malaria. In 50% of the households selected for the male survey, all eligible women and all children under age 5 underwent micronutrient testing; also in this subsample, a domestic violence module was administered to one randomly selected woman in households with at least one eligible woman. In the other 50% of households selected for the male survey, a domestic violence module was administered to one randomly selected man in households with at least one eligible man.

The survey was designed to produce representative estimates for the main demographic and health indicators for the country as a whole, for urban and rural areas and for each of the five provinces. For some indicators, representative results may be available for each of the 30 districts.

A.2 SAMPLING FRAME

The sampling frame used for the 2019-20 RDHS is the Rwanda Population and Housing Census (RPHC), which was conducted in 2012. The sampling frame is a complete list of enumeration areas (EAs) covering the whole country, provided by the National Institute of Statistics of Rwanda (NISR), the implementing agency for the 2019-20 RDHS. An EA is a natural village, or part of a village, created for the 2012 RPHC that served as a counting unit for the census. Each EA appears with identification information, administrative belongings, and a measure of size that is the number of residential households located in the EA. Each EA is also classified into one of four types of residence (urban, semi-urban, peri-urban, or rural). Urban and semi-urban areas were grouped together as “urban” areas, and peri-urban and rural areas were grouped together as “rural” areas. Each EA also has cartographical materials that delineate its geographical locations, boundaries, main access, and landmarks, which helps to identify the EA.

Rwanda’s administrative units were reformed in 2006, reducing the number of provinces from 11 to five relative to the last population census conducted in 2002. In the 2012 RPHC, Rwanda is divided into provinces, with each province being sub-divided into districts, each district into sectors, each sector into cells, and each cell into villages. The five provinces comprise 30 districts and 417 sectors. **Table A.1**

shows the residential population distribution (after exclusion of the institutional population) by province, district, and type of residence (urban or rural). The percentage of the total population ranges from 10.8% in City of Kigali to 24.7% in East. The percentage by district ranges from 2.7% to 5.1%. In Rwanda, 16.6% of the residential population lives in urban areas. The percentage of the urban population varies from 7.4% in East to 76.0% in City of Kigali. **Table A.2** shows the distributions of residential households. There is a slight difference between the two distributions because, in general, urban households are smaller than rural households. As a result, the percentage of urban households is 17.4%. **Table A.3** shows the distribution of EAs and their average size (number of households) after exclusion of 88 institutional EAs. Among the 16,640 EAs, 2,554 are in urban areas and 14,086 are in rural areas. The average size of EAs is 165 households for urban EAs and 142 households for rural EAs, with an overall average of 146 households per EA.

Table A.1 Population by province and by district within province, according to type of residence						
Province	District	Population			Percentage share	
		Urban	Rural	Total	Urban	Total
City of Kigali	Nyarugenge	215,069	69,746	284,815	75.5	2.7
	Gasabo	366,717	164,184	530,901	69.1	5.1
	Kicukiro	280,361	38,752	319,113	87.9	3.0
City of Kigali total		862,147	272,682	1,134,829	76.0	10.8
South	Nyanza	25,419	297,969	323,388	7.9	3.1
	Gasagara	5,014	317,789	322,803	1.6	3.1
	Nyaruguru	5,131	288,293	293,424	1.7	2.8
	Huye	53,101	275,504	328,605	16.2	3.1
	Nyamagabe	24,932	305,721	330,653	7.5	3.2
	Ruhango	26,470	295,551	322,021	8.2	3.1
	Muhanga	54,362	264,603	318,965	17.0	3.0
	Kamonyi	38,767	304,025	342,792	11.3	3.3
South total		233,196	2,349,455	2,582,651	9.0	24.6
West	Karongi	22,898	292,872	315,770	7.3	3.0
	Rutsiro	6,736	316,515	323,251	2.1	3.1
	Rubavu	148,368	255,910	404,278	36.7	3.9
	Nyabihu	40,610	254,582	295,192	13.8	2.8
	Ngororero	12,280	322,133	334,413	3.7	3.2
	Rusizi	63,868	340,844	404,712	15.8	3.9
	Nyamasheke	6,199	376,939	383,138	1.6	3.7
West total		300,959	2,159,795	2,460,754	12.2	23.5
North	Rulindo	8,706	279,746	288,452	3.0	2.8
	Gakenke	9,367	329,219	338,586	2.8	3.2
	Musanze	102,799	265,764	368,563	27.9	3.5
	Burera	6,240	330,215	336,455	1.9	3.2
	Gicumbi	23,839	361,798	385,637	6.2	3.7
North total		150,951	1,566,742	1,717,693	8.8	16.4
East	Rwamagana	27,179	283,059	310,238	8.8	3.0
	Nyagatare	47,888	419,056	466,944	10.3	4.5
	Gatsibo	23,719	400,196	423,915	5.6	4.0
	Kayanza	37,179	309,572	346,751	10.7	3.3
	Kirehe	10,056	330,927	340,983	2.9	3.3
	Ngoma	15,461	323,101	338,562	4.6	3.2
	Bugesera	29,511	333,828	363,339	8.1	3.5
East total		190,993	2,399,739	2,590,732	7.4	24.7
Rwanda		1,738,246	8,748,413	10,486,659	16.6	100.0
Source: 2012 population census, Rwanda						

Table A.2 Distribution of residential households by province and by district within province, according to type of residence

Province	District	Households			Percentage share	
		Urban	Rural	Total	Urban	Total
City of Kigali	Nyarugenge	53,512	17,369	70,881	75.5	2.9
	Gasabo	100,235	41,718	141,953	70.6	5.9
	Kicukiro	68,538	9,980	78,518	87.3	3.2
City of Kigali total		222,285	69,067	291,352	76.3	12.0
South	Nyanza	6,533	68,514	75,047	8.7	3.1
	Gisagara	1,242	75,995	77,237	1.6	3.2
	Nyaruguru	1,395	59,895	61,290	2.3	2.5
	Huye	11,350	67,002	78,352	14.5	3.2
	Nyamagabe	4,933	70,093	75,026	6.6	3.1
	Ruhango	6,517	70,034	76,551	8.5	3.2
	Muhanga	10,445	63,296	73,741	14.2	3.0
	Kamonyi	9,624	71,482	81,106	11.9	3.3
South total		52,039	546,311	598,350	8.7	24.7
West	Karongi	5,904	67,847	73,751	8.0	3.0
	Rutsiro	1,457	69,813	71,270	2.0	2.9
	Rubavu	34,345	54,702	89,047	38.6	3.7
	Nyabihu	8,671	57,551	66,222	13.1	2.7
	Ngororero	3,021	76,209	79,230	3.8	3.3
	Rusizi	13,314	70,442	83,756	15.9	3.5
	Nyamasheke	1,389	80,914	82,303	1.7	3.4
West total		68,101	477,478	545,579	12.5	22.5
North	Rulindo	2,087	65,364	67,451	3.1	2.8
	Gakenke	2,505	77,257	79,762	3.1	3.3
	Musanze	23,262	61,520	84,782	27.4	3.5
	Burera	1,504	72,197	73,701	2.0	3.0
	Gicumbi	5,629	80,796	86,425	6.5	3.6
North total		34,987	357,134	392,121	8.9	16.2
East	Rwamagana	6,615	67,585	74,200	8.9	3.1
	Nyagatare	12,128	94,622	106,750	11.4	4.4
	Gatsibo	5,877	90,254	96,131	6.1	4.0
	Kayanza	7,433	70,735	78,168	9.5	3.2
	Kirehe	2,359	75,331	77,690	3.0	3.2
	Ngoma	3,360	76,585	79,945	4.2	3.3
	Bugesera	7,238	78,237	85,475	8.5	3.5
East total		45,010	553,349	598,359	7.5	24.7
Rwanda		422,422	2,003,339	2,425,761	17.4	100.0

Source: 2012 population census, Rwanda

Table A.3 Distribution of EAs and their average size in number of households by province and by district within province, according to type of residence

Province	District	Number of EAs			Average EA size		
		Urban	Rural	Total	Urban	Rural	Total
City of Kigali	Nyarugenge	396	122	518	135	142	137
	Gasabo	585	262	847	171	159	168
	Kicukiro	473	72	545	145	139	144
	City of Kigali total	1,454	456	1,910	153	151	153
South	Nyanza	36	432	468	181	159	160
	Gisagara	9	533	542	138	143	143
	Nyaruguru	8	391	399	174	153	154
	Huye	64	486	550	177	138	142
	Nyamagabe	31	525	556	159	134	135
	Ruhango	40	511	551	163	137	139
	Muhanga	49	361	410	213	175	180
	Kamonyi	41	386	427	235	185	190
South total		278	3,625	3,903	187	151	153
West	Karongi	35	511	546	169	133	135
	Rutsiro	9	482	491	162	145	145
	Rubavu	203	375	578	169	146	154
	Nyabihu	44	445	489	197	129	135
	Ngororero	16	484	500	189	157	158
	Rusizi	83	543	626	160	130	134
	Nyamasheke	8	602	610	174	134	135
	West total	398	3,442	3,840	171	139	142
North	Rulindo	11	492	503	190	133	134
	Gakenke	17	603	620	147	128	129
	Musanze	116	405	521	201	152	163
	Burera	10	582	592	150	124	124
	Gicumbi	34	611	645	166	132	134
North total		188	2,693	2,881	186	133	136
East	Rwamagana	39	467	506	170	145	147
	Nyagatare	59	635	694	206	149	154
	Gatsibo	28	643	671	210	140	143
	Kayanza	35	426	461	212	166	170
	Kirehe	17	613	630	139	123	123
	Ngoma	20	510	530	168	150	151
	Bugesera	38	576	614	190	136	139
East total		236	3,870	4,106	191	143	146
Rwanda		2,554	14,086	16,640	165	142	146

Source: 2012 population census excluding 88 institutional EAs

A.3 STRUCTURE OF THE SAMPLE AND SAMPLING PROCEDURE

The sample for the 2019-20 RDHS was a stratified sample selected in two stages from the 2012 census frame. Stratification was achieved by separating each district into urban and rural areas, each of which formed a sampling stratum. In total, 60 sampling strata were created. Samples were selected independently in each sampling stratum, by a two-stage selection procedure. Implicit stratification and proportional allocation were achieved at each of the lower administrative unit levels by sorting the sampling frame within the explicit stratum according to administrative unit at different levels before sample selection and by using a probability proportional to size selection at the first stage of sampling.

In the first stage, 500 EAs were selected with probability proportional to EA size and with independent selection in each sampling stratum with the sample allocation given in **Table A.4**. A household listing operation was carried out in all of the selected EAs before the main survey. The household listing operation consisted of visiting each of the 500 selected EAs, drawing a location map and a detailed sketch map, and recording on the household listing forms all residential households found in the EA with the address and the name of the head of the household. The resulting list of households served as the sampling frame for the selection of households in the second stage. In the household listing operation, some of the selected EAs were found to be large in size. In order to not overburden the household listing team, selected EAs with an estimated number of households greater than 300 were segmented. Only one segment was selected for the survey with probability proportional to segment size. The methodology and the detailed household listing procedure are addressed in the household listing manual.

In the second stage, a fixed number of 26 households were selected from each selected EA in the newly updated listing. **Table A.4** shows the sample allocation of EAs and households. Among the 500 EAs, 112 were in urban areas and 388 were in rural areas. The total number of households selected was 13,000, 2,912 of which were in urban areas and 10,088 of which were in rural areas. Urban areas were slightly oversampled because of the low urbanization in most of the districts, where at least two urban clusters needed to be selected. With the request for representative results to be produced for some indicators at the district level, the total sample size was tight; thus, an equal size allocation was adopted, with a slightly larger sample size for the districts in City of Kigali because of the city's low fertility level. In fact, because the district sizes are quite homogeneous, the equal size allocation is not far from the proportional allocation, which is the best allocation for a multi-indicator survey. On the other hand, the total sample size was already large, and any substantial increase in the total sample size in order to provide representative results for indicators at the district level would raise concerns about data quality due to the limited implementing capability. With the designed sample size, adequate survey precision at the district level was expected for indicators for women with values above 15% and for indicators for children under age 5 with values above 20%.

Table A.5 shows the sample allocation of the expected number of interviews with women and men. The sample calculations were based on the survey results of the 2014-15 RDHS: the average number of women age 15-49 per household was 1.19 in urban areas and 1.03 in rural areas, the average number of men age 15-59 per household was 1.10 in urban areas and 0.94 in rural areas, the household response rate was 99%; the individual women's response rate was 99%, and the individual men's response rate was also 99%.

Table A.4 Sample allocation of EAs and households by province and by district within province, according to type of residence							
Province	District	Allocation of EAs			Allocation of households		
		Urban	Rural	Total	Urban	Rural	Total
City of Kigali	Nyarugenge	15	5	20	390	130	520
	Gasabo	14	7	21	364	182	546
	Kicukiro	17	3	20	442	78	520
City of Kigali total		46	15	61	1,196	390	1,586
South	Nyanza	2	16	18	52	416	468
	Gisagara	2	14	16	52	364	416
	Nyaruguru	2	14	16	52	364	416
	Huye	2	14	16	52	364	416
	Nyamagabe	2	14	16	52	364	416
	Ruhango	2	15	17	52	390	442
	Muhanga	3	13	16	78	338	416
	Kamonyi	2	14	16	52	364	416
South total		17	114	131	442	2,964	3,406
West	Karongi	3	13	16	78	338	416
	Rutsiro	2	14	16	52	364	416
	Rubavu	6	10	16	156	260	416
	Nyabihu	3	13	16	78	338	416
	Ngororero	2	14	16	52	364	416
	Rusizi	3	13	16	78	338	416
	Nyamasheke	2	14	16	52	364	416
West total		21	91	112	546	2,366	2,912
North	Rulindo	2	14	16	52	364	416
	Gakenke	2	14	16	52	364	416
	Musanze	5	11	16	130	286	416
	Burera	2	14	16	52	364	416
	Gicumbi	2	14	16	52	364	416
North total		13	67	80	338	1,742	2,080
East	Rwamagana	2	14	16	52	364	416
	Nyagatare	3	14	17	78	364	442
	Gatsibo	2	14	16	52	364	416
	Kayanza	2	14	16	52	364	416
	Kirehe	2	16	18	52	416	468
	Ngoma	2	14	16	52	364	416
	Bugesera	2	15	17	52	390	442
East total		15	101	116	390	2,626	3,016
Rwanda		112	388	500	2,912	10,088	13,000

Table A.5 Sample allocation of expected number of interviews by province and by district within province, according to type of residence

Province	District	Women age 15-49			Men age 15-59		
		Urban	Rural	Total	Urban	Rural	Total
City of Kigali	Nyarugenge	497	128	625	212	60	272
	Gasabo	449	185	634	198	84	282
	Kicukiro	579	72	651	240	36	276
City of Kigali total		1,525	385	1,910	650	180	830
South	Nyanza	52	377	429	29	193	222
	Gisagara	57	371	428	29	169	198
	Nyaruguru	45	378	423	29	169	198
	Huye	69	363	432	29	169	198
	Nyamagabe	60	393	453	29	169	198
	Ruhango	59	365	424	29	180	209
	Muhanga	92	350	442	43	157	200
	Kamonyi	67	379	446	29	169	198
South total		501	2,976	3,477	246	1,375	1,621
West	Karongi	62	359	421	43	157	200
	Rutsiro	65	345	410	29	169	198
	Rubavu	173	264	437	84	121	205
	Nyabihu	79	341	420	43	157	200
	Ngororero	62	364	426	29	169	198
	Rusizi	94	414	508	43	157	200
	Nyamasheke	58	373	431	29	169	198
	West total	593	2,460	3,053	300	1,099	1,399
North	Rulindo	50	360	410	29	169	198
	Gakenke	61	368	429	29	169	198
	Musanze	144	310	454	70	133	203
	Burera	53	395	448	29	169	198
	Gicumbi	53	376	429	29	169	198
North total		361	1,809	2,170	186	809	995
East	Rwamagana	55	402	457	29	169	198
	Nyagatare	73	359	432	43	169	212
	Gatsibo	61	375	436	29	169	198
	Kayonza	55	374	429	29	169	198
	Kirehe	48	375	423	29	193	222
	Ngoma	55	402	457	29	169	198
	Bugesera	56	366	422	29	180	209
East total		403	2,653	3,056	217	1,218	1,435
Rwanda		3,383	10,283	13,666	1,599	4,681	6,280

Note: The male survey was carried out in half of the households selected for the female survey.

A.4 SELECTION PROBABILITIES AND SAMPLING WEIGHTS

Due to the non-proportional allocation of the sample to the different provinces and their districts and the possible differences in response rates, sampling weights will be required for any analysis using 2019-20 RDHS data to ensure the actual representativeness of the survey results at the national level and as well as the domain level. Since the 2019-20 RDHS sample was a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. The following notations were used:

P_{1hi} : first-stage sampling probability of the i^{th} EA in stratum h

P_{2hi} : second-stage sampling probability within the i^{th} EA (household selection)

Let n_h be the number of EAs selected in stratum h , M_{hi} the total population according to the sampling frame in the i^{th} EA, and $\sum M_{hi}$ the total population in stratum h . The probability of selecting the i^{th} EA in the 2019-20 RDHS sample is calculated as follows:

$$\frac{n_h M_{hi}}{\sum M_{hi}}$$

Let s_{hi} be the proportion of households in the selected segment relative to the total number of households in EA i in stratum h if the EA is segmented; otherwise, $s_{hi} = 1$. Then the probability of selecting cluster i in the sample is:

$$P_{1hi} = \frac{n_h M_{hi}}{\sum M_{hi}} \times s_{hi}$$

A 2019-20 RDHS cluster is either an EA or a segment of a large EA. Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h , and let m_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{m_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the two-stage selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The design weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all sampling parameters and selection probabilities was prepared to facilitate the calculation of the design weights. Design weights were adjusted for household nonresponse and as well as for individual nonresponse to obtain the sampling weights for households and for women and men, respectively. All of the nonresponse adjustments were made at the sampling stratum level. Differences in the household sampling weights and the individual sampling weights were introduced by individual nonresponse. The final sampling weights were normalized to obtain the total number of unweighted cases equal to the total number of weighted cases at the national level, for both household weights and individual weights. The normalized weights are relative weights that are valid for estimating means, proportions, and ratios but not valid for estimating population totals or for pooled data. The sampling weights for HIV testing were calculated in a similar way, with correction of nonresponse for both individual surveys and HIV testing, but the normalization of the sampling weights was different. The HIV testing weights were normalized for women and men together at the national level so that the HIV prevalence rates calculated for women and men in combination would be valid. Sampling weights for the domestic violence module were calculated based on the number of eligible male and female respondents in the household selected for the module. The following sets of weights were calculated:

- one set for all households selected for the survey
- one set for the women's individual survey
- one set for households selected for the male survey
- one set for the men's individual survey
- one set for the women's domestic violence module
- one set for the men's domestic violence module
- one set for women's HIV testing
- one set for men's HIV testing

It is important to note that normalized weights are relative weights that are valid for estimating means, proportions, and ratios but not valid for estimating population totals or for pooled data. Normalization must be done at the national level; a piece-wise normalization, for example a normalization by region, will introduce bias for national indicators. Also, the number of weighted cases using the normalized weight has no direct relation with survey precision because it is relative. Especially for oversampled areas, the number of weighted cases will be much smaller than the number of unweighted cases, with only the latter being directly related to survey precision.

Sampling errors were calculated for selected indicators for the national sample, for urban and rural areas separately, and for each of the five provinces.

A.5 SURVEY IMPLEMENTATION

Table A.6 and **Table A.7** present response rates for women and men, respectively, by urban and rural areas and by provinces. The male subsample constituted one in three of the households selected for the women's sample.

Table A.6 Sample implementation: Women

Percent distribution of households and eligible women age 15-49 by results of the household and individual interviews, and household, eligible women, and overall women response rates, according to residence and province (unweighted), Rwanda DHS 2019-20

Result	Residence		Province					Total
	Urban	Rural	City of Kigali	South	West	North	East	
Selected households								
Completed (C)	99.3	99.7	99.3	99.6	99.5	99.5	99.8	99.6
Household present but no competent respondent at home (HP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Dwelling vacant/address not a dwelling (DV)	0.6	0.2	0.5	0.3	0.3	0.4	0.2	0.3
Dwelling destroyed (DD)	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Other (O)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	2,913	10,092	1,586	3,407	2,912	2,082	3,018	13,005
Household response rate (HRR) ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Eligible women								
Completed (EWC)	99.6	99.7	99.5	99.8	99.8	99.7	99.7	99.7
Not at home (EWNH)	0.1	0.0	0.3	0.0	0.0	0.0	0.1	0.1
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Incapacitated (EWI)	0.1	0.2	0.0	0.2	0.2	0.2	0.1	0.1
Other (EWO)	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,564	11,111	1,931	3,489	3,319	2,300	3,636	14,675
Eligible women response rate (EWRR) ²	99.6	99.7	99.5	99.8	99.8	99.7	99.7	99.7
Overall women response rate (OWRR) ³	99.6	99.7	99.5	99.8	99.8	99.7	99.7	99.7

¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\text{HRR} = \frac{100 * C}{C + HP + P + R + DNF}$$

² The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).

³ The overall women response rate (OWRR) is calculated as:

$$\text{OWRR} = \text{HRR} * \text{EWRR}/100$$

Table A.7 Sample implementation: Men

Percent distribution of households and eligible men age 15-59 by results of the household and individual interviews, and household, eligible men, and overall men response rates, according to residence and province (unweighted), Rwanda DHS 2019-20

	Residence		Province					
Result	Urban	Rural	City of Kigali	South	West	North	East	Total
Selected households								
Completed (C)	99.0	99.7	99.0	99.4	99.7	99.7	99.7	99.5
Household present but no competent respondent at home (HP)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Household absent (HA)	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Dwelling vacant/address not a dwelling (DV)	0.9	0.2	0.8	0.4	0.3	0.3	0.3	0.4
Dwelling destroyed (DD)	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Other (O)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,456	5,047	793	1,704	1,456	1,040	1,510	6,503
Household response rate (HRR) ¹	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0
Eligible men								
Completed (EMC)	99.3	99.6	99.5	99.7	99.7	99.6	99.1	99.5
Not at home (EMNH)	0.5	0.1	0.4	0.1	0.1	0.2	0.2	0.2
Refused (EMR)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Incapacitated (EMI)	0.2	0.3	0.1	0.2	0.1	0.2	0.7	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,514	5,030	851	1,599	1,498	1,017	1,579	6,544
Eligible men response rate (EMRR) ²	99.3	99.6	99.5	99.7	99.7	99.6	99.1	99.5
Overall men response rate (OMRR) ³	99.3	99.6	99.5	99.6	99.7	99.6	99.1	99.5

¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * R}{C + HP + P + R + LNT}$$

² The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC).

³ The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2019-20 Rwanda Demographic and Health Survey (2019-20 RDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2019-20 RDHS is only one of many samples that could have been selected from the same population, using the same design and sample size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected by simple random sampling, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2019-20 RDHS sample was the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed using SAS programs developed by ICF. These programs use the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any linear statistic such as a percentage or mean as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[\frac{m_h}{m_h-1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi} \text{ and } z_h = y_h - rx_h$$

where h represents the stratum, which varies from 1 to H ;
 m_h is the total number of clusters selected in the h^{th} stratum;
 y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum;
 x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum; and
 f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulas.

Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2019-20 RDHS, there were 500 non-empty clusters. Hence, 500 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 500 clusters,
 $r_{(i)}$ is the estimate computed from the reduced sample of 499 clusters (i^{th} cluster excluded),
and
 k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2019-20 RDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the five provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in **Table B.1**. **Tables B.2** through **B.9** present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect ($DEFT$), the relative standard error (SE/R), and the 95% confidence limits ($R \pm 2SE$) for each variable. The sampling errors for mortality rates are presented for the 5-year period preceding the survey for the national sample and the urban and rural samples and for the 10-year period preceding the survey at other domain levels. The $DEFT$ is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *ideal number of children*) can be interpreted as follows: the overall average ideal number of children for all interviewed women age 15-49 from the national sample is 3.490, and its standard error is 0.017. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, $3.490 \pm 2 \times 0.017$. There is a high probability (95%) that the *true* average ideal number of children is between 3.457 and 3.524.

For the total sample, the value of the $DEFT$, averaged over all variables for women, is 1.202. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.202 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Rwanda DHS 2019-20

Variable	Estimate	Base population
HOUSEHOLDS AND POPULATION		
Ownership of at least one ITN	Proportion	Households
Access to an ITN	Proportion	De facto household population
Use of an ITN	Proportion	De facto household population
WOMEN		
Urban residence	Proportion	All women 15-49
Literacy	Proportion	All women 15-49
No education	Proportion	All women 15-49
Secondary education or higher	Proportion	All women 15-49
Never married/never in union	Proportion	All women 15-49
Currently married/in union	Proportion	All women 15-49
Married before age 18	Proportion	All women 20-49
Had sexual intercourse before age 18	Proportion	All women 20-49
Currently pregnant	Proportion	All women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using male condoms	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using implants	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Used public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	All women 15-49
Mothers protected against tetanus for last birth	Proportion	Women with a live birth in last 5 years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Had diarrhea in last 2 weeks	Proportion	Children under 5
Treated with ORS	Proportion	Children under 5 with diarrhea in past 2 weeks
Sought medical treatment	Proportion	Children under 5 with diarrhea in past 2 weeks
Vaccination card seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT+HepB+Hib vaccination (3 doses)	Proportion	Children 12-23 months
Received birth dose polio 0 vaccination	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received pneumococcal vaccination (3 doses)	Proportion	Children 12-23 months
Received MCV vaccination	Proportion	Children 12-23 months
Received all basic vaccinations	Proportion	Children 12-23 months
Received MCV/MMR vaccination	Proportion	Children 24-35 months
Height-for-age (-2SD)	Proportion	Children under 5 who were measured
Weight-for-height (-2SD)	Proportion	Children under 5 who were measured
Weight-for-age (-2SD)	Proportion	Children under 5 who were measured
Prevalence of anemia (children 6-59 months)	Proportion	Children 6-59 months tested
Prevalence of malaria (rapid test)	Proportion	Children 6-59 months tested
Prevalence of malaria (microscopy test)	Proportion	Children 6-59 months tested
Body mass index (BMI) <18.5	Proportion	Women 15-49 who were measured
Body mass index (BMI) ≥25	Proportion	Women 15-49 who were measured
Prevalence of anemia (women 15-49)	Proportion	Women 15-49 who were tested
Had 2+ sexual partners in past 12 months	Proportion	All women 15-49
Condom use at last sex	Proportion	All women 15-49
Abstinence among young people (never had sex)	Proportion	All women 15-24
Had an HIV test and received results in past 12 months	Proportion	All women 15-49
Discriminatory attitudes towards people with HIV	Proportion	All women 15-49 who have heard of HIV/AIDS
Ever experienced any physical violence since age 15	Proportion	All women 15-49
Ever experienced any sexual violence	Proportion	All women 15-49
Ever experienced any physical/sexual violence by most recent husband/partner	Proportion	Ever-married women 15-49
Ever experienced any physical/sexual/emotional violence by most recent husband/partner	Proportion	Ever-married women 15-49
Ever experienced any physical/sexual/emotional violence in the last 12 months by most recent husband/partner	Proportion	Ever-married women 15-49
Total fertility rate (3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate ¹	Rate	Children exposed to the risk of mortality
Postneonatal mortality rate ¹	Rate	Children exposed to the risk of mortality
Infant mortality rate ¹	Rate	Children exposed to the risk of mortality
Child mortality rate ¹	Rate	Children exposed to the risk of mortality
Under-5 mortality rate ¹	Rate	Children exposed to the risk of mortality

Continued...

Table B.1—Continued

Variable	Estimate	Base population
	MEN	
Urban residence	Proportion	All men 15-49
Literacy	Proportion	All men 15-49
No education	Proportion	All men 15-49
Secondary education or higher	Proportion	All men 15-49
Never married/never in union	Proportion	All men 15-49
Currently married/in union	Proportion	All men 15-49
Had sexual intercourse before age 18	Proportion	All men 20-49
Want no more children	Proportion	Currently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men 15-49
Ideal number of children	Mean	All men 15-49
Had 2+ sexual partners in past 12 months	Proportion	All men 15-49
Paid for sexual intercourse in past 12 months	Proportion	All men 15-49
Abstinence among young people (never had sex)	Proportion	All men 15-24
Condom use at last sex	Proportion	All men 15-49
Had an HIV test and received results in past 12 months	Proportion	All men 15-49
Discriminatory attitudes towards people with HIV	Proportion	All men 15-49 who have heard of HIV/AIDS

¹ Mortality rates are calculated for the 5 years before the survey for the national, urban, and rural samples and for the 10 years before the survey for provincial samples.

Table B.2 Sampling errors: Total sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.664	0.008	12,949	12,949	1.925	0.012	0.648	0.680
Access to an ITN	0.508	0.008	55,287	55,479	2.118	0.016	0.491	0.524
Slept under an ITN last night	0.477	0.008	55,287	55,479	2.013	0.017	0.461	0.494
WOMEN								
Urban residence	0.199	0.005	14,634	14,634	1.590	0.026	0.188	0.209
Literacy	0.848	0.004	14,634	14,634	1.494	0.005	0.839	0.856
No education	0.094	0.004	14,634	14,634	1.510	0.039	0.087	0.101
Secondary education or higher	0.323	0.007	14,634	14,634	1.795	0.021	0.309	0.337
Never married/never in union	0.404	0.005	14,634	14,634	1.339	0.013	0.393	0.415
Currently married/in union	0.506	0.005	14,634	14,634	1.298	0.011	0.495	0.516
Married before age 18	0.085	0.003	11,326	11,376	1.173	0.036	0.079	0.091
Had sexual intercourse before age 18	0.200	0.005	11,326	11,376	1.227	0.023	0.191	0.209
Currently pregnant	0.059	0.002	14,634	14,634	1.089	0.036	0.055	0.064
Currently using any method	0.641	0.007	7,290	7,401	1.238	0.011	0.627	0.655
Currently using a modern method	0.584	0.007	7,290	7,401	1.250	0.012	0.570	0.599
Currently using pill	0.069	0.003	7,290	7,401	1.173	0.051	0.062	0.076
Currently using IUD	0.021	0.002	7,290	7,401	1.210	0.096	0.017	0.025
Currently using male condoms	0.037	0.002	7,290	7,401	1.117	0.067	0.032	0.041
Currently using injectables	0.153	0.005	7,290	7,401	1.166	0.032	0.143	0.162
Currently using implants	0.266	0.006	7,290	7,401	1.169	0.023	0.254	0.278
Currently using female sterilization	0.020	0.002	7,290	7,401	1.108	0.092	0.016	0.023
Currently using withdrawal	0.030	0.002	7,290	7,401	1.131	0.076	0.025	0.034
Currently using rhythm	0.026	0.002	7,290	7,401	1.028	0.074	0.022	0.029
Used public sector source	0.771	0.007	5,066	5,126	1.251	0.010	0.756	0.785
Want no more children	0.509	0.006	7,290	7,401	1.094	0.013	0.496	0.522
Want to delay next birth at least 2 years	0.344	0.006	7,290	7,401	1.054	0.017	0.332	0.355
Ideal number of children	3.490	0.017	14,377	14,352	1.413	0.005	3.457	3.524
Mothers protected against tetanus for last birth	0.792	0.007	6,167	6,302	1.269	0.008	0.779	0.805
Births with skilled attendant at delivery	0.935	0.005	8,092	8,324	1.542	0.005	0.926	0.945
Had diarrhea in last 2 weeks	0.142	0.005	7,796	8,020	1.154	0.033	0.133	0.152
Treated with ORS	0.280	0.015	1,103	1,141	1.107	0.054	0.250	0.310
Sought medical treatment for diarrhea	0.519	0.016	1,103	1,141	1.023	0.030	0.488	0.550
Ever had vaccination card	0.972	0.004	1,572	1,633	1.065	0.004	0.964	0.981
Received BCG vaccination	0.992	0.002	1,572	1,633	1.102	0.002	0.987	0.997
Received DPT+HepB+Hib vaccination (3 doses)	0.990	0.003	1,572	1,633	0.999	0.003	0.984	0.995
Received birth dose polio 0 vaccination	0.939	0.008	1,572	1,633	1.324	0.009	0.923	0.956
Received polio vaccination (3 doses)	0.977	0.004	1,572	1,633	1.051	0.004	0.969	0.985
Received pneumococcal vaccination (3 doses)	0.988	0.003	1,572	1,633	1.162	0.003	0.982	0.995
Received rotavirus vaccination (2 doses)	0.993	0.002	1,572	1,633	1.047	0.002	0.989	0.997
Received MCV vaccination (12-23 months)	0.978	0.004	1,572	1,633	1.031	0.004	0.970	0.985
Received all basic vaccinations	0.955	0.006	1,572	1,633	1.109	0.006	0.944	0.967
Received MCV/MMR vaccination (24-35 months)	0.938	0.007	1,587	1,631	1.196	0.008	0.923	0.952
Height-for-age (-2SD)	0.331	0.009	4,049	4,158	1.136	0.027	0.313	0.349
Weight-for-height (-2SD)	0.011	0.002	4,050	4,158	1.120	0.166	0.007	0.015
Weight-for-age (-2SD)	0.077	0.005	4,052	4,160	1.062	0.061	0.067	0.086
Prevalence of anemia (children 6-59 months)	0.366	0.010	3,677	3,765	1.217	0.027	0.346	0.385
Prevalence of malaria (rapid test)	0.027	0.004	3,665	3,753	1.569	0.166	0.018	0.036
Prevalence of malaria (microscopy test)	0.009	0.002	3,676	3,764	1.313	0.249	0.004	0.013
Body mass index (BMI) <18.5	0.059	0.003	6,771	6,710	1.071	0.052	0.053	0.066
Body mass index (BMI) ≥25.0	0.263	0.007	6,771	6,710	1.324	0.027	0.249	0.277
Prevalence of anemia (women 15-49)	0.131	0.005	7,299	7,265	1.270	0.038	0.121	0.141
Had 2+ sexual partners in past 12 months	0.013	0.001	14,634	14,634	1.220	0.087	0.011	0.015
Condom use at last sex	0.459	0.015	1,286	1,297	1.086	0.033	0.429	0.489
Abstinence among young people (never had sex)	0.757	0.007	4,828	4,732	1.132	0.009	0.743	0.771
Had an HIV test and received results in past 12 months	0.356	0.005	14,634	14,634	1.330	0.015	0.345	0.366
Discriminatory attitudes towards people with HIV	0.132	0.004	14,592	14,593	1.349	0.029	0.125	0.140
Experienced physical violence since age 15 by anyone	0.367	0.010	2,788	2,788	1.105	0.027	0.347	0.388
Experienced sexual violence by anyone ever	0.225	0.010	2,788	2,788	1.213	0.043	0.206	0.244
Experienced any physical/sexual violence by most recent husband/partner ever	0.403	0.012	1,947	1,703	1.123	0.031	0.378	0.428
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.459	0.013	1,947	1,703	1.143	0.028	0.434	0.485
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.297	0.012	1,947	1,703	1.190	0.041	0.273	0.322
Total fertility rate (last 3 years)	4.126	0.066	40,375	40,383	1.289	0.016	3.994	4.259
Neonatal mortality (last 0-4 years)	18.935	1.784	8,121	8,345	1.060	0.094	15.368	22.503
Postneonatal mortality (last 0-4 years)	13.594	1.341	8,134	8,358	1.048	0.099	10.912	16.277
Infant mortality (last 0-4 years)	32.530	2.269	8,129	8,352	1.076	0.070	27.992	37.067
Child mortality (last 0-4 years)	13.395	1.414	8,136	8,331	1.100	0.106	10.566	16.223
Under-5 mortality (last 0-4 years)	45.489	2.683	8,174	8,397	1.104	0.059	40.123	50.855
MEN								
Urban residence	0.191	0.007	5,833	5,846	1.386	0.037	0.176	0.205
Literacy	0.860	0.005	5,833	5,846	1.187	0.006	0.849	0.871
No education	0.072	0.004	5,833	5,846	1.136	0.053	0.064	0.080
Secondary education or higher	0.318	0.009	5,833	5,846	1.411	0.027	0.300	0.335
Never married/never in union	0.490	0.008	5,833	5,846	1.216	0.016	0.475	0.506
Currently married/in union	0.489	0.008	5,833	5,846	1.243	0.017	0.473	0.506
Had sexual intercourse before age 18	0.161	0.006	4,299	4,320	1.080	0.038	0.149	0.173
Want no more children	0.521	0.010	2,805	2,860	1.012	0.018	0.502	0.540
Want to delay next birth at least 2 years	0.366	0.010	2,805	2,860	1.099	0.027	0.346	0.386
Ideal number of children	3.106	0.020	5,827	5,840	1.247	0.007	3.065	3.147
Had 2+ sexual partners in past 12 months	0.055	0.004	5,833	5,846	1.184	0.064	0.048	0.062
Paid for sexual intercourse in past 12 months	0.015	0.002	5,833	5,846	1.217	0.131	0.011	0.018
Abstinence among young people (never had sex)	0.698	0.010	2,358	2,346	1.060	0.014	0.678	0.719
Condom use at last sex	0.696	0.021	724	723	1.225	0.030	0.654	0.738
Had an HIV test and received results in past 12 months	0.303	0.007	5,833	5,846	1.172	0.023	0.289	0.317
Discriminatory attitudes towards people with HIV	0.119	0.005	5,827	5,840	1.171	0.042	0.110	0.129

Table B.3 Sampling errors: Urban sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.762	0.014	2,892	2,355	1.777	0.018	0.734	0.791
Access to an ITN	0.682	0.013	11,757	9,482	1.619	0.019	0.655	0.708
Slept under an ITN last night	0.647	0.016	11,757	9,482	1.895	0.025	0.614	0.680
WOMEN								
Urban residence	1.000	0.000	3,551	2,909	na	0.000	1.000	1.000
Literacy	0.933	0.006	3,551	2,909	1.362	0.006	0.921	0.944
No education	0.046	0.005	3,551	2,909	1.422	0.109	0.036	0.056
Secondary education or higher	0.570	0.017	3,551	2,909	2.005	0.029	0.537	0.604
Never married/never in union	0.469	0.014	3,551	2,909	1.717	0.031	0.440	0.498
Currently married/in union	0.443	0.014	3,551	2,909	1.673	0.032	0.415	0.470
Married before age 18	0.057	0.005	2,800	2,331	1.194	0.092	0.047	0.068
Had sexual intercourse before age 18	0.197	0.012	2,800	2,331	1.581	0.060	0.173	0.221
Currently pregnant	0.055	0.006	3,551	2,909	1.502	0.104	0.044	0.067
Currently using any method	0.605	0.019	1,552	1,288	1.522	0.031	0.567	0.642
Currently using a modern method	0.550	0.020	1,552	1,288	1.578	0.036	0.510	0.590
Currently using pill	0.083	0.008	1,552	1,288	1.108	0.094	0.068	0.099
Currently using IUD	0.061	0.009	1,552	1,288	1.535	0.153	0.042	0.080
Currently using male condoms	0.045	0.006	1,552	1,288	1.205	0.141	0.032	0.058
Currently using injectables	0.128	0.012	1,552	1,288	1.380	0.092	0.104	0.151
Currently using implants	0.174	0.013	1,552	1,288	1.398	0.077	0.147	0.201
Currently using female sterilization	0.031	0.005	1,552	1,288	1.104	0.156	0.022	0.041
Currently using withdrawal	0.023	0.005	1,552	1,288	1.283	0.211	0.013	0.033
Currently using rhythm	0.028	0.004	1,552	1,288	1.011	0.152	0.019	0.036
Used public sector source	0.645	0.019	1,093	879	1.336	0.030	0.607	0.684
Want no more children	0.467	0.016	1,552	1,288	1.252	0.034	0.435	0.498
Want to delay next birth at least 2 years	0.363	0.014	1,552	1,288	1.116	0.038	0.336	0.390
Ideal number of children	3.391	0.035	3,501	2,851	1.389	0.010	3.322	3.460
Mothers protected against tetanus for last birth	0.806	0.015	1,322	1,123	1.378	0.018	0.776	0.836
Births with skilled attendant at delivery	0.978	0.006	1,702	1,454	1.473	0.006	0.966	0.990
Had diarrhea in last 2 weeks	0.115	0.009	1,654	1,411	1.132	0.079	0.097	0.134
Treated with ORS	0.232	0.040	189	163	1.301	0.173	0.151	0.312
Sought medical treatment for diarrhea	0.460	0.043	189	163	1.183	0.094	0.373	0.546
Ever had vaccination card	0.984	0.006	304	269	0.914	0.007	0.971	0.997
Received BCG vaccination	0.992	0.006	304	269	1.173	0.006	0.981	1.004
Received DPT+HepB+Hib vaccination (3 doses)	0.989	0.007	304	269	1.127	0.007	0.975	1.002
Received birth dose polio 0 vaccination	0.968	0.013	304	269	1.170	0.013	0.943	0.994
Received polio vaccination (3 doses)	0.983	0.007	304	269	0.988	0.007	0.969	0.997
Received pneumococcal vaccination (3 doses)	0.991	0.006	304	269	1.113	0.006	0.980	1.003
Received rotavirus vaccination (2 doses)	0.992	0.006	304	269	1.173	0.006	0.981	1.004
Received MCV vaccination (12-23 months)	0.983	0.008	304	269	1.079	0.008	0.967	0.998
Received all basic vaccinations	0.970	0.010	304	269	1.077	0.011	0.949	0.991
Received MCV/MMR vaccination (24-35 months)	0.933	0.016	370	319	1.275	0.018	0.900	0.966
Height-for-age (-2SD)	0.198	0.018	841	694	1.202	0.089	0.163	0.233
Weight-for-height (-2SD)	0.016	0.007	841	693	1.562	0.424	0.002	0.029
Weight-for-age (-2SD)	0.037	0.007	844	696	1.113	0.199	0.022	0.051
Prevalence of anemia (children 6-59 months)	0.340	0.024	775	641	1.346	0.070	0.293	0.388
Prevalence of malaria (rapid test)	0.017	0.008	773	640	1.551	0.449	0.002	0.032
Prevalence of malaria (microscopy test)	0.005	0.003	774	641	1.231	0.626	0.000	0.011
Body mass index (BMI) <18.5	0.037	0.006	1,681	1,339	1.271	0.161	0.025	0.048
Body mass index (BMI) ≥25.0	0.422	0.014	1,681	1,339	1.177	0.034	0.393	0.451
Prevalence of anemia (women 15-49)	0.123	0.010	1,777	1,428	1.270	0.081	0.103	0.142
Had 2+ sexual partners in past 12 months	0.025	0.004	3,551	2,909	1.523	0.160	0.017	0.033
Condom use at last sex	0.586	0.023	430	386	0.969	0.039	0.540	0.632
Abstinence among young people (never had sex)	0.697	0.018	1,257	992	1.360	0.025	0.662	0.732
Had an HIV test and received results in past 12 months	0.403	0.012	3,551	2,909	1.509	0.031	0.378	0.428
Discriminatory attitudes towards people with HIV	0.100	0.006	3,547	2,905	1.250	0.063	0.088	0.113
Experienced physical violence since age 15 by anyone	0.329	0.021	590	526	1.084	0.064	0.287	0.371
Experienced sexual violence by anyone ever	0.263	0.024	590	526	1.321	0.091	0.215	0.311
Experienced any physical/sexual violence by most recent husband/partner ever	0.351	0.028	369	281	1.142	0.081	0.294	0.407
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.424	0.030	369	281	1.152	0.070	0.364	0.483
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.265	0.028	369	281	1.213	0.105	0.209	0.321
Total fertility rate (last 3 years)	3.399	0.132	9,993	8,210	1.414	0.039	3.136	3.662
Neonatal mortality (last 0-4 years)	15.292	4.350	1,710	1,455	1.273	0.284	6.591	23.992
Postneonatal mortality (last 0-4 years)	12.555	3.505	1,711	1,455	1.261	0.279	5.545	19.566
Infant mortality (last 0-4 years)	27.847	5.495	1,711	1,456	1.238	0.197	16.858	38.836
Child mortality (last 0-4 years)	6.997	2.257	1,726	1,471	1.125	0.323	2.482	11.511
Under-5 mortality (last 0-4 years)	34.649	5.974	1,718	1,461	1.239	0.172	22.702	46.596
MEN								
Urban residence	1.000	0.000	1,366	1,115	na	0.000	1.000	1.000
Literacy	0.949	0.008	1,366	1,115	1.393	0.009	0.933	0.966
No education	0.035	0.006	1,366	1,115	1.166	0.165	0.024	0.047
Secondary education or higher	0.578	0.024	1,366	1,115	1.830	0.042	0.529	0.627
Never married/never in union	0.563	0.022	1,366	1,115	1.638	0.039	0.519	0.607
Currently married/in union	0.418	0.024	1,366	1,115	1.774	0.057	0.371	0.466
Had sexual intercourse before age 18	0.185	0.014	1,065	879	1.186	0.076	0.157	0.214
Want no more children	0.461	0.024	568	466	1.149	0.052	0.413	0.509
Want to delay next birth at least 2 years	0.411	0.026	568	466	1.256	0.063	0.359	0.463
Ideal number of children	3.102	0.046	1,364	1,114	1.031	0.015	3.011	3.193
Had 2+ sexual partners in past 12 months	0.076	0.009	1,366	1,115	1.234	0.116	0.058	0.094
Paid for sexual intercourse in past 12 months	0.028	0.006	1,366	1,115	1.370	0.220	0.016	0.040
Abstinence among young people (never had sex)	0.611	0.022	548	449	1.075	0.037	0.566	0.655
Condom use at last sex	0.719	0.039	266	226	1.402	0.054	0.641	0.797
Had an HIV test and received results in past 12 months	0.349	0.017	1,366	1,115	1.295	0.048	0.315	0.382
Discriminatory attitudes towards people with HIV	0.074	0.009	1,365	1,114	1.212	0.117	0.056	0.091

na = Not applicable

Table B.4 Sampling errors: Rural sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.642	0.009	10,057	10,594	1.923	0.014	0.623	0.660
Access to an ITN	0.472	0.009	43,530	45,998	2.193	0.020	0.453	0.491
Slept under an ITN last night	0.442	0.009	43,530	45,998	2.009	0.021	0.424	0.461
WOMEN								
Urban residence	0.000	0.000	11,083	11,725	na	na	0.000	0.000
Literacy	0.826	0.005	11,083	11,725	1.495	0.007	0.816	0.837
No education	0.106	0.004	11,083	11,725	1.495	0.041	0.097	0.115
Secondary education or higher	0.262	0.008	11,083	11,725	1.856	0.030	0.246	0.277
Never married/never in union	0.388	0.006	11,083	11,725	1.254	0.015	0.376	0.400
Currently married/in union	0.521	0.006	11,083	11,725	1.215	0.011	0.510	0.533
Married before age 18	0.092	0.004	8,526	9,045	1.151	0.039	0.085	0.099
Had sexual intercourse before age 18	0.201	0.005	8,526	9,045	1.135	0.025	0.191	0.211
Currently pregnant	0.060	0.002	11,083	11,725	0.991	0.037	0.056	0.065
Currently using any method	0.649	0.007	5,738	6,114	1.170	0.011	0.634	0.664
Currently using a modern method	0.592	0.008	5,738	6,114	1.175	0.013	0.576	0.607
Currently using pill	0.066	0.004	5,738	6,114	1.188	0.059	0.058	0.074
Currently using IUD	0.013	0.002	5,738	6,114	1.078	0.124	0.010	0.016
Currently using male condoms	0.035	0.003	5,738	6,114	1.100	0.077	0.029	0.040
Currently using injectables	0.158	0.005	5,738	6,114	1.126	0.034	0.147	0.169
Currently using implants	0.285	0.007	5,738	6,114	1.138	0.024	0.272	0.299
Currently using female sterilization	0.017	0.002	5,738	6,114	1.122	0.113	0.013	0.021
Currently using withdrawal	0.031	0.003	5,738	6,114	1.098	0.081	0.026	0.036
Currently using rhythm	0.025	0.002	5,738	6,114	1.028	0.084	0.021	0.029
Used public sector source	0.796	0.008	3,973	4,247	1.253	0.010	0.780	0.812
Want no more children	0.518	0.007	5,738	6,114	1.064	0.014	0.504	0.532
Want to delay next birth at least 2 years	0.339	0.006	5,738	6,114	1.038	0.019	0.326	0.352
Ideal number of children	3.515	0.019	10,876	11,501	1.412	0.005	3.477	3.553
Mothers protected against tetanus for last birth	0.789	0.007	4,845	5,179	1.241	0.009	0.775	0.804
Births with skilled attendant at delivery	0.927	0.006	6,390	6,870	1.521	0.006	0.915	0.938
Had diarrhea in last 2 weeks	0.148	0.005	6,142	6,608	1.140	0.036	0.137	0.159
Treated with ORS	0.288	0.016	914	978	1.071	0.057	0.255	0.320
Sought medical treatment for diarrhea	0.529	0.017	914	978	0.995	0.032	0.495	0.562
Ever had vaccination card	0.970	0.005	1,268	1,364	1.061	0.005	0.960	0.980
Received BCG vaccination	0.992	0.003	1,268	1,364	1.082	0.003	0.987	0.998
Received DPT+HepB+Hib vaccination (3 doses)	0.990	0.003	1,268	1,364	0.969	0.003	0.984	0.995
Received birth dose polio 0 vaccination	0.934	0.009	1,268	1,364	1.318	0.010	0.915	0.952
Received polio vaccination (3 doses)	0.976	0.005	1,268	1,364	1.047	0.005	0.966	0.985
Received pneumococcal vaccination (3 doses)	0.988	0.004	1,268	1,364	1.155	0.004	0.981	0.995
Received rotavirus vaccination (2 doses)	0.993	0.002	1,268	1,364	1.017	0.002	0.988	0.998
Received MCV vaccination (12-23 months)	0.977	0.004	1,268	1,364	1.014	0.004	0.968	0.985
Received all basic vaccinations	0.952	0.007	1,268	1,364	1.100	0.007	0.939	0.966
Received MCV/MMR vaccination (24-35 months)	0.939	0.008	1,217	1,312	1.177	0.009	0.922	0.955
Height-for-age (-2SD)	0.358	0.010	3,208	3,464	1.131	0.028	0.338	0.378
Weight-for-height (-2SD)	0.010	0.002	3,209	3,466	0.997	0.174	0.007	0.014
Weight-for-age (-2SD)	0.085	0.005	3,208	3,464	1.028	0.063	0.074	0.095
Prevalence of anemia (children 6-59 months)	0.371	0.011	2,902	3,123	1.185	0.029	0.349	0.392
Prevalence of malaria (rapid test)	0.029	0.005	2,892	3,113	1.549	0.178	0.019	0.039
Prevalence of malaria (microscopy test)	0.009	0.002	2,902	3,123	1.295	0.267	0.004	0.014
Body mass index (BMI) <18.5	0.065	0.004	5,090	5,372	1.026	0.055	0.058	0.072
Body mass index (BMI) ≥25.0	0.223	0.008	5,090	5,372	1.375	0.036	0.207	0.239
Prevalence of anemia (women 15-49)	0.133	0.006	5,522	5,837	1.259	0.043	0.122	0.145
Had 2+ sexual partners in past 12 months	0.010	0.001	11,083	11,725	1.082	0.101	0.008	0.012
Condom use at last sex	0.405	0.019	856	911	1.110	0.046	0.368	0.442
Abstinence among young people (never had sex)	0.773	0.007	3,571	3,740	1.061	0.010	0.758	0.788
Had an HIV test and received results in past 12 months	0.344	0.006	11,083	11,725	1.291	0.017	0.333	0.356
Discriminatory attitudes towards people with HIV	0.140	0.004	11,045	11,688	1.350	0.032	0.131	0.149
Experienced physical violence since age 15 by anyone	0.376	0.011	2,198	2,262	1.110	0.030	0.353	0.399
Experienced sexual violence by anyone ever	0.216	0.010	2,198	2,262	1.186	0.048	0.195	0.237
Experienced any physical/sexual violence by most recent husband/partner ever	0.413	0.014	1,578	1,422	1.120	0.034	0.385	0.441
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.466	0.014	1,578	1,422	1.139	0.031	0.438	0.495
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.304	0.014	1,578	1,422	1.183	0.045	0.276	0.331
Total fertility rate (last 3 years)	4.317	0.072	30,381	32,172	1.250	0.017	4.173	4.461
Neonatal mortality (last 0-4 years)	19.704	1.961	6,411	6,890	1.015	0.100	15.781	23.627
Postneonatal mortality (last 0-4 years)	13.810	1.451	6,423	6,903	0.999	0.105	10.909	16.711
Infant mortality (last 0-4 years)	33.514	2.496	6,418	6,896	1.038	0.074	28.522	38.507
Child mortality (last 0-4 years)	14.759	1.635	6,410	6,860	1.078	0.111	11.490	18.029
Under-5 mortality (last 0-4 years)	47.779	2.988	6,456	6,936	1.072	0.063	41.803	53.754
MEN								
Urban residence	0.000	0.000	4,467	4,731	na	na	0.000	0.000
Literacy	0.839	0.006	4,467	4,731	1.162	0.008	0.826	0.852
No education	0.081	0.005	4,467	4,731	1.118	0.057	0.071	0.090
Secondary education or higher	0.256	0.009	4,467	4,731	1.354	0.035	0.239	0.274
Never married/never in union	0.473	0.008	4,467	4,731	1.117	0.018	0.457	0.490
Currently married/in union	0.506	0.008	4,467	4,731	1.115	0.016	0.489	0.523
Had sexual intercourse before age 18	0.154	0.007	3,234	3,441	1.052	0.043	0.141	0.168
Want no more children	0.533	0.010	2,237	2,394	0.978	0.019	0.512	0.554
Want to delay next birth at least 2 years	0.357	0.011	2,237	2,394	1.062	0.030	0.336	0.379
Ideal number of children	3.107	0.023	4,463	4,726	1.339	0.007	3.062	3.153
Had 2+ sexual partners in past 12 months	0.050	0.004	4,467	4,731	1.175	0.077	0.042	0.057
Paid for sexual intercourse in past 12 months	0.012	0.002	4,467	4,731	1.187	0.165	0.008	0.015
Abstinence among young people (never had sex)	0.719	0.011	1,810	1,897	1.049	0.015	0.697	0.741
Condom use at last sex	0.685	0.025	458	496	1.142	0.036	0.635	0.735
Had an HIV test and received results in past 12 months	0.292	0.008	4,467	4,731	1.144	0.027	0.277	0.308
Discriminatory attitudes towards people with HIV	0.130	0.006	4,462	4,726	1.146	0.044	0.119	0.142

na = Not applicable

Table B.5 Sampling errors: City of Kigali sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.860	0.012	1,575	1,810	1.322	0.013	0.837	0.883
Access to an ITN	0.806	0.010	6,278	7,228	1.259	0.013	0.785	0.827
Slept under an ITN last night	0.757	0.018	6,278	7,228	1.834	0.024	0.721	0.794
WOMEN								
Urban residence	0.759	0.016	1,921	2,166	1.610	0.021	0.727	0.790
Literacy	0.936	0.008	1,921	2,166	1.362	0.008	0.921	0.952
No education	0.039	0.006	1,921	2,166	1.313	0.149	0.027	0.050
Secondary education or higher	0.548	0.020	1,921	2,166	1.759	0.036	0.508	0.588
Never married/never in union	0.443	0.018	1,921	2,166	1.603	0.041	0.407	0.479
Currently married/in union	0.464	0.018	1,921	2,166	1.587	0.039	0.428	0.501
Married before age 18	0.044	0.006	1,555	1,769	1.243	0.147	0.031	0.057
Had sexual intercourse before age 18	0.191	0.016	1,555	1,769	1.589	0.083	0.160	0.223
Currently pregnant	0.051	0.006	1,921	2,166	1.257	0.124	0.038	0.063
Currently using any method	0.606	0.021	837	1,006	1.258	0.035	0.564	0.649
Currently using a modern method	0.549	0.023	837	1,006	1.311	0.041	0.504	0.594
Currently using pill	0.084	0.009	837	1,006	0.953	0.109	0.065	0.102
Currently using IUD	0.069	0.012	837	1,006	1.361	0.173	0.045	0.093
Currently using male condoms	0.047	0.009	837	1,006	1.195	0.186	0.030	0.065
Currently using injectables	0.151	0.015	837	1,006	1.186	0.097	0.122	0.180
Currently using implants	0.147	0.015	837	1,006	1.221	0.102	0.117	0.177
Currently using female sterilization	0.025	0.005	837	1,006	0.922	0.198	0.015	0.035
Currently using withdrawal	0.026	0.007	837	1,006	1.196	0.252	0.013	0.040
Currently using rhythm	0.025	0.006	837	1,006	1.041	0.226	0.014	0.036
Used public sector source	0.582	0.028	570	667	1.351	0.048	0.526	0.638
Want no more children	0.489	0.018	837	1,006	1.047	0.037	0.453	0.525
Want to delay next birth at least 2 years	0.318	0.014	837	1,006	0.874	0.044	0.290	0.346
Ideal number of children	3.327	0.035	1,878	2,102	1.067	0.011	3.257	3.397
Mothers protected against tetanus for last birth	0.807	0.019	714	866	1.296	0.023	0.769	0.845
Births with skilled attendant at delivery	0.971	0.008	948	1,164	1.289	0.008	0.956	0.987
Had diarrhea in last 2 weeks	0.117	0.012	920	1,133	1.101	0.104	0.093	0.142
Treated with ORS	0.197	0.047	102	133	1.241	0.240	0.102	0.291
Sought medical treatment for diarrhea	0.428	0.052	102	133	1.092	0.122	0.324	0.533
Ever had vaccination card	0.984	0.008	161	209	0.816	0.008	0.969	0.999
Received BCG vaccination	0.990	0.007	161	209	0.983	0.007	0.976	1.005
Received DPT+HepB+Hib vaccination (3 doses)	0.990	0.007	161	209	0.983	0.007	0.976	1.005
Received birth dose polio 0 vaccination	0.957	0.017	161	209	0.997	0.017	0.924	0.990
Received polio vaccination (3 doses)	0.986	0.008	161	209	0.918	0.008	0.970	1.002
Received pneumococcal vaccination (3 doses)	0.990	0.007	161	209	0.983	0.007	0.976	1.005
Received rotavirus vaccination (2 doses)	0.990	0.007	161	209	0.983	0.007	0.976	1.005
Received MCV vaccination (12-23 months)	0.975	0.012	161	209	0.996	0.012	0.951	0.998
Received all basic vaccinations	0.971	0.013	161	209	1.050	0.014	0.945	0.998
Received MCV/MMR vaccination (24-35 months)	0.922	0.022	197	244	1.177	0.024	0.878	0.966
Height-for-age (-2SD)	0.213	0.022	454	561	1.109	0.106	0.168	0.258
Weight-for-height (-2SD)	0.018	0.008	453	559	1.391	0.472	0.001	0.034
Weight-for-age (-2SD)	0.048	0.011	455	562	1.047	0.236	0.026	0.071
Prevalence of anemia (children 6-59 months)	0.367	0.026	413	513	1.080	0.071	0.315	0.419
Prevalence of malaria (rapid test)	0.020	0.012	412	511	1.786	0.596	0.000	0.043
Prevalence of malaria (microscopy test)	0.006	0.004	412	512	1.154	0.731	0.000	0.014
Body mass index (BMI) <18.5	0.039	0.007	881	977	1.113	0.189	0.024	0.053
Body mass index (BMI) ≥25.0	0.426	0.019	881	977	1.160	0.046	0.387	0.465
Prevalence of anemia (women 15-49)	0.145	0.014	941	1,050	1.233	0.098	0.117	0.174
Had 2+ sexual partners in past 12 months	0.031	0.005	1,921	2,166	1.359	0.173	0.021	0.042
Condom use at last sex	0.602	0.029	258	289	0.942	0.048	0.545	0.660
Abstinence among young people (never had sex)	0.691	0.024	656	690	1.324	0.035	0.644	0.739
Had an HIV test and received results in past 12 months	0.388	0.018	1,921	2,166	1.613	0.046	0.352	0.424
Discriminatory attitudes towards people with HIV	0.101	0.008	1,920	2,164	1.216	0.083	0.084	0.118
Experienced physical violence since age 15 by anyone	0.348	0.024	317	391	0.889	0.068	0.300	0.395
Experienced sexual violence by anyone ever	0.273	0.032	317	391	1.272	0.117	0.209	0.336
Experienced any physical/sexual violence by most recent husband/partner ever	0.376	0.031	212	228	0.940	0.083	0.313	0.438
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.458	0.033	212	228	0.968	0.072	0.392	0.524
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.302	0.034	212	228	1.078	0.113	0.234	0.370
Total fertility rate (last 3 years)	3.613	0.182	5,427	6,115	1.248	0.050	3.250	3.977
Neonatal mortality (last 0-9 years)	12.937	3.171	1,750	2,116	1.026	0.245	6.596	19.279
Postneonatal mortality (last 0-9 years)	10.547	2.889	1,745	2,107	1.207	0.274	4.768	16.325
Infant mortality (last 0-9 years)	23.484	4.484	1,750	2,116	1.159	0.191	14.516	32.452
Child mortality (last 0-9 years)	7.279	2.136	1,678	2,030	1.043	0.293	3.008	11.550
Under-5 mortality (last 0-9 years)	30.592	4.914	1,754	2,122	1.139	0.161	20.765	40.420
MEN								
Urban residence	0.738	0.024	766	879	1.487	0.032	0.691	0.786
Literacy	0.959	0.007	766	879	0.966	0.007	0.946	0.973
No education	0.028	0.006	766	879	0.958	0.206	0.016	0.039
Secondary education or higher	0.531	0.029	766	879	1.588	0.054	0.473	0.588
Never married/never in union	0.547	0.029	766	879	1.603	0.053	0.490	0.605
Currently married/in union	0.437	0.031	766	879	1.730	0.071	0.374	0.499
Had sexual intercourse before age 18	0.170	0.015	614	700	0.997	0.089	0.140	0.200
Want no more children	0.470	0.028	315	384	0.990	0.059	0.415	0.526
Want to delay next birth at least 2 years	0.411	0.031	315	384	1.108	0.075	0.349	0.472
Ideal number of children	2.983	0.035	765	878	0.949	0.012	2.914	3.052
Had 2+ sexual partners in past 12 months	0.075	0.009	766	879	0.999	0.127	0.056	0.094
Paid for sexual intercourse in past 12 months	0.028	0.007	766	879	1.185	0.252	0.014	0.042
Abstinence among young people (never had sex)	0.646	0.028	296	335	0.991	0.043	0.591	0.701
Condom use at last sex	0.695	0.046	167	178	1.293	0.067	0.602	0.787
Had an HIV test and received results in past 12 months	0.323	0.022	766	879	1.291	0.068	0.280	0.367
Discriminatory attitudes towards people with HIV	0.057	0.010	766	879	1.172	0.173	0.037	0.076

Table B.6 Sampling errors: South sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.649	0.016	3,393	3,003	1.891	0.024	0.618	0.680
Access to an ITN	0.477	0.016	13,836	12,237	2.133	0.033	0.446	0.508
Slept under an ITN last night	0.466	0.015	13,836	12,237	1.924	0.033	0.436	0.496
WOMEN								
Urban residence	0.092	0.012	3,482	3,065	2.397	0.128	0.069	0.116
Literacy	0.841	0.009	3,482	3,065	1.409	0.010	0.824	0.859
No education	0.098	0.007	3,482	3,065	1.480	0.076	0.083	0.113
Secondary education or higher	0.279	0.012	3,482	3,065	1.629	0.044	0.254	0.304
Never married/never in union	0.406	0.009	3,482	3,065	1.037	0.021	0.389	0.424
Currently married/in union	0.509	0.009	3,482	3,065	1.023	0.017	0.491	0.526
Married before age 18	0.057	0.005	2,696	2,383	1.102	0.087	0.047	0.067
Had sexual intercourse before age 18	0.171	0.008	2,696	2,383	1.144	0.049	0.154	0.187
Currently pregnant	0.068	0.004	3,482	3,065	0.971	0.061	0.060	0.076
Currently using any method	0.625	0.014	1,755	1,559	1.247	0.023	0.596	0.654
Currently using a modern method	0.560	0.014	1,755	1,559	1.152	0.024	0.533	0.588
Currently using pill	0.072	0.007	1,755	1,559	1.136	0.097	0.058	0.086
Currently using IUD	0.016	0.003	1,755	1,559	0.955	0.176	0.011	0.022
Currently using male condoms	0.039	0.005	1,755	1,559	1.109	0.131	0.029	0.049
Currently using injectables	0.134	0.010	1,755	1,559	1.210	0.073	0.114	0.154
Currently using implants	0.267	0.012	1,755	1,559	1.136	0.045	0.243	0.291
Currently using female sterilization	0.014	0.003	1,755	1,559	1.115	0.222	0.008	0.020
Currently using withdrawal	0.036	0.005	1,755	1,559	1.034	0.129	0.026	0.045
Currently using rhythm	0.027	0.004	1,755	1,559	1.078	0.154	0.019	0.035
Used public sector source	0.806	0.014	1,186	1,056	1.178	0.017	0.778	0.833
Want no more children	0.556	0.012	1,755	1,559	1.026	0.022	0.532	0.581
Want to delay next birth at least 2 years	0.307	0.013	1,755	1,559	1.143	0.041	0.282	0.332
Ideal number of children	3.367	0.031	3,447	3,035	1.410	0.009	3.305	3.428
Mothers protected against tetanus for last birth	0.823	0.012	1,453	1,305	1.178	0.014	0.799	0.846
Births with skilled attendant at delivery	0.921	0.011	1,853	1,672	1.422	0.012	0.900	0.943
Had diarrhea in last 2 weeks	0.131	0.010	1,784	1,610	1.182	0.073	0.112	0.150
Treated with ORS	0.299	0.031	235	211	1.020	0.104	0.237	0.362
Sought medical treatment for diarrhea	0.524	0.038	235	211	1.122	0.072	0.449	0.599
Ever had vaccination card	0.983	0.007	384	346	1.043	0.007	0.969	0.996
Received BCG vaccination	0.992	0.006	384	346	1.312	0.006	0.980	1.004
Received DPT+HepB+Hib vaccination (3 doses)	0.990	0.005	384	346	0.949	0.005	0.980	0.999
Received birth dose polio 0 vaccination	0.921	0.017	384	346	1.139	0.018	0.888	0.954
Received polio vaccination (3 doses)	0.986	0.006	384	346	1.050	0.006	0.973	0.998
Received pneumococcal vaccination (3 doses)	0.993	0.004	384	346	0.960	0.004	0.984	1.001
Received rotavirus vaccination (2 doses)	0.995	0.003	384	346	0.986	0.004	0.988	1.002
Received MCV vaccination (12-23 months)	0.991	0.005	384	346	1.126	0.006	0.980	1.002
Received all basic vaccinations	0.973	0.009	384	346	1.118	0.009	0.955	0.992
Received MCV/MMR vaccination (24-35 months)	0.976	0.008	344	311	1.014	0.009	0.959	0.993
Height-for-age (-2SD)	0.327	0.019	930	835	1.121	0.058	0.290	0.365
Weight-for-height (-2SD)	0.022	0.005	929	834	1.041	0.234	0.012	0.032
Weight-for-age (-2SD)	0.104	0.011	930	835	1.081	0.109	0.081	0.126
Prevalence of anemia (children 6-59 months)	0.321	0.020	853	761	1.231	0.062	0.281	0.361
Prevalence of malaria (rapid test)	0.037	0.007	848	757	1.067	0.185	0.023	0.050
Prevalence of malaria (microscopy test)	0.013	0.004	853	761	1.165	0.352	0.004	0.021
Body mass index (BMI) <18.5	0.092	0.008	1,607	1,397	1.146	0.090	0.076	0.109
Body mass index (BMI) ≥25.0	0.197	0.014	1,607	1,397	1.386	0.070	0.170	0.225
Prevalence of anemia (women 15-49)	0.145	0.011	1,740	1,521	1.328	0.077	0.123	0.168
Had 2+ sexual partners in past 12 months	0.012	0.002	3,482	3,065	1.014	0.159	0.008	0.015
Condom use at last sex	0.384	0.033	307	270	1.178	0.085	0.318	0.449
Abstinence among young people (never had sex)	0.752	0.013	1,143	984	0.979	0.017	0.727	0.777
Had an HIV test and received results in past 12 months	0.357	0.010	3,482	3,065	1.171	0.027	0.338	0.376
Discriminatory attitudes towards people with HIV	0.119	0.007	3,473	3,057	1.249	0.058	0.106	0.133
Experienced physical violence since age 15 by anyone	0.382	0.023	693	604	1.240	0.060	0.336	0.428
Experienced sexual violence by anyone ever	0.242	0.019	693	604	1.160	0.078	0.204	0.280
Experienced any physical/sexual violence by most recent husband/partner ever	0.419	0.026	477	368	1.147	0.062	0.367	0.470
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.472	0.025	477	368	1.101	0.053	0.422	0.523
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.308	0.026	477	368	1.212	0.083	0.257	0.359
Total fertility rate (last 3 years)	4.082	0.130	9,576	8,425	1.192	0.032	3.822	4.342
Neonatal mortality (last 0-9 years)	28.409	3.590	3,591	3,218	1.063	0.126	21.228	35.590
Postneonatal mortality (last 0-9 years)	12.257	2.375	3,597	3,223	1.116	0.194	7.507	17.008
Infant mortality (last 0-9 years)	40.667	4.751	3,595	3,222	1.150	0.117	31.165	50.168
Child mortality (last 0-9 years)	15.777	2.552	3,556	3,173	1.183	0.162	10.672	20.882
Under-5 mortality (last 0-9 years)	55.802	5.647	3,608	3,234	1.210	0.101	44.508	67.096
MEN								
Urban residence	0.075	0.010	1,409	1,239	1.436	0.134	0.055	0.096
Literacy	0.826	0.012	1,409	1,239	1.155	0.014	0.803	0.850
No education	0.090	0.009	1,409	1,239	1.178	0.100	0.072	0.108
Secondary education or higher	0.255	0.014	1,409	1,239	1.175	0.054	0.228	0.283
Never married/never in union	0.502	0.015	1,409	1,239	1.104	0.029	0.472	0.531
Currently married/in union	0.471	0.015	1,409	1,239	1.134	0.032	0.441	0.501
Had sexual intercourse before age 18	0.153	0.011	1,033	918	1.023	0.075	0.130	0.176
Want no more children	0.532	0.020	654	584	1.034	0.038	0.491	0.572
Want to delay next birth at least 2 years	0.309	0.019	654	584	1.071	0.063	0.271	0.348
Ideal number of children	3.102	0.038	1,407	1,237	1.128	0.012	3.025	3.178
Had 2+ sexual partners in past 12 months	0.038	0.006	1,409	1,239	1.159	0.155	0.027	0.050
Paid for sexual intercourse in past 12 months	0.007	0.002	1,409	1,239	1.007	0.309	0.003	0.012
Abstinence among young people (never had sex)	0.717	0.021	581	507	1.144	0.030	0.674	0.759
Condom use at last sex	0.606	0.048	144	128	1.164	0.079	0.510	0.701
Had an HIV test and received results in past 12 months	0.272	0.014	1,409	1,239	1.163	0.051	0.245	0.300
Discriminatory attitudes towards people with HIV	0.205	0.012	1,409	1,239	1.149	0.060	0.180	0.230

Table B.7 Sampling errors: West sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.642	0.019	2,898	2,770	2.084	0.029	0.604	0.679
Access to an ITN	0.439	0.017	12,991	12,496	2.263	0.040	0.404	0.473
Slept under an ITN last night	0.427	0.017	12,991	12,496	2.080	0.040	0.393	0.462
WOMEN								
Urban residence	0.135	0.009	3,312	3,174	1.506	0.066	0.117	0.153
Literacy	0.818	0.011	3,312	3,174	1.636	0.013	0.796	0.840
No education	0.124	0.010	3,312	3,174	1.793	0.083	0.103	0.144
Secondary education or higher	0.271	0.014	3,312	3,174	1.759	0.050	0.244	0.299
Never married/never in union	0.404	0.011	3,312	3,174	1.277	0.027	0.382	0.426
Currently married/in union	0.513	0.011	3,312	3,174	1.229	0.021	0.492	0.534
Married before age 18	0.093	0.007	2,582	2,480	1.308	0.080	0.078	0.108
Had sexual intercourse before age 18	0.196	0.009	2,582	2,480	1.191	0.047	0.177	0.215
Currently pregnant	0.063	0.005	3,312	3,174	1.100	0.074	0.053	0.072
Currently using any method	0.615	0.016	1,685	1,628	1.335	0.026	0.583	0.647
Currently using a modern method	0.544	0.016	1,685	1,628	1.344	0.030	0.512	0.577
Currently using pill	0.047	0.005	1,685	1,628	1.047	0.115	0.036	0.058
Currently using IUD	0.010	0.003	1,685	1,628	1.191	0.286	0.004	0.016
Currently using male condoms	0.030	0.005	1,685	1,628	1.156	0.161	0.020	0.039
Currently using injectables	0.144	0.010	1,685	1,628	1.139	0.068	0.125	0.164
Currently using implants	0.263	0.013	1,685	1,628	1.196	0.049	0.237	0.289
Currently using female sterilization	0.032	0.005	1,685	1,628	1.225	0.164	0.021	0.042
Currently using withdrawal	0.037	0.005	1,685	1,628	1.187	0.148	0.026	0.048
Currently using rhythm	0.034	0.004	1,685	1,628	0.927	0.120	0.026	0.042
Used public sector source	0.831	0.013	1,074	1,024	1.160	0.016	0.805	0.858
Want no more children	0.514	0.015	1,685	1,628	1.231	0.029	0.484	0.544
Want to delay next birth at least 2 years	0.343	0.013	1,685	1,628	1.104	0.037	0.318	0.369
Ideal number of children	3.682	0.042	3,269	3,131	1.555	0.011	3.599	3.765
Mothers protected against tetanus for last birth	0.767	0.015	1,478	1,425	1.349	0.019	0.738	0.797
Births with skilled attendant at delivery	0.924	0.011	2,069	2,009	1.719	0.012	0.902	0.946
Had diarrhea in last 2 weeks	0.184	0.010	1,998	1,940	1.160	0.056	0.164	0.205
Treated with ORS	0.300	0.027	354	358	1.101	0.089	0.246	0.353
Sought medical treatment for diarrhea	0.533	0.027	354	358	1.021	0.050	0.479	0.587
Ever had vaccination card	0.980	0.007	399	385	0.984	0.007	0.966	0.994
Received BCG vaccination	0.989	0.006	399	385	1.047	0.006	0.978	1.000
Received DPT+HepB+Hib vaccination (3 doses)	0.991	0.005	399	385	1.039	0.005	0.982	1.001
Received birth dose polio 0 vaccination	0.951	0.010	399	385	0.947	0.011	0.930	0.971
Received polio vaccination (3 doses)	0.973	0.008	399	385	0.965	0.008	0.958	0.989
Received pneumococcal vaccination (3 doses)	0.991	0.005	399	385	1.007	0.005	0.981	1.000
Received rotavirus vaccination (2 doses)	0.997	0.003	399	385	1.046	0.003	0.992	1.003
Received MCV vaccination (12-23 months)	0.973	0.008	399	385	0.962	0.008	0.957	0.989
Received all basic vaccinations	0.946	0.010	399	385	0.922	0.011	0.926	0.967
Received MCV/MMR vaccination (24-35 months)	0.926	0.017	404	387	1.221	0.018	0.893	0.959
Height-for-age (-2SD)	0.402	0.019	1,017	997	1.139	0.047	0.364	0.440
Weight-for-height (-2SD)	0.006	0.003	1,016	996	1.178	0.481	0.000	0.011
Weight-for-age (-2SD)	0.081	0.010	1,016	996	1.013	0.118	0.062	0.100
Prevalence of anemia (children 6-59 months)	0.409	0.022	909	886	1.340	0.054	0.364	0.453
Prevalence of malaria (rapid test)	0.031	0.013	908	885	1.815	0.406	0.006	0.056
Prevalence of malaria (microscopy test)	0.015	0.007	909	886	1.531	0.492	0.000	0.029
Body mass index (BMI) <18.5	0.063	0.006	1,535	1,464	0.990	0.098	0.050	0.075
Body mass index (BMI) ≥25.0	0.221	0.014	1,535	1,464	1.298	0.062	0.193	0.248
Prevalence of anemia (women 15-49)	0.127	0.009	1,673	1,604	1.158	0.074	0.108	0.145
Had 2+ sexual partners in past 12 months	0.009	0.002	3,312	3,174	1.097	0.202	0.005	0.012
Condom use at last sex	0.508	0.038	238	228	1.170	0.075	0.432	0.584
Abstinence among young people (never had sex)	0.789	0.014	1,073	1,024	1.141	0.018	0.760	0.817
Had an HIV test and received results in past 12 months	0.392	0.011	3,312	3,174	1.293	0.028	0.370	0.414
Discriminatory attitudes towards people with HIV	0.169	0.009	3,300	3,163	1.454	0.056	0.150	0.188
Experienced physical violence since age 15 by anyone	0.390	0.024	650	614	1.232	0.060	0.343	0.437
Experienced sexual violence by anyone ever	0.231	0.022	650	614	1.345	0.096	0.187	0.276
Experienced any physical/sexual violence by most recent husband/partner ever	0.421	0.025	456	373	1.068	0.059	0.372	0.471
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.483	0.026	456	373	1.126	0.055	0.430	0.536
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.329	0.023	456	373	1.052	0.070	0.283	0.376
Total fertility rate (last 3 years)	4.491	0.142	9,135	8,759	1.371	0.032	4.206	4.776
Neonatal mortality (last 0-9 years)	16.652	2.692	3,839	3,723	1.146	0.162	11.268	22.037
Postneonatal mortality (last 0-9 years)	15.508	2.473	3,831	3,716	1.180	0.159	10.561	20.454
Infant mortality (last 0-9 years)	32.160	3.559	3,842	3,726	1.138	0.111	25.042	39.278
Child mortality (last 0-9 years)	11.859	2.098	3,832	3,710	1.149	0.177	7.662	16.055
Under-5 mortality (last 0-9 years)	43.638	4.048	3,854	3,739	1.092	0.093	35.541	51.734
MEN								
Urban residence	0.121	0.012	1,334	1,268	1.380	0.102	0.096	0.146
Literacy	0.853	0.013	1,334	1,268	1.299	0.015	0.828	0.879
No education	0.076	0.008	1,334	1,268	1.060	0.101	0.061	0.092
Secondary education or higher	0.308	0.018	1,334	1,268	1.439	0.059	0.271	0.344
Never married/never in union	0.484	0.015	1,334	1,268	1.125	0.032	0.453	0.514
Currently married/in union	0.500	0.016	1,334	1,268	1.144	0.031	0.468	0.531
Had sexual intercourse before age 18	0.198	0.015	939	894	1.177	0.077	0.167	0.229
Want no more children	0.523	0.020	652	634	1.012	0.038	0.483	0.563
Want to delay next birth at least 2 years	0.397	0.021	652	634	1.094	0.053	0.355	0.439
Ideal number of children	3.263	0.062	1,333	1,267	1.733	0.019	3.140	3.386
Had 2+ sexual partners in past 12 months	0.062	0.007	1,334	1,268	1.118	0.119	0.047	0.077
Paid for sexual intercourse in past 12 months	0.014	0.004	1,334	1,268	1.377	0.319	0.005	0.023
Abstinence among young people (never had sex)	0.699	0.020	547	517	1.039	0.029	0.658	0.740
Condom use at last sex	0.708	0.044	152	140	1.180	0.062	0.621	0.796
Had an HIV test and received results in past 12 months	0.361	0.015	1,334	1,268	1.170	0.043	0.330	0.392
Discriminatory attitudes towards people with HIV	0.124	0.010	1,334	1,268	1.151	0.084	0.103	0.145

Table B.8 Sampling errors: North sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.657	0.019	2,072	2,012	1.808	0.029	0.620	0.695
Access to an ITN	0.487	0.019	8,685	8,472	2.036	0.039	0.449	0.525
Slept under an ITN last night	0.442	0.020	8,685	8,472	1.983	0.044	0.402	0.481
WOMEN								
Urban residence	0.110	0.005	2,294	2,226	0.785	0.047	0.100	0.121
Literacy	0.841	0.011	2,294	2,226	1.398	0.013	0.819	0.862
No education	0.090	0.007	2,294	2,226	1.164	0.077	0.076	0.104
Secondary education or higher	0.269	0.017	2,294	2,226	1.809	0.062	0.235	0.302
Never married/never in union	0.385	0.013	2,294	2,226	1.312	0.035	0.358	0.412
Currently married/in union	0.540	0.014	2,294	2,226	1.332	0.026	0.512	0.568
Married before age 18	0.092	0.007	1,777	1,729	1.085	0.081	0.077	0.107
Had sexual intercourse before age 18	0.176	0.011	1,777	1,729	1.203	0.062	0.154	0.197
Currently pregnant	0.059	0.005	2,294	2,226	0.927	0.077	0.050	0.068
Currently using any method	0.694	0.015	1,226	1,201	1.126	0.021	0.664	0.723
Currently using a modern method	0.649	0.015	1,226	1,201	1.126	0.024	0.618	0.680
Currently using pill	0.072	0.008	1,226	1,201	1.109	0.114	0.055	0.088
Currently using IUD	0.008	0.002	1,226	1,201	0.892	0.284	0.003	0.013
Currently using male condoms	0.028	0.005	1,226	1,201	1.052	0.176	0.018	0.038
Currently using injectables	0.164	0.013	1,226	1,201	1.236	0.080	0.138	0.190
Currently using implants	0.342	0.017	1,226	1,201	1.287	0.051	0.307	0.377
Currently using female sterilization	0.010	0.003	1,226	1,201	0.965	0.277	0.004	0.015
Currently using withdrawal	0.026	0.005	1,226	1,201	1.021	0.179	0.017	0.035
Currently using rhythm	0.017	0.004	1,226	1,201	0.987	0.217	0.009	0.024
Used public sector source	0.784	0.020	906	894	1.439	0.025	0.745	0.823
Want no more children	0.450	0.016	1,226	1,201	1.158	0.037	0.417	0.483
Want to delay next birth at least 2 years	0.410	0.016	1,226	1,201	1.141	0.039	0.378	0.443
Ideal number of children	3.585	0.036	2,247	2,179	1.203	0.010	3.512	3.658
Mothers protected against tetanus for last birth	0.800	0.013	1,016	1,004	1.008	0.016	0.775	0.826
Births with skilled attendant at delivery	0.964	0.006	1,282	1,267	1.150	0.006	0.952	0.977
Had diarrhea in last 2 weeks	0.162	0.011	1,229	1,214	0.990	0.066	0.141	0.184
Treated with ORS	0.245	0.039	193	197	1.268	0.160	0.167	0.323
Sought medical treatment for diarrhea	0.507	0.035	193	197	0.942	0.068	0.438	0.576
Ever had vaccination card	0.961	0.012	260	262	0.978	0.012	0.938	0.984
Received BCG vaccination	0.997	0.003	260	262	0.931	0.003	0.990	1.003
Received DPT+HepB+Hib vaccination (3 doses)	0.981	0.008	260	262	0.983	0.008	0.965	0.997
Received birth dose polio 0 vaccination	0.977	0.009	260	262	1.006	0.009	0.959	0.996
Received polio vaccination (3 doses)	0.972	0.010	260	262	0.986	0.010	0.953	0.992
Received pneumococcal vaccination (3 doses)	0.971	0.014	260	262	1.377	0.015	0.943	0.999
Received rotavirus vaccination (2 doses)	0.983	0.008	260	262	1.053	0.009	0.966	1.000
Received MCV vaccination (12-23 months)	0.968	0.011	260	262	1.017	0.011	0.947	0.990
Received all basic vaccinations	0.938	0.017	260	262	1.129	0.018	0.905	0.972
Received MCV/MMR vaccination (24-35 months)	0.940	0.018	250	247	1.214	0.019	0.903	0.976
Height-for-age (-2SD)	0.405	0.024	649	635	1.167	0.059	0.357	0.453
Weight-for-height (-2SD)	0.005	0.003	650	636	1.021	0.575	0.000	0.010
Weight-for-age (-2SD)	0.073	0.012	651	637	1.094	0.164	0.049	0.097
Prevalence of anemia (children 6-59 months)	0.414	0.027	592	584	1.325	0.065	0.360	0.468
Prevalence of malaria (rapid test)	0.022	0.012	590	582	1.907	0.556	0.000	0.047
Prevalence of malaria (microscopy test)	0.003	0.002	592	584	1.015	0.699	0.000	0.008
Body mass index (BMI) <18.5	0.046	0.007	1,048	1,005	1.069	0.151	0.032	0.060
Body mass index (BMI) ≥25.0	0.246	0.016	1,048	1,005	1.177	0.064	0.215	0.278
Prevalence of anemia (women 15-49)	0.114	0.012	1,132	1,091	1.225	0.102	0.091	0.137
Had 2+ sexual partners in past 12 months	0.010	0.002	2,294	2,226	0.968	0.200	0.006	0.014
Condom use at last sex	0.438	0.037	166	162	0.963	0.085	0.364	0.512
Abstinence among young people (never had sex)	0.783	0.017	729	704	1.103	0.022	0.749	0.817
Had an HIV test and received results in past 12 months	0.360	0.013	2,294	2,226	1.257	0.035	0.335	0.385
Discriminatory attitudes towards people with HIV	0.148	0.011	2,284	2,215	1.429	0.072	0.126	0.169
Experienced physical violence since age 15 by anyone	0.377	0.026	449	411	1.115	0.068	0.326	0.428
Experienced sexual violence by anyone ever	0.208	0.021	449	411	1.072	0.099	0.167	0.249
Experienced any physical/sexual violence by most recent husband/partner ever	0.434	0.034	317	254	1.231	0.079	0.366	0.503
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.476	0.035	317	254	1.241	0.073	0.406	0.546
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.300	0.034	317	254	1.329	0.114	0.231	0.368
Total fertility rate (last 3 years)	3.993	0.145	6,399	6,216	1.175	0.036	3.704	4.283
Neonatal mortality (last 0-9 years)	24.473	3.454	2,364	2,324	0.969	0.141	17.566	31.381
Postneonatal mortality (last 0-9 years)	15.290	2.360	2,359	2,321	0.926	0.154	10.569	20.011
Infant mortality (last 0-9 years)	39.763	4.142	2,366	2,326	0.966	0.104	31.479	48.047
Child mortality (last 0-9 years)	17.533	2.613	2,316	2,284	0.984	0.149	12.307	22.759
Under-5 mortality (last 0-9 years)	56.599	5.230	2,368	2,328	1.050	0.092	46.138	67.059
MEN								
Urban residence	0.109	0.009	915	886	0.859	0.081	0.091	0.127
Literacy	0.846	0.015	915	886	1.242	0.018	0.817	0.876
No education	0.069	0.010	915	886	1.141	0.139	0.050	0.088
Secondary education or higher	0.269	0.019	915	886	1.302	0.071	0.231	0.307
Never married/never in union	0.447	0.018	915	886	1.090	0.040	0.411	0.483
Currently married/in union	0.539	0.017	915	886	1.052	0.032	0.504	0.573
Had sexual intercourse before age 18	0.135	0.012	680	658	0.926	0.090	0.111	0.159
Want no more children	0.519	0.021	487	477	0.926	0.040	0.477	0.561
Want to delay next birth at least 2 years	0.406	0.021	487	477	0.939	0.052	0.364	0.448
Ideal number of children	3.015	0.032	915	886	0.948	0.011	2.951	3.079
Had 2+ sexual partners in past 12 months	0.034	0.008	915	886	1.253	0.220	0.019	0.049
Paid for sexual intercourse in past 12 months	0.008	0.004	915	886	1.494	0.565	0.000	0.016
Abstinence among young people (never had sex)	0.716	0.026	355	345	1.069	0.036	0.665	0.767
Condom use at last sex	0.710	0.049	93	88	1.035	0.069	0.612	0.808
Had an HIV test and received results in past 12 months	0.341	0.015	915	886	0.934	0.043	0.312	0.371
Discriminatory attitudes towards people with HIV	0.104	0.011	912	883	1.083	0.105	0.082	0.126

Table B.9 Sampling errors: East sample, Rwanda DHS 2019-20

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence interval	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
HOUSEHOLDS								
Ownership of at least one ITN	0.593	0.018	3,011	3,353	2.047	0.031	0.556	0.630
Access to an ITN	0.458	0.019	13,497	15,047	2.362	0.042	0.420	0.497
Slept under an ITN last night	0.413	0.018	13,497	15,047	2.116	0.043	0.378	0.449
WOMEN								
Urban residence	0.077	0.006	3,625	4,003	1.325	0.076	0.065	0.089
Literacy	0.832	0.010	3,625	4,003	1.538	0.011	0.813	0.851
No education	0.100	0.007	3,625	4,003	1.473	0.073	0.085	0.115
Secondary education or higher	0.306	0.016	3,625	4,003	2.037	0.051	0.275	0.338
Never married/never in union	0.392	0.011	3,625	4,003	1.400	0.029	0.369	0.415
Currently married/in union	0.501	0.011	3,625	4,003	1.300	0.022	0.480	0.523
Married before age 18	0.121	0.007	2,716	3,014	1.121	0.058	0.107	0.135
Had sexual intercourse before age 18	0.246	0.009	2,716	3,014	1.075	0.036	0.228	0.263
Currently pregnant	0.055	0.004	3,625	4,003	1.142	0.078	0.047	0.064
Currently using any method	0.661	0.013	1,787	2,007	1.185	0.020	0.635	0.688
Currently using a modern method	0.615	0.014	1,787	2,007	1.250	0.023	0.586	0.643
Currently using pill	0.075	0.008	1,787	2,007	1.351	0.113	0.058	0.091
Currently using IUD	0.018	0.004	1,787	2,007	1.110	0.193	0.011	0.025
Currently using male condoms	0.040	0.005	1,787	2,007	1.021	0.119	0.030	0.049
Currently using injectables	0.168	0.009	1,787	2,007	1.073	0.057	0.149	0.187
Currently using implants	0.281	0.012	1,787	2,007	1.084	0.041	0.258	0.304
Currently using female sterilization	0.017	0.003	1,787	2,007	1.079	0.197	0.010	0.023
Currently using withdrawal	0.023	0.004	1,787	2,007	1.179	0.183	0.014	0.031
Currently using rhythm	0.024	0.004	1,787	2,007	1.089	0.166	0.016	0.031
Used public sector source	0.780	0.014	1,330	1,485	1.189	0.017	0.753	0.807
Want no more children	0.513	0.011	1,787	2,007	0.953	0.022	0.491	0.536
Want to delay next birth at least 2 years	0.345	0.011	1,787	2,007	0.944	0.031	0.323	0.366
Ideal number of children	3.468	0.036	3,536	3,905	1.506	0.010	3.396	3.541
Mothers protected against tetanus for last birth	0.778	0.014	1,506	1,702	1.317	0.018	0.750	0.806
Births with skilled attendant at delivery	0.921	0.011	1,940	2,212	1.614	0.012	0.899	0.943
Had diarrhea in last 2 weeks	0.114	0.009	1,865	2,123	1.155	0.075	0.097	0.131
Treated with ORS	0.307	0.032	219	242	1.015	0.104	0.243	0.371
Sought medical treatment for diarrhea	0.553	0.035	219	242	1.023	0.063	0.483	0.623
Ever had vaccination card	0.958	0.012	368	431	1.145	0.012	0.935	0.981
Received BCG vaccination	0.994	0.004	368	431	1.107	0.004	0.985	1.003
Received DPT+HepB+Hib vaccination (3 doses)	0.992	0.005	368	431	1.029	0.005	0.983	1.002
Received birth dose polio 0 vaccination	0.913	0.024	368	431	1.665	0.026	0.865	0.960
Received polio vaccination (3 doses)	0.971	0.010	368	431	1.166	0.010	0.951	0.991
Received pneumococcal vaccination (3 doses)	0.992	0.005	368	431	1.029	0.005	0.983	1.002
Received rotavirus vaccination (2 doses)	0.995	0.004	368	431	1.071	0.004	0.987	1.003
Received MCV vaccination (12-23 months)	0.978	0.008	368	431	1.071	0.008	0.962	0.994
Received all basic vaccinations	0.952	0.014	368	431	1.253	0.014	0.924	0.979
Received MCV/MMR vaccination (24-35 months)	0.928	0.015	392	442	1.129	0.016	0.898	0.957
Height-for-age (-2SD)	0.288	0.015	999	1,130	1.050	0.053	0.258	0.319
Weight-for-height (-2SD)	0.008	0.003	1,002	1,133	0.926	0.315	0.003	0.014
Weight-for-age (-2SD)	0.069	0.009	1,000	1,130	1.083	0.126	0.052	0.086
Prevalence of anemia (children 6-59 months)	0.333	0.017	910	1,021	1.085	0.052	0.298	0.368
Prevalence of malaria (rapid test)	0.023	0.007	907	1,017	1.270	0.285	0.010	0.036
Prevalence of malaria (microscopy test)	0.005	0.002	910	1,021	1.054	0.503	0.000	0.010
Body mass index (BMI) <18.5	0.050	0.006	1,700	1,866	1.066	0.113	0.039	0.061
Body mass index (BMI) ≥25.0	0.269	0.015	1,700	1,866	1.415	0.057	0.238	0.299
Prevalence of anemia (women 15-49)	0.126	0.010	1,813	1,999	1.325	0.082	0.106	0.147
Had 2+ sexual partners in past 12 months	0.010	0.002	3,625	4,003	1.133	0.190	0.006	0.013
Condom use at last sex	0.376	0.029	317	349	1.065	0.077	0.318	0.434
Abstinence among young people (never had sex)	0.756	0.013	1,227	1,330	1.078	0.018	0.729	0.782
Had an HIV test and received results in past 12 months	0.306	0.010	3,625	4,003	1.273	0.032	0.287	0.326
Discriminatory attitudes towards people with HIV	0.121	0.007	3,615	3,993	1.287	0.058	0.107	0.135
Experienced physical violence since age 15 by anyone	0.342	0.018	679	767	1.003	0.053	0.306	0.379
Experienced sexual violence by anyone ever	0.191	0.017	679	767	1.109	0.088	0.158	0.225
Experienced any physical/sexual violence by most recent husband/partner ever	0.372	0.025	485	479	1.136	0.067	0.322	0.422
Experienced spousal physical/sexual/emotional violence by any husband/partner ever	0.423	0.026	485	479	1.174	0.062	0.370	0.476
Experienced spousal physical/sexual/emotional violence by any husband/partner in the past 12 months	0.261	0.024	485	479	1.221	0.093	0.212	0.309
Total fertility rate (last 3 years)	4.242	0.135	9,837	10,868	1.345	0.032	3.971	4.513
Neonatal mortality (last 0-9 years)	20.893	2.903	3,778	4,274	1.141	0.139	15.087	26.699
Postneonatal mortality (last 0-9 years)	14.241	1.934	3,793	4,288	1.023	0.136	10.373	18.109
Infant mortality (last 0-9 years)	35.134	3.560	3,782	4,279	1.137	0.101	28.013	42.255
Child mortality (last 0-9 years)	21.526	2.708	3,722	4,210	1.067	0.126	16.110	26.942
Under-5 mortality (last 0-9 years)	55.903	4.691	3,804	4,307	1.179	0.084	46.521	65.286
MEN								
Urban residence	0.078	0.012	1,409	1,574	1.657	0.152	0.054	0.102
Literacy	0.844	0.011	1,409	1,574	1.137	0.013	0.822	0.866
No education	0.081	0.009	1,409	1,574	1.194	0.108	0.063	0.098
Secondary education or higher	0.283	0.018	1,409	1,574	1.484	0.063	0.248	0.319
Never married/never in union	0.480	0.015	1,409	1,574	1.145	0.032	0.449	0.510
Currently married/in union	0.497	0.015	1,409	1,574	1.125	0.030	0.467	0.527
Had sexual intercourse before age 18	0.147	0.012	1,033	1,150	1.121	0.084	0.122	0.171
Want no more children	0.538	0.019	697	782	0.989	0.035	0.501	0.576
Want to delay next birth at least 2 years	0.338	0.020	697	782	1.097	0.058	0.298	0.377
Ideal number of children	3.104	0.040	1,407	1,572	1.074	0.013	3.023	3.185
Had 2+ sexual partners in past 12 months	0.062	0.008	1,409	1,574	1.286	0.133	0.046	0.079
Paid for sexual intercourse in past 12 months	0.017	0.004	1,409	1,574	1.061	0.213	0.010	0.025
Abstinence among young people (never had sex)	0.702	0.020	579	642	1.040	0.028	0.662	0.741
Condom use at last sex	0.742	0.042	168	189	1.247	0.057	0.657	0.826
Had an HIV test and received results in past 12 months	0.248	0.014	1,409	1,574	1.188	0.055	0.220	0.275
Discriminatory attitudes towards people with HIV	0.092	0.010	1,406	1,572	1.253	0.105	0.073	0.111

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Rwanda DHS 2019-20

Age	Women		Men		Age	Women		Men	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	818	2.8	811	3.1	37	404	1.4	367	1.4
1	793	2.7	838	3.2	38	428	1.4	301	1.2
2	822	2.8	864	3.3	39	332	1.1	284	1.1
3	828	2.8	824	3.2	40	367	1.2	270	1.0
4	830	2.8	808	3.1	41	316	1.1	258	1.0
5	836	2.8	814	3.1	42	294	1.0	237	0.9
6	712	2.4	768	3.0	43	264	0.9	228	0.9
7	730	2.5	779	3.0	44	245	0.8	150	0.6
8	718	2.4	738	2.9	45	266	0.9	215	0.8
9	666	2.2	673	2.6	46	224	0.8	175	0.7
10	737	2.5	742	2.9	47	208	0.7	181	0.7
11	693	2.3	749	2.9	48	238	0.8	152	0.6
12	803	2.7	793	3.1	49	282	1.0	139	0.5
13	846	2.9	743	2.9	50	100	0.3	134	0.5
14	585	2.0	641	2.5	51	185	0.6	145	0.6
15	818	2.8	704	2.7	52	190	0.6	123	0.5
16	694	2.3	662	2.6	53	171	0.6	119	0.5
17	661	2.2	594	2.3	54	176	0.6	135	0.5
18	494	1.7	533	2.1	55	156	0.5	140	0.5
19	602	2.0	481	1.9	56	147	0.5	135	0.5
20	556	1.9	496	1.9	57	161	0.5	126	0.5
21	464	1.6	339	1.3	58	167	0.6	113	0.4
22	472	1.6	354	1.4	59	136	0.5	120	0.5
23	484	1.6	352	1.4	60	177	0.6	89	0.3
24	457	1.5	339	1.3	61	135	0.5	125	0.5
25	451	1.5	346	1.3	62	159	0.5	115	0.4
26	410	1.4	309	1.2	63	122	0.4	78	0.3
27	387	1.3	282	1.1	64	123	0.4	91	0.4
28	421	1.4	287	1.1	65	104	0.4	98	0.4
29	406	1.4	296	1.1	66	90	0.3	56	0.2
30	461	1.6	358	1.4	67	94	0.3	62	0.2
31	451	1.5	304	1.2	68	82	0.3	69	0.3
32	432	1.5	357	1.4	69	65	0.2	38	0.1
33	375	1.3	349	1.3	70+	774	2.6	468	1.8
34	409	1.4	320	1.2	Don't know	1	0.0	1	0.0
35	481	1.6	341	1.3					
36	436	1.5	339	1.3	Total	29,617.5	100.0	25,862.0	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, Rwanda DHS 2019-20

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	3,662	na	na	na
15-19	3,269	3,259	22.2	99.7
20-24	2,432	2,424	16.5	99.7
25-29	2,076	2,070	14.1	99.7
30-34	2,127	2,123	14.5	99.8
35-39	2,081	2,080	14.2	99.9
40-44	1,485	1,480	10.1	99.6
45-49	1,218	1,214	8.3	99.7
50-54	822	na	na	na
15-49	14,688	14,650	100.0	99.7

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-64, interviewed men age 15-59, and number and percent distribution of eligible men who were interviewed (weighted), by 5-year age groups, Rwanda DHS 2019-20

Age group	Household population of men age 10-64	Interviewed men age 15-59		Percentage of eligible men interviewed
		Number	Percentage	
10-14	1,819	na	na	na
15-19	1,537	1,531	23.5	99.6
20-24	969	963	14.8	99.4
25-29	716	711	10.9	99.3
30-34	839	834	12.8	99.4
35-39	796	792	12.2	99.5
40-44	574	573	8.8	99.8
45-49	450	450	6.9	100.0
50-54	342	342	5.2	100.0
55-59	325	325	5.0	100.0
60-64	231	na	na	na
15-59	6,547	6,520	100.0	99.6

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of men and interviewed men are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Rwanda DHS 2019-20

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Day only		0.32	22,265
Month only		0.02	22,265
Month and year		0.01	22,265
Age at death	Deceased children born in the 15 years preceding the survey	0.00	1,228
Age/date at first union¹	Ever-married women age 15-49	0.00	8,720
	Ever-married men age 15-59	0.00	3,632
Respondent's education	All women age 15-49	0.00	14,634
	All men age 15-59	0.00	6,513
Diarrhea in last 2 weeks	Living children age 0-59 months	0.52	8,020
Anthropometry of children	Living children age 0-59 months (from the Biomarker Questionnaire)		
Height		0.12	4,170
Weight		0.11	4,170
Height or weight		0.12	4,170
Anthropometry of women	Women age 15-49 (from the Biomarker Questionnaire)		
Height		0.33	7,302
Weight		0.34	7,302
Height or weight		0.35	7,302
Anemia in children	Living children age 6-59 months (from the Biomarker Questionnaire)	0.94	3,801
Anemia in women	All women (from the Biomarker Questionnaire)	0.36	7,302

¹ Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), Rwanda DHS 2019-20

Calendar year	Number of births			Percentage with year and month of birth given			Sex ratio at birth ¹			Calendar year ratio ²		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2019-20	1,621	52	1,673	100.0	100.0	100.0	99.9	122.0	100.5	na	na	na
2018	1,653	66	1,719	100.0	100.0	100.0	107.3	107.3	107.3	na	na	na
2017	1,615	57	1,671	100.0	100.0	100.0	108.8	118.0	109.1	99.6	82.5	98.9
2016	1,589	71	1,660	100.0	100.0	100.0	95.9	120.6	96.9	99.1	115.0	99.6
2015	1,594	68	1,661	100.0	100.0	100.0	98.2	117.8	98.9	102.6	92.9	102.2
2014	1,518	74	1,592	100.0	100.0	100.0	108.7	114.1	108.9	101.4	98.8	101.2
2013	1,401	82	1,483	100.0	97.5	99.9	99.0	70.3	97.2	96.3	104.2	96.7
2012	1,393	84	1,477	100.0	100.0	100.0	99.1	162.5	101.9	103.2	103.8	103.2
2011	1,299	79	1,378	100.0	99.1	99.9	105.8	82.5	104.3	100.4	86.2	99.5
2010	1,194	100	1,294	100.0	100.0	100.0	107.3	114.2	107.8	91.6	123.8	93.5
2015-2019	8,070	314	8,384	100.0	100.0	100.0	102.0	116.8	102.5	na	na	na
2010-2014	6,804	420	7,224	100.0	99.3	100.0	103.8	104.7	103.9	na	na	na
2005-2009	6,188	510	6,698	100.0	99.3	99.9	100.2	118.3	101.4	na	na	na
2000-2004	4,287	644	4,931	100.0	99.2	99.8	96.2	129.3	100.0	na	na	na
Before 2000	2,856	855	3,711	99.9	99.1	99.7	99.8	116.4	103.4	na	na	na
All	28,205	2,743	30,949	100.0	99.3	99.9	100.9	117.8	102.3	na	na	na

na = Not applicable

¹ (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively

² [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at age 0-6 days, for 5-year periods preceding the survey (weighted), Rwanda DHS 2019-20

Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	78	99	74	84	335
1	9	16	19	13	58
2	16	8	3	15	42
3	12	9	17	9	47
4	5	6	4	4	18
5	2	3	5	1	11
6	3	1	2	2	8
7	5	10	9	20	44
9	0	1	0	1	2
10	0	1	2	1	4
11	1	0	2	0	3
12	0	3	0	1	4
13	1	0	0	2	3
14	10	7	9	13	39
15	4	0	1	2	8
16	0	0	2	0	2
17	0	2	2	0	4
18	0	0	0	0	0
20	0	1	0	0	1
21	7	1	7	4	20
25	0	0	1	1	2
27	1	0	0	2	3
28	1	0	1	0	2
30	0	3	1	0	4
Total 0-30	155	172	161	175	663
Percentage early neonatal ¹	80	83	77	73	78

¹ 0-6 days / 0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and percentage of infant deaths reported to occur under age 1 month, for 5-year periods preceding the survey (weighted), Rwanda DHS 2019-20

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 ^a	155	172	161	175	663
1	28	18	22	32	101
2	14	16	17	20	67
3	10	15	20	20	65
4	9	7	13	18	47
5	7	2	12	11	31
6	5	6	10	20	41
7	8	7	13	16	43
8	3	3	9	13	28
9	11	12	31	18	72
10	2	4	5	5	16
11	6	3	6	12	28
12	7	10	19	21	57
13	2	2	3	5	12
14	1	3	5	7	17
15	3	6	7	16	31
16	4	3	2	4	13
17	1	3	1	6	11
18	3	6	7	16	32
19	4	2	3	2	11
20	0	4	8	4	16
21	3	2	0	3	7
22	0	2	0	1	3
23	1	3	0	2	7
Total 0-11	257	265	317	361	1,200
Percentage neonatal ¹	60	65	51	49	55

^a Includes deaths under 1 month reported in days

¹ Under 1 month/under 1 year

Table C.7 Standardization exercise results from anthropometry training

Trainees' precision and accuracy for height measurements taken during the standardization exercise for anthropometry, Rwanda DHS 2019-20

Measurer	Standardization exercise ¹	
	Trainees' precision ²	Trainees' accuracy ²
Trainee 1	0.28	0.15
Trainee 2	0.29	0.14
Trainee 3	0.59	0.27
Trainee 4	0.43	0.27
Trainee 5	0.25	0.22
Trainee 6	0.22	0.20
Trainee 7	0.18	0.23
Trainee 8	0.23	0.11
Trainee 9	0.36	0.18
Trainee 10	0.38	0.24
Trainee 11	0.31	0.19
Trainee 12 ³	na	na
Trainee 13 ³	na	na
Trainee 14	0.18	0.45
Trainee 15	0.13	0.44
Trainee 16	0.18	0.45
Trainee 17	0.48	0.36
Trainee 18	0.38	0.36
Trainee 19	0.20	0.16
Trainee 20	0.19	0.19
Trainee 21	0.47	0.34
Trainee 22	0.13	0.31
Trainee 23	0.08	0.35
Trainee 24	0.05	0.21
Trainee 25	0.37	0.27
Trainee 26	0.39	0.26
Trainee 27	0.08	0.52
Trainee 28	0.72	0.21
Trainee 29	1.12	0.46
Trainee 30	0.16	0.25
Trainee 31	0.00	0.70
Trainee 32	0.07	0.69
Trainee 33	0.02	1.19
Trainee 34	0.24	1.19
Trainee 35	0.43	0.61
Trainee 36	0.43	0.61
Trainee 37	0.70	0.34
Trainee 38	0.68	0.40
Trainee 39	0.60	0.39
Trainee 40	1.42	0.50
Trainee 41	0.53	0.51
Trainee 42	0.56	0.45
Trainee 43	0.39	0.42
Trainee 44	0.31	0.48
Trainee 45	0.16	0.41
Trainee 46	0.82	0.34
Trainee 47	0.97	0.36
Trainee 48	0.58	0.28
Trainee 49	0.32	0.43
Trainee 50	0.20	0.49
Trainee 51	0.23	0.31
Trainee 52	0.39	0.31
Trainee 53	0.81	0.21
Trainee 54	0.31	0.46
Trainee 55 ⁴	0.42	-
Trainee 56 ⁴	2.39	-
Trainee 57 ⁴	2.92	-
Trainee 58 ⁴	0.70	-
Trainee 59 ⁴	0.61	-
Trainee 60 ⁴	0.32	-
Average	0.47	0.38

na = not available

¹ 10 children were measured twice for each standardization exercise.

² Trainees' precision and accuracy are defined in terms of a technical error of measurement (TEM), which is calculated as $\sqrt{\sum(D^2)/(2N)}$, where D is the difference in height and N is the number of repeat measurements. An acceptable TEM according to WHO-UNICEF is a TEM of <0.6 cm for precision and <0.8 cm for accuracy.

³ Data missing for two trainees.

⁴ For one of the standardization exercises, the experts TEM for precision was 0.77, and thus their measurements could not serve as reference values. The trainees' TEM for accuracy is not presented for this standardization exercise.

Table C.8 Height and weight data completeness and quality for children

Among children under age 5 (age 0-59 months) who were eligible for anthropometry, percentage with incomplete or missing data for height, weight, or month or year of birth; among children with complete height and age, percentage with implausible data for height-for-age; among children with complete weight and height, percentage with implausible data for weight-for-height; among children with complete weight and age, percentage with implausible data for weight-for-age; and among all children under age 5 who were eligible for anthropometry, percentage with valid data for height-for-age, weight-for-height, or weight-for-age, according to background characteristics (unweighted), Rwanda DHS 2019-20

Background characteristic	Percentage with data incomplete or missing for:				Percentage with implausible data for:						Percentage with valid data for ⁸ :			
	Height ¹	Weight ²	Age in months ³	Number of children	Height-for-age ⁴	Number of children with complete height and age ⁵	Weight-for-height ⁶	Number of children with complete weight and height	Weight-for-age ⁷	Number of children with complete weight and age ⁵	Height-for-age	Weight-for-height	Weight-for-age	Number of children
Age in months														
<6	0.0	0.0	0.0	378	0.8	378	1.1	378	0.8	378	99.2	98.9	99.2	378
6-8	0.5	0.5	0.0	208	0.0	207	0.5	207	0.0	207	99.5	99.0	99.5	208
9-11	0.5	0.5	0.0	212	0.0	211	0.0	211	0.0	211	99.5	99.5	99.5	212
12-17	0.0	0.0	0.0	400	0.5	400	0.3	400	0.3	400	99.5	99.8	99.8	400
18-23	0.2	0.2	0.2	402	0.0	401	0.0	401	0.0	401	99.8	99.8	99.8	402
24-35	0.2	0.2	0.0	844	0.0	842	0.0	842	0.0	842	99.8	99.8	99.8	844
36-47	0.1	0.1	0.1	809	0.0	807	0.0	808	0.0	807	99.8	99.9	99.8	809
48-59	0.1	0.0	0.0	810	0.1	809	0.0	809	0.0	810	99.8	99.9	100.0	810
Sex														
Male	0.2	0.2	0.0	2,047	0.1	2,042	0.1	2,042	0.1	2,043	99.6	99.6	99.7	2,047
Female	0.1	0.1	0.0	2,016	0.1	2,013	0.1	2,014	0.1	2,013	99.7	99.8	99.8	2,016
Mother's interview status														
Interviewed	0.1	0.1	0.0	3,805	0.2	3,800	0.2	3,800	0.1	3,800	99.7	99.7	99.8	3,805
Not interviewed but in household	5.0	5.0	5.0	20	0.0	19	0.0	19	0.0	19	95.0	95.0	95.0	20
Not interviewed and not in the household ⁵	0.4	0.0	0.4	238	0.0	236	0.0	237	0.0	237	99.2	99.6	99.6	238
Province														
City of Kigali	0.0	0.0	0.0	501	0.4	501	0.2	501	0.0	501	99.6	99.8	100.0	501
South	0.1	0.1	0.0	1,022	0.0	1,021	0.1	1,021	0.0	1,021	99.9	99.8	99.9	1,022
West	0.1	0.1	0.0	919	0.2	918	0.1	918	0.0	918	99.7	99.8	99.9	919
North	0.5	0.3	0.2	623	0.0	619	0.0	620	0.0	620	99.4	99.5	99.5	623
East	0.2	0.2	0.1	991	0.2	989	0.3	989	0.4	989	99.6	99.5	99.4	991
Mother's education														
No education	0.0	0.0	0.0	453	0.2	453	0.2	453	0.0	453	99.8	99.8	100.0	453
Primary	0.0	0.0	0.0	2,465	0.1	2,464	0.1	2,464	0.1	2,464	99.8	99.8	99.8	2,465
Secondary	0.0	0.0	0.0	723	0.1	723	0.1	723	0.1	723	99.9	99.9	99.9	723
More than secondary	2.7	2.7	0.0	184	0.6	179	0.6	179	0.0	179	96.7	96.7	97.3	184

Continued...

Table C.8—Continued

Background characteristic	Percentage with data incomplete or missing for:				Percentage with implausible data for:					Percentage with valid data for ⁸ :				
	Height ¹	Weight ²	Age in months ³	Number of children	Height-for-age ⁴	Number of children with complete height and age ⁵	Weight-for-height ⁶	Number of children with complete weight and height	Weight-for-age ⁷	Number of children with complete weight and age ⁵	Height-for-age	Weight-for-height	Weight-for-age	Number of children
Measurer														
Measurer 1	0.0	0.0	0.0	70	1.4	70	0.0	70	0.0	70	98.6	100.0	100.0	70
Measurer 2	1.3	1.3	0.0	151	0.0	149	0.0	149	0.0	149	98.7	98.7	98.7	151
Measurer 3	0.0	0.0	0.0	30	3.3	30	0.0	30	0.0	30	96.7	100.0	100.0	30
Measurer 4	0.0	0.0	0.0	166	0.0	166	0.0	166	0.0	166	100.0	100.0	100.0	166
Measurer 5	0.0	0.0	0.0	4	0.0	4	0.0	4	0.0	4	100.0	100.0	100.0	4
Measurer 6	0.0	0.0	0.0	47	0.0	47	0.0	47	0.0	47	100.0	100.0	100.0	47
Measurer 7	0.0	0.0	0.0	80	0.0	80	0.0	80	0.0	80	100.0	100.0	100.0	80
Measurer 8	0.0	0.0	0.0	156	0.0	156	0.0	156	0.0	156	100.0	100.0	100.0	156
Measurer 9	0.0	0.0	0.0	1	0.0	1	0.0	1	0.0	1	100.0	100.0	100.0	1
Measurer 10	0.0	0.0	0.0	152	0.7	152	1.3	152	1.3	152	99.3	98.7	98.7	152
Measurer 11	0.0	0.0	0.0	129	0.0	129	0.0	129	0.0	129	100.0	100.0	100.0	129
Measurer 12	0.0	0.0	0.0	99	0.0	99	0.0	99	0.0	99	100.0	100.0	100.0	99
Measurer 13	0.0	0.0	0.0	101	0.0	101	0.0	101	0.0	101	100.0	100.0	100.0	101
Measurer 14	0.0	0.0	0.0	128	0.0	128	0.0	128	0.0	128	100.0	100.0	100.0	128
Measurer 15	0.0	0.0	0.0	111	0.9	111	0.9	111	0.0	111	99.1	99.1	100.0	111
Measurer 16	0.0	0.0	0.0	122	0.0	122	0.0	122	0.0	122	100.0	100.0	100.0	122
Measurer 17	0.0	0.0	0.0	140	0.0	140	0.0	140	0.0	140	100.0	100.0	100.0	140
Measurer 18	1.7	1.7	0.0	118	0.0	116	0.0	116	0.0	116	98.3	98.3	98.3	118
Measurer 19	0.0	0.0	0.0	111	0.0	111	0.9	111	0.0	111	100.0	99.1	100.0	111
Measurer 20	0.0	0.0	0.6	166	0.6	165	0.0	166	0.6	165	98.8	100.0	98.8	166
Measurer 21	0.0	0.0	0.0	122	0.0	122	0.0	122	0.0	122	100.0	100.0	100.0	122
Measurer 22	2.6	2.6	1.3	76	0.0	74	0.0	74	0.0	74	97.4	97.4	97.4	76
Measurer 23	0.0	0.0	0.0	200	0.0	200	0.0	200	0.0	200	100.0	100.0	100.0	200
Measurer 24	0.0	0.0	0.0	91	0.0	91	0.0	91	0.0	91	100.0	100.0	100.0	91
Measurer 25	0.0	0.0	0.0	149	0.0	149	0.0	149	0.0	149	100.0	100.0	100.0	149
Measurer 26	0.0	0.0	0.0	13	0.0	13	0.0	13	0.0	13	100.0	100.0	100.0	13
Measurer 27	0.0	0.0	0.0	1	0.0	1	0.0	1	0.0	1	100.0	100.0	100.0	1
Measurer 28	0.0	0.0	0.0	39	0.0	39	0.0	39	0.0	39	100.0	100.0	100.0	39
Measurer 29	0.0	0.0	0.0	150	0.0	150	0.0	150	0.0	150	100.0	100.0	100.0	150
Measurer 30	0.0	0.0	0.0	50	0.0	50	0.0	50	0.0	50	100.0	100.0	100.0	50
Measurer 31	0.0	0.0	0.0	99	0.0	99	0.0	99	0.0	99	100.0	100.0	100.0	99
Measurer 32	0.0	0.0	0.0	109	0.0	109	0.0	109	0.0	109	100.0	100.0	100.0	109
Measurer 33	0.0	0.0	0.0	102	0.0	102	1.0	102	1.0	102	100.0	99.0	99.0	102
Measurer 34	0.0	0.0	0.0	71	0.0	71	0.0	71	0.0	71	100.0	100.0	100.0	71
Measurer 35	0.0	0.0	0.0	36	2.8	36	2.8	36	0.0	36	97.2	97.2	100.0	36
Measurer 36	0.0	0.0	0.0	163	0.0	163	0.0	163	0.0	163	100.0	100.0	100.0	163
Measurer 37	1.0	0.0	0.0	99	0.0	98	0.0	98	0.0	99	99.0	99.0	100.0	99
Measurer 38	0.0	0.0	0.0	116	0.0	116	0.0	116	0.0	116	100.0	100.0	100.0	116
Measurer 39	0.0	0.0	0.0	21	0.0	21	0.0	21	0.0	21	100.0	100.0	100.0	21
Measurer 40	0.0	0.0	0.0	82	0.0	82	0.0	82	0.0	82	100.0	100.0	100.0	82
Measurer 41	0.0	0.0	0.0	92	0.0	92	0.0	92	0.0	92	100.0	100.0	100.0	92
Measurer 42	0.0	0.0	0.0	44	0.0	44	0.0	44	0.0	44	100.0	100.0	100.0	44
Measurer 43	0.0	0.0	0.0	56	0.0	56	0.0	56	0.0	56	100.0	100.0	100.0	56
Total	0.2	0.1	0.0	4,063	0.1	4,055	0.1	4,056	0.1	4,056	99.7	99.7	99.7	4,063

¹ Child's height in centimeters is missing, child was not present, measurement of child was refused, and "other" result codes.

² Child's weight in kilograms is missing, child was not present, measurement of child was refused, and "other" result codes.

³ Incomplete date of birth; a complete date of birth is month/day/year or month/year.

⁴ Implausible cases for height-for-age are defined as more than 6 standard deviations (SD) above or below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete height and month/year of birth data.

⁵ Complete age is calculated from month and year of birth.

⁶ Implausible cases for weight-for-height are defined as more than 5 SD above or below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete weight and height data.

⁷ Implausible cases for weight-for-age are defined as more than 5 SD above or 6 SD below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete weight and month/year of birth data.

⁸ No missing data, incomplete data, or implausible data

⁹ Includes children whose mothers are deceased

Table C.9 Height measurements from random sub-sample of measured children

Differences in first height measurement and second height measurement among children under age 5 (0-59 months) randomly selected and remeasured, according to region and measurer (unweighted), Rwanda DHS 2019-20

Region and measurer	Median difference in height measurements ¹	Percentage of height measurements with a difference >1 cm	Number of children randomly selected and remeasured
Province			
City of Kigali	0.1	6.8	59
South	0.1	3.5	142
West	0.1	2.7	111
North	0.1	3.3	91
East	0.1	4.6	108
Measurer			
Measurer 1	0.2	0.0	11
Measurer 2	0.1	0.0	24
Measurer 3	*	*	4
Measurer 4	0.0	0.0	28
Measurer 6	*	*	4
Measurer 7	*	*	9
Measurer 8	0.0	0.0	28
Measurer 10	0.1	6.3	16
Measurer 11	0.1	0.0	14
Measurer 12	0.1	8.3	12
Measurer 13	0.2	0.0	15
Measurer 14	0.2	7.1	14
Measurer 15	0.1	0.0	19
Measurer 16	0.0	13.3	15
Measurer 17	0.1	8.0	25
Measurer 18	0.0	25.0	12
Measurer 19	0.1	0.0	14
Measurer 20	0.2	9.5	21
Measurer 21	0.2	15.4	13
Measurer 22	*	*	9
Measurer 23	0.1	0.0	18
Measurer 24	*	*	6
Measurer 25	0.1	0.0	21
Measurer 26	*	*	2
Measurer 28	*	*	6
Measurer 29	0.0	0.0	27
Measurer 30	*	*	4
Measurer 31	0.0	8.3	12
Measurer 32	0.1	7.1	14
Measurer 33	0.0	0.0	12
Measurer 34	*	*	6
Measurer 35	*	*	5
Measurer 36	0.1	5.9	17
Measurer 37	0.1	14.3	14
Measurer 38	0.1	10.0	10
Measurer 39	*	*	1
Measurer 40	*	*	8
Measurer 41	0.1	0.0	11
Measurer 42	*	*	2
Measurer 43	*	*	9
Total	0.1	3.9	512

Note: An asterisk indicates that a figure is based on fewer than 10 children.

¹ Median absolute difference between measurers' first and second height measurement in centimeters.

Table C.10 Number of enumeration areas completed by month, according to province, Rwanda DHS 2019-20

Province	Month							Total
	November 2019	December 2019	January 2020	February 2020	March 2020	June 2020	July 2020	
City of Kigali	0	0	0	4	15	26	16	61
South	15	24	26	20	12	19	15	131
West	21	34	36	21	0	0	0	112
North	15	25	25	15	0	0	0	80
East	0	0	0	12	29	40	35	116
Percent	10	17	17	14	11	17	13	100
Total	51	83	87	72	56	85	66	500

Table C.11 Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings, and age at death (AD) and years since death (YSD) of dead siblings (unweighted), Rwanda DHS 2019-20

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
All siblings	38,646	100.0	39,022	100.0	77,668	100.0
Living	32,766	84.8	31,487	80.7	64,253	82.7
Dead	5,823	15.1	7,426	19.0	13,249	17.1
Survival status unknown	57	0.1	109	0.3	166	0.2
Living siblings	32,766	100.0	31,487	100.0	64,253	100.0
Age reported	32,766	100.0	31,487	100.0	64,253	100.0
Dead siblings	5,823	100.0	7,426	100.0	13,249	100.0
AD and YSD reported	5,823	100.0	7,426	100.0	13,249	100.0

Table C.12 Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of siblings at birth, Rwanda DHS 2019-20

Age of respondents	Mean sibship size ¹	Sex ratio of siblings at birth ²
15-19	5.7	101.9
20-24	6.2	101.6
25-29	6.1	96.4
30-34	6.4	100.6
35-39	6.7	100.8
40-44	6.9	98.2
45-49	7.0	106.4
Total	6.3	100.7

¹ Includes the respondent

² Excludes the respondent

Table C.13 Pregnancy-related mortality

Direct estimates of pregnancy-related mortality rates for the 5 years preceding each survey, by 5-year age groups, Rwanda DHS 2019-20

Age	Pregnancy-related mortality rates ^{1,2} 2009-2015
15-19	0.06
20-24	0.08
25-29	0.12
30-34	0.34
35-39	0.44
40-44	0.78
45-49	0.47
Total 15-49	0.27 ^a
Total fertility rate (TFR)	4.2
General fertility rate (GFR) ³	121
Pregnancy-related mortality ratio (PRMR) ⁴	226
Confidence interval	143
	308
Lifetime risk of pregnancy-related death ⁵	0.009

¹ Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy, from any cause including accidents or violence.

² Expressed per 1,000 woman-years of exposure

³ Age-adjusted rate, expressed per 1,000 women age 15-49

⁴ Expressed per 100,000 live births; calculated as the age-adjusted pregnancy-related mortality rate times 100 divided by the age-adjusted general fertility rate

⁵ Calculated as $1 - (1 - \text{PRMR})^{\text{TFR}}$, where TFR represents the total fertility rate for the 5 years preceding the survey

^a Age-adjusted rate

Table C.14 Pregnancy-related mortality

Direct estimates of pregnancy-related mortality rates for the 5 years preceding the survey, by 5-year age groups, Rwanda DHS 2019-20

Age	Percentage of female deaths that are pregnancy-related	Pregnancy-related deaths ¹	Exposure years	Pregnancy-related mortality rate ²
15-19	7.4	1	19,848	0.06
20-24	7.2	2	22,473	0.08
25-29	8.4	3	23,584	0.12
30-34	17.7	8	23,301	0.34
35-39	19.0	8	19,189	0.44
40-44	33.2	9	12,223	0.78
45-49	9.9	3	7,169	0.47
Total 15-49	15.4	35	127,787	0.27

¹ Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy, from any cause including accidents or violence.

² Expressed per 1,000 woman-years of exposure

^a Age-adjusted rate

Table D.1 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to district, Rwanda DHS 2019-20

District	Percentage of children whose births are registered and who:			Number of children
	Had a birth certificate	Did not have birth certificate	Total percentage of children whose births are registered	
Nyarugenge	11.8	65.0	76.7	215
Gasabo	23.6	55.4	78.9	597
Kicukiro	25.1	58.5	83.6	273
Nyanza	7.3	73.4	80.7	209
Gisagara	9.1	73.4	82.5	198
Nyaruguru	6.0	84.6	90.6	207
Huye	5.6	82.0	87.7	202
Nyamagabe	4.8	80.0	84.8	206
Ruhango	35.8	44.1	80.0	215
Muhanga	5.1	84.3	89.4	201
Kamonyi	8.7	73.4	82.1	225
Karongi	41.6	50.1	91.6	248
Rutsiro	11.8	67.7	79.5	263
Rubavu	20.9	66.0	86.9	398
Nyabihu	10.5	70.5	81.0	226
Ngororero	24.8	62.2	87.0	254
Rusizi	11.6	84.3	95.9	284
Nyamasheke	15.0	76.4	91.4	302
Rulindo	34.7	58.2	92.9	189
Gakenke	13.5	80.8	94.3	221
Musanze	14.7	73.2	87.9	317
Burera	10.2	78.8	89.0	251
Gicumbi	5.4	86.4	91.9	261
Rwamagana	13.5	71.8	85.2	252
Nyagatare	28.5	44.5	73.1	421
Gatsibo	1.8	80.6	82.5	363
Kayanza	17.3	71.0	88.3	342
Kirehe	7.9	80.5	88.4	253
Ngoma	40.9	51.0	91.9	248
Bugesera	12.5	74.0	86.4	317
Total	16.6	69.0	85.6	8,157

Table D.2 Household bank account and health insurance

Percentage of households in which at least one member has a bank account and is covered by health insurance, according to district, Rwanda DHS 2019-20

District	Percentage of households with at least one member who has a bank account	Percentage of households with at least one member covered by health insurance	Number of households
Nyarugenge	67.0	83.6	388
Gasabo	67.0	84.9	931
Kicukiro	71.9	87.5	492
Nyanza	51.8	85.6	399
Gisagara	52.4	90.6	347
Nyaruguru	67.6	88.5	313
Huye	45.4	77.4	383
Nyamagabe	40.7	82.0	367
Ruhango	39.3	84.9	384
Muhanga	55.3	91.5	382
Kamonyi	47.6	89.0	429
Karongi	43.3	88.4	375
Rutsiro	46.5	78.1	358
Rubavu	49.9	82.7	508
Nyabihu	49.9	85.2	339
Ngororero	43.6	89.3	395
Rusizi	45.8	82.4	395
Nyamasheke	57.5	90.8	399
Rulindo	66.1	92.6	345
Gakenke	55.3	98.0	386
Musanze	53.7	89.5	460
Burera	35.9	90.0	378
Gicumbi	33.9	90.8	443
Rwamagana	48.3	79.1	453
Nyagatare	36.9	83.5	595
Gatsibo	41.6	87.9	581
Kayonza	39.1	79.5	439
Kirehe	37.5	87.6	422
Ngoma	45.6	83.7	407
Bugesera	49.4	76.7	457
Total	49.9	85.9	12,949

Table D.3 Fertility

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, according to district, Rwanda DHS 2019-20

District	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Nyarugenge	3.7	6.3	4.0
Gasabo	3.9	5.2	4.7
Kicukiro	3.2	4.1	3.5
Nyanza	4.1	6.7	4.6
Gisagara	4.0	9.7	5.0
Nyaruguru	4.9	7.2	5.6
Huye	3.8	3.9	4.4
Nyamagabe	4.2	5.4	5.1
Ruhango	3.9	6.3	4.3
Muhanga	3.6	8.1	4.5
Kamonyi	4.3	7.0	4.4
Karongi	4.2	4.5	5.1
Rutsiro	4.3	4.8	5.5
Rubavu	4.7	9.3	5.9
Nyabihu	4.0	5.8	5.8
Ngororero	4.9	4.9	4.6
Rusizi	4.6	7.2	4.8
Nyamasheke	4.7	5.9	5.3
Rulindo	3.9	5.9	4.3
Gakenke	4.2	4.0	4.8
Musanze	3.5	7.1	5.1
Burera	4.5	4.9	5.6
Gicumbi	4.0	6.9	5.4
Rwamagana	3.4	4.2	4.6
Nyagatare	4.6	6.3	5.8
Gatsibo	4.4	6.4	5.2
Kayonza	4.8	5.0	5.6
Kirehe	3.8	4.7	5.3
Ngoma	3.8	4.1	5.1
Bugesera	4.6	7.7	5.2
Total	4.1	5.9	5.0

Note: Total fertility rates are for the period 1-36 months prior to interview.

Table D.4 Current use of contraception according to background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to district, Rwanda DHS 2019-20

District	Modern method										Traditional method									
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	Emergency contraception	SDM	LAM	Any traditional method	Traditional method			Not currently using	Total	Number of women
															Rhythm	Withdrawal	Other			
Nyarugenge	58.6	55.9	0.7	0.0	10.4	7.2	17.2	14.3	4.6	0.0	0.3	0.5	0.7	2.7	1.1	1.6	0.0	41.4	100.0	215
Gasabo	59.0	51.8	2.1	0.0	8.1	4.6	17.1	13.2	4.8	0.0	0.2	1.7	0.0	7.1	3.1	4.1	0.0	41.0	100.0	531
Kicukiro	65.6	60.4	5.0	0.0	7.2	11.4	9.3	18.2	4.6	0.0	0.0	3.6	1.3	5.2	2.4	0.6	2.2	34.4	100.0	260
Nyanza	61.8	53.4	2.7	0.0	7.7	3.8	10.0	21.0	7.3	0.0	0.0	1.0	0.0	8.5	4.8	3.7	0.0	38.2	100.0	191
Gisagara	59.8	56.5	0.7	0.6	4.1	0.5	18.0	28.4	2.6	0.0	0.0	1.1	0.6	3.3	1.4	1.9	0.0	40.2	100.0	178
Nyaruguru	46.9	44.3	0.6	0.0	3.9	1.0	13.2	23.2	1.6	0.0	0.0	0.6	0.0	2.6	1.5	1.2	0.0	53.1	100.0	167
Huye	61.7	55.4	1.7	0.0	4.3	2.0	16.1	27.7	3.8	0.0	0.0	0.0	0.0	6.2	3.7	2.5	0.0	38.3	100.0	183
Nyamagabe	67.1	64.5	1.5	0.0	6.1	1.3	13.8	37.5	1.9	0.5	0.0	1.8	0.0	2.6	0.7	2.0	0.0	32.9	100.0	197
Ruhango	68.1	55.8	1.3	0.0	10.5	0.5	11.3	26.1	3.6	0.6	0.0	1.8	0.0	12.3	5.2	7.1	0.0	31.9	100.0	195
Muhanga	66.5	58.5	0.9	0.0	11.0	0.0	14.8	22.8	6.4	0.0	0.4	1.8	0.4	8.0	3.2	4.7	0.0	33.5	100.0	221
Kamonyi	64.6	57.5	1.9	0.0	8.4	3.8	10.7	27.1	3.5	0.0	0.0	1.5	0.6	7.0	1.2	4.6	1.3	35.4	100.0	228
Karongi	68.4	62.6	3.6	0.0	5.4	1.5	10.9	35.1	2.2	0.0	0.0	3.9	0.0	5.8	1.8	4.0	0.0	31.6	100.0	216
Rutsiro	63.1	56.2	1.3	0.0	1.6	2.0	16.9	30.5	3.4	0.0	0.0	0.0	0.4	6.9	4.2	2.8	0.0	36.9	100.0	233
Rubavu	52.2	45.6	2.4	0.0	4.1	0.0	15.1	20.1	1.8	0.0	0.3	1.8	0.0	6.6	1.9	4.7	0.0	47.8	100.0	305
Nyabihu	70.3	63.5	0.6	0.0	8.9	0.0	20.0	27.7	4.4	0.0	0.0	1.9	0.0	6.7	2.3	4.5	0.0	29.7	100.0	218
Ngororero	63.7	58.9	1.0	0.4	7.5	1.0	13.3	32.7	3.0	0.0	0.0	0.0	0.0	4.8	2.9	1.9	0.0	36.3	100.0	239
Rusizi	56.9	46.8	8.7	0.0	4.2	3.2	11.4	12.5	4.9	0.0	0.0	1.5	0.5	10.1	5.1	5.0	0.0	43.1	100.0	201
Nyamasheke	59.0	49.8	5.8	0.0	1.6	0.1	12.6	25.9	1.7	0.0	0.0	1.7	0.5	9.2	6.4	2.8	0.0	41.0	100.0	215
Rulindo	71.1	62.8	1.1	0.0	11.0	0.0	24.4	22.7	2.0	0.0	0.0	1.7	0.0	8.2	3.7	3.0	1.6	28.9	100.0	175
Gakenke	74.0	66.5	0.6	0.0	10.1	1.9	19.9	27.8	3.1	0.0	0.0	2.3	0.9	7.5	1.3	6.2	0.0	26.0	100.0	223
Musanze	70.1	66.1	1.3	0.3	3.2	1.3	13.2	38.0	4.2	0.0	0.5	4.2	0.0	4.0	2.4	1.7	0.0	29.9	100.0	320
Burera	67.6	66.2	1.1	0.0	5.3	0.1	11.2	47.3	0.5	0.0	0.5	0.2	0.0	1.5	0.8	0.6	0.0	32.4	100.0	226
Gicumbi	64.7	62.2	0.7	0.0	8.6	0.5	16.5	31.4	3.5	0.0	0.0	0.6	0.4	2.5	0.5	2.0	0.0	35.3	100.0	258
Rwamagana	59.7	56.9	1.1	0.0	6.8	3.6	18.9	24.8	1.0	0.0	0.0	0.5	0.3	2.8	1.1	1.7	0.0	40.3	100.0	246
Nyagatare	71.0	64.5	1.1	1.1	6.7	1.2	20.9	29.1	3.8	0.0	0.0	0.5	0.0	6.5	2.5	4.0	0.0	29.0	100.0	372
Gatsibo	65.3	62.9	0.9	1.1	7.6	2.2	14.3	29.9	4.6	0.0	0.0	2.3	0.0	2.3	2.0	0.3	0.0	34.7	100.0	342
Kayanza	63.8	61.4	2.4	0.3	5.8	0.9	17.2	27.3	6.4	0.0	0.0	1.0	0.0	2.4	1.2	1.2	0.0	36.2	100.0	311
Kirehe	73.2	68.3	0.3	0.0	5.7	1.6	17.7	38.6	4.3	0.0	0.0	0.0	0.0	5.0	2.2	2.3	0.4	26.8	100.0	237
Ngoma	70.6	61.1	5.6	0.0	7.4	0.7	12.1	30.2	2.9	0.0	0.0	2.4	0.0	9.5	5.0	4.6	0.0	29.4	100.0	237
Bugesera	58.7	53.7	0.8	0.3	12.4	2.7	15.2	17.3	4.0	0.0	0.0	1.0	0.0	5.0	3.0	2.0	0.0	41.3	100.0	262
Total	64.1	58.4	2.0	0.2	6.9	2.1	15.3	26.6	3.7	0.0	0.1	1.5	0.2	5.7	2.6	3.0	0.2	35.9	100.0	7,401

Note: If more than one method is used, only the most effective method is considered in this tabulation.

SDM = Standard days method

LAM = Lactational amenorrhea method

Table D.5 Ten-year early childhood mortality rates according to additional characteristics

Neonatal, post-neonatal, infant, child, and under-5 mortality rates for the ten-year period preceding the survey, according to district, Rwanda DHS 2019-20

District	Neonatal mortality (NN)	Post-neonatal mortality (PNN) ¹	Infant mortality ($\pm q_0$)	Child mortality ($\pm q_1$)	Under-5 mortality ($\pm q_0$)
Nyarugenge	20	13	33	(6)	(38)
Gasabo	8	7	15	9	24
Kicukiro	18	16	34	(5)	(39)
Nyanza	(45)	(33)	(78)	(19)	(96)
Gisagara	(34)	(12)	(46)	(26)	(70)
Nyaruguru	(20)	(15)	(34)	(11)	(45)
Huye	(22)	(5)	(27)	(11)	(37)
Nyamagabe	(45)	(13)	(58)	(9)	(67)
Ruhango	(24)	(4)	(28)	(13)	(40)
Muhanga	(33)	(4)	(38)	(13)	(50)
Kamonyi	(5)	(11)	(16)	(22)	(37)
Karongi	(17)	(12)	(30)	(5)	(35)
Rutsiro	9	20	29	9	38
Rubavu	15	21	36	13	48
Nyabihu	17	21	38	(20)	(58)
Ngororero	(32)	(13)	(46)	(13)	(58)
Rusizi	16	9	24	(16)	(40)
Nyamasheke	13	10	23	(7)	(30)
Rulindo	(21)	(9)	(30)	(10)	(39)
Gakenke	(28)	(15)	(42)	(16)	(57)
Musanze	25	21	47	(21)	(67)
Burera	13	(15)	(28)	(12)	(39)
Gicumbi	(34)	(14)	(48)	(26)	(72)
Rwamagana	(9)	(18)	(27)	(14)	(41)
Nyagatare	21	9	30	(23)	(52)
Gatsibo	(27)	(17)	(44)	(22)	(65)
Kayonza	23	19	42	32	73
Kirehe	24	18	42	(18)	(59)
Ngoma	(18)	(10)	(28)	(23)	(50)
Bugesera	20	10	31	14	44

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Computed as the difference between the infant and neonatal mortality rates

Table D.6 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to district, Rwanda DHS 2019-20

District	Height-for-age ¹				Weight-for-height					Weight-for-age				
	Percent-age below -3 SD	Percent-age below -2 SD ²	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD ²	Percent-age above +2 SD	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD ²	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Nyarugenge	6.0	27.9	-1.2	112	0.0	1.6	5.1	0.3	112	3.0	7.6	1.4	-0.5	112
Gasabo	7.5	23.2	-1.2	321	0.6	2.3	6.7	0.4	319	0.7	4.7	1.1	-0.4	321
Kicukiro	2.0	10.7	-0.7	127	0.0	0.6	6.3	0.4	127	0.0	2.6	2.7	-0.1	128
Nyanza	9.8	32.4	-1.6	118	0.0	3.0	2.2	0.2	118	4.3	10.4	0.0	-0.8	118
Gisagara	6.4	31.6	-1.4	95	0.8	4.7	2.8	-0.1	95	3.0	12.6	0.0	-0.9	95
Nyaruguru	12.2	39.1	-1.7	99	0.0	4.6	1.9	0.1	99	2.7	15.0	0.9	-0.9	99
Huye	8.2	29.2	-1.5	105	0.0	0.0	4.4	0.3	105	0.7	9.3	0.0	-0.6	105
Nyamagabe	10.9	33.6	-1.6	98	0.0	2.0	3.9	0.2	98	2.3	11.0	0.0	-0.8	98
Ruhango	13.3	38.5	-1.7	110	0.0	1.2	6.0	0.5	110	0.8	11.1	0.0	-0.6	110
Muhanga	6.6	35.8	-1.7	99	0.0	1.6	2.4	0.3	99	1.8	6.4	0.0	-0.7	100
Kamonyi	5.2	22.5	-1.4	110	0.0	0.9	0.9	0.3	110	0.8	7.6	0.0	-0.6	110
Karongi	10.4	32.4	-1.6	126	0.3	1.7	8.0	0.4	126	0.3	7.7	3.9	-0.6	126
Rutsiro	13.5	44.4	-1.8	142	0.4	0.4	4.3	0.3	142	2.1	12.4	0.0	-0.8	142
Rubavu	15.6	40.2	-1.8	204	0.0	0.0	8.1	0.6	204	1.2	7.4	0.6	-0.6	204
Nyabihu	12.9	46.7	-1.8	115	0.0	0.0	10.8	0.9	115	0.0	4.4	0.6	-0.4	115
Ngororero	16.7	50.5	-2.0	129	1.5	1.7	7.7	0.5	129	3.0	11.0	0.0	-0.8	129
Rusizi	10.6	30.7	-1.4	137	0.0	0.0	2.9	0.3	137	1.3	7.3	0.0	-0.6	137
Nyamasheke	11.7	37.7	-1.6	146	0.0	0.5	1.9	0.4	145	0.5	6.1	0.0	-0.6	145
Rulindo	7.2	29.7	-1.6	98	0.0	0.0	6.5	0.7	98	0.0	4.9	0.0	-0.4	98
Gakenke	10.6	39.3	-1.7	107	0.0	0.9	6.6	0.6	107	0.0	6.1	0.0	-0.6	107
Musanze	14.4	45.4	-1.8	159	0.0	0.0	9.8	0.7	159	3.1	7.9	0.0	-0.5	159
Burera	15.2	41.6	-1.9	129	0.0	0.8	4.8	0.7	130	1.4	10.0	0.0	-0.6	130
Gicumbi	9.4	42.2	-1.8	142	0.0	0.8	9.6	0.7	142	2.8	6.8	0.8	-0.5	143
Rwamagana	6.4	22.3	-1.2	135	0.5	2.0	7.0	0.3	136	0.0	5.0	2.5	-0.4	136
Nyagatare	4.1	30.7	-1.3	222	0.0	0.0	4.5	0.5	222	0.0	2.6	1.4	-0.4	222
Gatsibo	6.2	27.5	-1.4	200	0.0	0.0	5.8	0.3	200	0.6	7.5	0.4	-0.6	200
Kayanza	8.0	28.3	-1.3	163	0.0	1.4	3.4	0.3	166	1.5	8.5	0.0	-0.5	163
Kirehe	5.5	31.3	-1.6	126	0.0	0.3	4.0	0.3	126	0.7	8.7	0.0	-0.7	126
Ngoma	7.6	37.3	-1.5	115	0.9	0.9	9.7	0.5	115	1.7	9.5	1.9	-0.5	115
Bugesera	5.5	26.1	-1.3	170	0.5	1.8	5.5	0.3	170	1.4	8.7	0.0	-0.5	170
Total	9.2	33.1	-1.5	4,158	0.2	1.1	5.6	0.4	4,158	1.3	7.7	0.6	-0.6	4,160

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards.

¹ Recumbent length is measured for children under age 2; standing height is measured for all other children.

² Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median.

Table D.7 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to district, Rwanda DHS 2019-20

District	Median duration (months) of breastfeeding among children born in the past 3 years ¹		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding ²
Nyarugenge	*	(5.5)	(5.8)
Gasabo	(24.1)	(3.9)	(4.7)
Kicukiro	*	(4.3)	(4.6)
Nyanza	*	(5.0)	(5.0)
Gisagara	(33.1)	*	*
Nyaruguru	(32.7)	*	*
Nyamagabe	(31.8)	(5.3)	(5.5)
Muhanga	(29.1)	*	*
Kamonyi	*	(5.3)	(5.3)
Karongi	(26.6)	(5.7)	(5.9)
Rutsiro	(28.7)	(5.9)	(6.2)
Rubavu	(22.5)	(7.0)	(7.1)
Nyabihu	(26.1)	(5.7)	(6.1)
Ngororero	(26.0)	(6.1)	(6.1)
Rusizi	(28.9)	(4.8)	(5.4)
Nyamasheke	*	(6.2)	(6.4)
Gakenke	*	(6.2)	(6.2)
Musanze	(24.6)	a	*
Burera	(25.9)	(6.0)	(6.7)
Gicumbi	*	(5.8)	(5.8)
Nyagatare	(23.3)	*	*
Gatsibo	*	(4.0)	(6.5)
Kayonza	(25.9)	a	(5.7)
Kirehe	*	(5.8)	(5.8)
Ngoma	(25.5)	(6.1)	(6.9)
Bugesera	(22.5)	(5.0)	(6.0)
Total	26.2	5.4	5.9
Mean for all children	26.5	6.1	6.8

Note: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

^a = Omitted because less than 50% of the children in this group were exclusively or predominantly breastfeeding

¹ For last-born children under age 24 months who live with the mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with the mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with the mother and all non-last-born children are not currently breastfeeding.

² Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

Table D.8 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among all children age 6-23 months, percentage given Ongerita intungamubiri (multiple micronutrient powder) in the 7 days preceding the survey; among all children age 6-59 months, percentages who were given vitamin A supplements in the 6 months preceding the survey, who were given iron supplements in the 7 days preceding the survey, and who were given deworming medication in the 6 months preceding the survey; and among all children age 6-59 months who live in households in which salt was tested for iodine, percentage who live in households with iodized salt, according to district, Rwanda DHS 2019-20

District	Among youngest children age 6-23 months living with the mother:			Among all children age 6-23 months:		Among all children age 6-59 months:		
	Percentage who consumed foods rich in vitamin A in last 24 hours ¹	Percentage who consumed foods rich in iron in last 24 hours ²	Number of children	Percentage given Ongerita intungamubiri in past 7 days ⁴	Number of children	Percentage given vitamin A supplements in past 6 months ⁵	Percentage given deworming medication in past 6 months ^{3,6}	Number of children
Nyarugenge	92.4	48.0	63	6.4	66	75.3	70.2	203
Gasabo	86.4	34.0	165	6.5	181	80.5	76.0	566
Kicukiro	90.3	45.4	82	15.6	88	73.6	75.9	260
Nyanza	89.4	19.6	68	13.3	69	87.3	77.4	191
Gisagara	78.7	21.3	55	10.8	55	93.3	88.3	176
Nyaruguru	87.2	23.3	67	21.2	69	90.7	76.2	180
Huye	77.3	17.9	68	21.9	73	81.4	69.3	180
Nyamagabe	80.5	15.2	63	9.6	68	87.9	83.5	178
Ruhango	93.0	35.1	61	23.2	62	91.5	84.8	181
Muhanga	90.1	33.5	69	11.3	69	95.7	88.5	178
Kamonyi	94.9	28.1	61	23.4	67	82.8	85.7	188
Karongi	81.9	15.9	71	15.9	76	85.8	73.6	210
Rutsiro	79.0	16.0	73	24.9	76	89.2	85.0	233
Rubavu	87.5	28.3	109	28.6	111	89.1	87.0	342
Nyabihu	84.1	22.3	70	24.8	70	84.8	82.4	207
Ngororero	78.6	7.0	60	37.6	68	85.6	76.9	219
Rusizi	87.6	30.1	82	14.4	86	85.8	88.1	256
Nyamasheke	73.7	23.0	82	19.5	86	79.8	79.9	261
Rulindo	88.9	13.3	52	22.8	55	97.2	85.6	165
Gakenke	91.7	7.4	64	17.8	66	90.0	83.1	191
Musanze	79.3	17.6	89	17.0	92	92.4	87.1	291
Burera	79.0	3.9	78	13.5	81	88.0	83.7	238
Gicumbi	83.0	5.7	69	13.0	72	88.2	85.1	226
Rwamagana	79.3	20.5	59	16.0	61	85.0	82.6	222
Nyagatare	83.5	17.3	116	19.5	121	85.5	80.9	371
Gatsibo	87.8	35.3	123	1.6	126	96.7	90.5	326
Kayanza	79.3	37.3	116	26.5	118	87.9	77.9	310
Kirehe	81.0	7.7	69	35.0	69	88.2	79.5	209
Ngoma	60.1	15.6	64	30.3	68	88.6	88.4	191
Bugesera	90.2	26.8	93	29.4	99	80.0	77.3	281
Total	84.0	23.6	2,363	18.4	2,469	86.5	81.5	7,229

na = Not applicable

¹ Includes meat, such as beef, pork, lamb, goat, chicken, or duck meat, liver, kidney, heart, or other organ meats, fresh or dried fish or shellfish, eggs pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside, dark green leafy vegetables, ripe mangoes, avocados, papayas, banana, or other fruit with A vitamin

² Includes meat (and organ meat), fish, poultry and eggs

³ Based on mother's recall

⁴ Local name for multiple micronutrient powders

⁵ Based on both mother's recall and the vaccination card (where available).

⁶ Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

Table D.9 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN); and among children under age 5 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to district, Rwanda DHS 2019-20

District	Children under age 5 in all households			Children under age 5 in households with at least one ITN ¹	
	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN ¹ last night	Number of children	Percentage who slept under an ITN ¹ last night	Number of children
Nyarugenge	82.3	80.6	218	82.7	212
Gasabo	86.5	84.3	605	89.6	569
Kicukiro	78.5	74.8	277	83.8	247
Nyanza	70.7	70.0	210	78.6	187
Gisagara	39.3	39.3	201	65.8	120
Nyaruguru	34.3	33.9	208	70.5	100
Huye	54.2	53.7	200	86.8	124
Nyamagabe	40.5	40.5	207	76.4	110
Ruhango	67.2	66.8	217	84.8	171
Muhanga	76.6	74.5	200	82.9	179
Kamonyi	71.1	70.4	227	84.7	189
Karongi	57.9	56.7	253	79.1	181
Rutsiro	37.3	37.3	267	64.6	154
Rubavu	47.5	47.2	397	76.6	245
Nyabihu	31.7	31.3	227	64.5	110
Ngororero	71.8	71.3	259	85.2	217
Rusizi	59.7	59.3	288	77.6	220
Nyamasheke	56.5	55.8	302	72.9	231
Rulindo	71.4	71.4	192	84.1	163
Gakenke	58.6	57.8	224	73.6	176
Musanze	46.7	46.4	318	69.0	214
Burera	40.8	40.8	257	62.2	168
Gicumbi	53.1	53.1	265	77.0	183
Rwamagana	49.9	46.7	255	80.1	149
Nyagatare	52.0	50.3	419	66.8	316
Gatsibo	41.4	41.4	381	80.4	197
Kayanza	41.5	38.9	341	77.3	172
Kirehe	61.6	61.6	254	75.1	208
Ngoma	66.9	66.8	249	75.5	220
Bugesera	39.6	38.3	320	71.5	171
Total	56.6	55.6	8,238	77.7	5,903

Note: Table is based on children who stayed in the household the night before the interview.

¹ An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2014-15 RDHS, this was known as a long-lasting insecticidal net (LLIN).

Table D.10 Nutritional status of women

Among women age 15-49, percentage with height under 145 cm, mean Body Mass Index (BMI), and percentage with specific BMI levels, according to district, Rwanda DHS 2019-20

District	Height		Body Mass Index ¹								Number of women
	Percentage below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderately and severely thin)	≥25.0 (Total overweight or obese)	25.0-29.9 (Overweight)	≥30.0 (Obese)	
Nyarugenge	2.4	216	24.6	56.1	5.8	4.9	1.0	38.1	22.5	15.5	199
Gasabo	1.7	533	25.1	55.5	3.2	2.2	1.1	41.2	26.1	15.1	493
Kicukiro	1.5	302	25.6	48.2	3.6	2.2	1.4	48.2	32.8	15.3	286
Nyanza	3.2	205	22.1	72.0	11.4	9.1	2.3	16.5	14.4	2.1	188
Gisagara	4.5	189	21.7	72.6	11.9	7.4	4.5	15.4	14.8	0.6	167
Nyaruguru	2.9	148	21.7	77.3	10.5	5.3	5.2	12.1	11.0	1.1	132
Huye	0.9	171	22.8	72.1	8.2	6.3	1.9	19.7	14.5	5.2	161
Nyamagabe	4.1	192	22.3	70.2	10.3	8.1	2.3	19.5	17.0	2.5	178
Ruhango	2.9	190	22.3	69.4	11.2	7.0	4.2	19.4	17.2	2.2	173
Muhanga	3.8	200	23.1	68.8	4.2	3.7	0.6	27.0	22.7	4.3	186
Kamonyi	2.2	225	23.2	68.1	7.1	6.3	0.8	24.8	17.4	7.4	214
Karongi	1.5	198	22.6	75.5	5.5	4.8	0.7	19.1	17.0	2.1	177
Rutsiro	5.6	217	22.4	74.7	8.3	6.4	1.9	17.0	14.1	2.9	206
Rubavu	1.7	322	23.9	63.3	4.4	3.0	1.5	32.3	24.8	7.5	289
Nyabihu	2.0	209	24.1	64.7	2.4	2.4	0.0	32.9	26.1	6.8	191
Ngororero	3.2	215	22.6	81.4	5.6	5.1	0.5	13.0	9.7	3.3	199
Rusizi	6.5	208	22.6	70.0	10.9	9.3	1.5	19.2	15.3	3.9	188
Nyamasheke	4.2	235	22.3	75.6	7.5	7.0	0.4	17.0	14.4	2.6	214
Rulindo	3.2	177	23.2	66.5	8.2	5.3	2.8	25.3	18.1	7.2	164
Gakenke	3.7	203	22.5	77.1	3.8	3.8	0.0	19.1	18.4	0.7	188
Musanze	1.6	274	23.5	68.8	3.0	2.1	0.9	28.2	23.1	5.0	248
Burera	4.2	212	23.2	71.7	4.0	2.6	1.4	24.3	19.2	5.1	199
Gicumbi	3.4	224	23.1	69.6	5.2	3.5	1.7	25.3	25.0	0.3	206
Rwamagana	4.8	235	23.2	72.2	4.3	2.7	1.5	23.5	20.1	3.4	223
Nyagatare	1.1	332	23.5	70.7	3.2	1.2	2.0	26.1	21.5	4.6	307
Gatsibo	3.7	329	24.0	63.3	3.0	2.5	0.4	33.7	24.8	8.9	305
Kayanza	2.4	272	23.5	63.8	6.0	4.3	1.7	30.2	23.6	6.6	254
Kirehe	5.3	227	23.0	67.2	7.1	6.2	0.9	25.8	22.7	3.0	218
Ngoma	2.1	319	22.7	72.9	6.3	4.9	1.4	20.8	18.7	2.1	299
Bugesera	4.4	283	23.3	66.8	6.0	4.4	1.6	27.1	21.5	5.6	261
Total	3.0	7,266	23.3	67.8	5.9	4.5	1.5	26.3	20.5	5.8	6,710

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

¹ Excludes pregnant women and women with a birth in the preceding 2 months

PERSONS INVOLVED IN THE 2019-20 RWANDA DEMOGRAPHIC AND HEALTH SURVEY

Appendix **E**

TECHNICAL AND ADMINISTRATIVE STAFF

National Survey Directors

MURANGWA Yusuf

MURENZI Ivan

Assistant Technical Directors

MUKANYONGA Apolline

ABALIKUMWE Francois

National Technical Directors

NDAKIZE RUGAMBWA Michel

BYIRINGIRO James

Provincial/District Coordinators

KANYONGA INGABIRE Evelyn

NGOMITUJE Xavier

NKURUNZIZA Venust

HARELIMANA Massoud

NDAYISHIMIYE Jean Bosco

IMANISHIMWE Valentine

KANOBANA M. Dominique

PROJECT IMPLEMENTING COMMITTEES

Steering Committee

Chairperson

NGAMIJE Daniel

GASHUMBA Diane

Vice-chairperson

GODWIN Lisa

Secretary

MURANGWA Yusuf

Members

BRYAN SCHREINER Mark

UWALIRAYE Parfait

CONDO Jeannine

NSANZIMANA Sabin

ASIIMWE Anita

SAYINZOGA Felix

MBITUYUMUREMYI Aimable

TUYISHIME Albert

MIGAMBI Patrick

NDAKIZE RUGAMBWA Michel

MUKANYONGA Apolline

ABALIKUMWE Francois

Technical Advisory Committee

MUHIRE Andrew

BIKORIMANA Ferdinand

SERUMONDO Janvier

NDAHINDWA Vedaste

BORG Jan

MUBILIGI Joel

BANAMWANA Robert

KAYIGI Etienne

NYANDWI Alpio

MUKANEZA Alice

UWIMANA Aline

BIOMARKER COORDINATORS

MUNYANEZA Tharcisse
BUTERA Jean de Dieu
BYAMUNGU Blaise
MWIKARAGO Ivan
RUCOGOZA Anicet
KABANDA Alice
RUTAYISIRE Robert

BIOMARKERS: SAMPLE FIELD PROCESSING

BIRORI Espoir
CYIZA Jean d'Amour Jolly
KWITONDA A. Bonheur
MAPENZI Carine
MBABAZI Olivier
MIZERO Clement
MUGENZI Innocent
MUHIRE Bernard
MUHOZA Ange

MUKAGASANA Solange
MUKESHIMANA Esperance
NIYOMUKESHA Angelique
NKIRIHO David
NTIRENGANYA Martin
NYIRISHARA Emmanuel
RUBERANZIZA Leonce
UMUHIRE Adelaide

BIOMARKER: SAMPLE TRANSPORTATION AND COLD CHAIN

MUSABE Pierre Celestin
NDAMIRA Noe
NDATIMANA Fidele
NKUNDABERUYE Simon Pierre
UZABAKIRIHO Viateur

BIOMARKER: SAMPLE COLLECTION

BONTE Joy Honore
DUSABIMANA Ally
DUSINGIZIMANA J. Pierre
GIKUNDIRO Thierry
HABIYAREMYE Martin
HAGENIMANA Fabien
HAKIZIMANA Egide
ISHIMWE Glorioso
ISHIMWE Jean Claude
KABEGA Rosine
KAYUGI Barthazar
KOMEZUSENGE J. Damasene
MUHOZI Valens
MUSABYIMANA Amie de Dieu
MUZIRANGE Immaculee
NIRERE Diane
NISHIMWE Josee
NIYITEGEKA Beatrice
NIYOYITA Jean de Dieu
NKUNDABANYANGA Marc
NTAHOBARI Francois

NTIRENGANYA Jean Claude
NYAMBARIZA Angelo
NYIRABANANIYE Christine
RUKERAMIHIGO Christophe
RUNYAMBO Docteur
RURAMIRA Angelo
SANGWA Nsibika Honore
SEREMANI Jacques
SINDAYIHEBA Reuben
UJENEZA Nicole
UMULISA Aime Iriza
UMUTONIWASE Claudine
UWIDUHAYE Tressy Vestine

BIOMARKER: MICROSCOPISTS

NYAMBARIZA Angelo
GAKUNDE Vedaste
BIRORI Espoir
IMANIZABAYO Theogene
MBABAZI Olivier
ISHIMWE Glorioso

FIELDWORK TEAM LEADERS

BIZIMANA Jean
BIZIMANA Robert
HABIMANA Epimaque
HABUMUREMYI Serge
KABANDAHO Egide
KABATSI Dative
MANZI Camille
MUHIMPUNDU Clotilde
MUKAGATERA Jose

MUKAMWIZA Illumine
MUKANDEKEZI Dorothee
MUKASEKURU Francoise
MUKESHIMANA Quesie
NSENIGYUMVA N. Judith
NZABAKINGA P. Claver
UWAYO Jules
UWERA Marie Clarisse

FIELDWORK INTERVIEWERS

AKIMANA Jeanine
AKIZANYE Nicole
BUCYEDUSENGE M. Claire
BUZIZI Kabahire Diane
DUSABEYEZU Domina
GAHAMANYI Genevieve
GATARAYIHA Aloys
HAKORIMANA Eric
HAKORIMANA Secondine
IRAKOZE Natacha
ISHIMWE Clement
ISINGIZWE Grace
KWIZERA Alice
KARANGWA M. Antoinette
MANIRAHU Emmanuel
MICOMYIZA Dominique
MUHIMPUNDU M. Chantal
MUJEJIMANA Jacqueline
MUKAMANA Venantie
MUKAMUTESI M. Madeline
MUKANDORI Clementine
MUKAYUBUSA Emerence
MUKESHIMANA Laurence
MUNGANYINKA Zaytun
MURAMIRA Luc Michel
MUREKATETE K. Cansilde
MUREKATETE Immaculee
MUSORE Jean de Dieu
MVUNABO Jean Baptiste

NAMUKASA Hasha
NAMUTIMA Jolie
NDUWAYO Clemence
NIRERE Ange Rosine
NIYITEGEKA M. Grace
NIYONGABO Emile
NKURIYEKUBONA Assinapol
NSENIGYUMVA Laura
NSENIGYUMVA Vincent
NTAKIRUTIMANA M. Josee
NTEZIRIZAZA Theogene
NYIRABAHUTU Immaculee
NYIRAMANA Monique
NYIRAMUHOZA Immaculee
NYIRANDUHURA Esperance
NZABAHIMANA J. Chriso
RIBERA Alexis
SEBAHUNGU P. Celestin
SIBOMANA Joseph
TUYISENGE Amedee
TUYUBAHE Sandrine
UMUHOZA Alice
UMUHOZA Olive
UMULISA Edith
UMURERWA Claudine
UMURERWA Nadine
UMUTESI Marie Chantal
UWABYAYE Odette
UWAMAHORO Jacqueline

UWAMAHORO Laetitia
UWAMAHORO Vestine
UWAMBAYIKIREZI Sabine
UWAMBAYINEMA Dancille
UWANKWERA Henriette
UWASE Claudine

UWASE Liliane
UWERA Esperance
UWIMANA Claire
UWIMANA Vestine
UWIMBABAZI Vanessa

LISTING AND MAPPING SUPERVISORS

BIGIRIMANA Florent
MBANGUTSE Olivier
KARERA Albert
BIZIMUNGU Clement
MUNDERERE Theophile

FIELDWORK LISTING AND MAPPING STAFF

MUKAMANA Epiphanie
KABANDAHU Egide
NDAGIJIMANA Gerard
GASHAGAZA Liliane
TWAGIRAYESU Jean Paul
MUSHINZIMANA Emmanuel
MURAMIRA Luc Michel
MUKARWEGO Alice
KANYARWANDA Emmanuel
NYIRAMUHOZA Immaculee
NZABIHIMANA J. Chryso
GAHUNGA Nadia
MANZI Camille
MUGABO N. Robert
GAKWAYA Richard
MUKAMWIZA Elluminee
BIZIMANA Jean

NYIRANSABIMANA Esperance
KABERA Jean Claude
UWAMAHORO Vestine
NIYIRORA Daniel
UWINGABIRE Liliane
TURABAYO Philbert
KAMIKAZI Christelle
HABUMUREMYI Serge
MUZIRANENGE Alice
RURANGWA Jean Pierre
UMUTONIWASE Jaqueline
HABIYAREMYE Evaliste
NIYIGENA Solange
SIBORUREMA Mathias
MUKABASEBYA Claudette
NZABAKINGA Pierre Claver
KWIZERA Etienne

DATA PROCESSING TEAM

MUKASA Jimmy
HARELIMANA Massoud
NDAYISHIMIYE J. Bosco
KABANDANA Pierre Claver

ADMINISTRATIVE AND FINANCE TEAM

NKUSI David
MUNYEMANA Silas
SEMANYWA Faustin
SHUMBUSHO Alphonse
GASANA Patrick
MUREBWAYIRE Theodette
UWIMANA Alice

ICF STAFF

HONG Rathavuth
MONTANA Livia
REN Ruilin
ORTIZ Lady
LEE Sung
GARRETT Dean
AKA Peter
NAMASTE Sorrel

GRAMER Chris
ZWEIMUELLER Sally
EDMONDSON Greg
NYBRO Erica
JONES Toni
BRITTON Elizabeth
MCFARLAND Annette

RWANDA DEMOGRAPHIC AND HEALTH SURVEY

HOUSEHOLD QUESTIONNAIRE

MINECOFIN

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

MINISTRY OF HEALTH

IDENTIFICATION (1)

PROVINCE _____ DISTRICT _____ SECTOR _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER

STRUCTURE NUMBER

HOUSEHOLD NUMBER

HOUSEHOLD SELECTED FOR MAN'S SURVEY AND RDHS BIOMAKER ? (1=YES, 2=NO)

HOUSEHOLD SELECTED FOR WOMEN'S DV? (1=YES, 2=NO)

HOUSEHOLD SELECTED FOR MEN'S DV? (1=YES, 2=NO)

HOUSEHOLD SELECTED FOR MICRONUTRIENT BIOMAKER (1=YES, 2=NO)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT																
DATE	_____	_____	_____	DAY <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTH <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> INT. NO. <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> RESULT*																
INTERVIEWER'S NAME	_____	_____	_____																	
RESULT*	_____	_____	_____																	
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <table border="1"><tr><td></td></tr></table>																
TIME	_____	_____																		
*RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 4 POSTPONED 5 REFUSED 6 DWELLING VACANT OR ADDRESS NOT A DWELLING 7 DWELLING DESTROYED 8 DWELLING NOT FOUND 9 OTHER _____ (SPECIFY)				TOTAL PERSONS IN HOUSEHOLD <table border="1"><tr><td></td><td></td></tr></table> TOTAL ELIGIBLE WOMEN <table border="1"><tr><td></td><td></td></tr></table> TOTAL ELIGIBLE MEN <table border="1"><tr><td></td><td></td></tr></table> LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE <table border="1"><tr><td></td><td></td></tr></table>																

LANGUAGE OF QUESTIONNAIRE**

0 1

LANGUAGE OF INTERVIEW**

NATIVE LANGUAGE OF RESPONDENT**

TRANSLATOR USED (YES = 1, NO = 2)

LANGUAGE OF QUESTIONNAIRE**

ENGLISH

**LANGUAGE CODES:

01 ENGLISH

02 KINYARWANDA

SUPERVISOR

NAME				
	NUMBER			

FIELD EDITOR

NAME				
	NUMBER			

OFFICE EDITOR

NUMBER		

KEYED BY

NUMBER		

INTRODUCTION AND CONSENT

(2)

Hello. My name is _____. I am working with National Institute of Statistics of Rwanda. We are conducting a survey about health and other topics all over Rwanda. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES
TO BE INTERVIEWED .. 1

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED .. 2 → END



100	RECORD THE TIME.	HOURS	<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				
		MINUTES	<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				

HOUSEHOLD SCHEDULE

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	IF AGE 15 OR OLDER	ELIGIBILITY		
							MARITAL STATUS			
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER ASKING QUESTIONS 2 TO 7 ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED 2 = LIVING TOGETHER 3 = DIVORCED 4 = SEPARATED 5 = WIDOWED 6 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	IF HOUSEHOLD SELECTED FOR MAN'S SURVEY CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS 		01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

2A) Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed?	YES ☐	→ ADD TO TABLE	NO ☐
2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?	YES ☐	→ ADD TO TABLE	NO ☐
2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?	YES ☐	→ ADD TO TABLE	NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD OF HH	08 = BROTHER OR SISTER
02 = SPOUSE	09 = OTHER RELATIVE
03 = SON OR DAUGHTER	10 = ADOPTED/ FOSTER/ STEPCHILD
04 = SON-IN-LAW OR DAUGHTER-IN-LAW	11 = BROTHER/ SISTER IN LAW
05 = GRANDCHILD	12 = NOT RELATED
06 = PARENT	13 = WAGED DOMESTIC WORKER
07 = PARENT-IN-LAW	98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	IF AGE 0-17 YEARS				IF AGE 3 YEARS OR OLDER		IF AGE 3-24 YEARS		IF AGE 0-4 YEARS			IF AGE 7+ YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION	INSURANCE		
	12	13	14	15	16	17	18	19	20	21	22	23
	Is (NAME)'s biological mother alive?	Does (NAME)'s biological mother usually live in this household or was she a guest last night? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s biological natural father alive?	Does (NAME)'s biological father usually live in this household or was he a guest last night? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed in that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the 2019/2020 school year? (3)	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate from civil authority? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Is (NAME) covered by any health insurance?	What is (NAME) main type of health insurance?	Does (NAME) currently smoke? 1=YES 2=NO 8=DK
01	Y N DK 1 2 8 ↓ GO TO 14	 	Y N DK 1 2 8 ↓ GO TO 16	 	Y N 1 2 ↓ GO TO 20 OR 21	LEVEL GRADE 	Y N 1 2 ↓ GO TO 20 OR 21	LEVEL GRADE 		Y N DK 1 2 8 ↓ GO TO 23		
02	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
03	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
04	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
05	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
06	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
07	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
08	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
09	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
10	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 	1 2 ↓ GO TO 20 OR 21	 	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL

1= PRE-PRIMARY
2 = PRIMARY
3 = POST-PRIMARY/VOCATIONAL
4= SECONDARY
5= UNIVERSITY/ HIGHER EDUCATION
8 = DON'T KNOW

GRADE

00 = LESS THAN 1 YEAR COMPLETED
(USE '00' FOR Q. 17 ONLY.
THIS CODE IS NOT ALLOWED FOR Q. 19.)
98 = DON'T KNOW

CODE FOR Q.22

1=MUTUELLE/
COMMUNITY HEALTH
INSURANCE
2=RAMA/RSSB , 3=MMI
4=PRIVATE INSURANCE COMPANY
5= EMPLOYER
6=OTHER
8=DON'T KNOW

HOUSEHOLD SCHEDULE

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	IF AGE 15 OR OLDER	ELIGIBILITY		
							MARITAL STATUS			
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER ASKING QUESTIONS 2 TO 7 ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED 2 = LIVING TOGETHER 3 = DIVORCED 4 = SEPARATED 5 = WIDOWED 6 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49 CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	IF HOUSEHOLD SELECTED FOR MAN'S SURVEY	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS 		11	11	11
12			1 2	1 2	1 2			12	12	12
13			1 2	1 2	1 2			13	13	13
14			1 2	1 2	1 2			14	14	14
15			1 2	1 2	1 2			15	15	15
16			1 2	1 2	1 2			16	16	16
17			1 2	1 2	1 2			17	17	17
18			1 2	1 2	1 2			18	18	18
19			1 2	1 2	1 2			19	19	19
20			1 2	1 2	1 2			20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD	08 = BROTHER OR SISTER
02 = SPOUSE	09 = OTHER RELATIVE
03 = SON OR DAUGHTER	10 = ADOPTED/ FOSTER/ STEPCHILD
04 = SON-IN-LAW OR DAUGHTER-IN-LAW	11 = BROTHER/ SISTER IN LAW
05 = GRANDCHILD	12 = NOT RELATED
06 = PARENT	13 = WAGED DOMESTIC WORKER
07 = PARENT-IN-LAW	98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	IF AGE 0-17 YEARS				IF AGE 3 YEARS OR OLDER		IF AGE 3-24 YEARS		IF AGE 0-4 YEARS			IF AGE 7+ YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION	INSURANCE		
	12	13	14	15	16	17	18	19	20	21	22	23
	Is (NAME)'s biological mother alive?	Does (NAME)'s biological mother usually live in this household or was she a guest last night? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s biological natural father alive?	Does (NAME)'s biological father usually live in this household or was he a guest last night? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed in that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the 2019/2020 school year? (3)	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate from civil authority? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Is (NAME) covered by any health insurance?	What is (NAME) main type of health insurance?	Does (NAME) currently smoke? 1=YES 2=NO 8=DK
11	Y N DK 1 2 8 ↓ GO TO 14	 	Y N DK 1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	Y N 1 2 ↓ GO TO 20 OR 21	LEVEL GRADE GO TO 20 OR 21	Y N 1 2 ↓ GO TO 20 OR 21	LEVEL GRADE 		Y N DK 1 2 8 ↓ GO TO 23		
12	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
13	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
14	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
15	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
16	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
17	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
18	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
19	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		
20	1 2 8 ↓ GO TO 14	 	1 2 8 ↓ GO TO 16	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 GO TO 20 OR 21	1 2 ↓ GO TO 20 OR 21	 		1 2 8 ↓ GO TO 23		

CODES FOR Qs. 17 AND 19: EDUCATION

1= PRE-PRIMARY
2 = PRIMARY
3 = POST-PRIMARY/VOCATIONAL
4= SECONDARY
5= UNIVERSITY

8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED
(USE '00' FOR Q. 17 ONLY.
THIS CODE IS NOT ALLOWED
FOR Q. 19.)
98 = DON'T KNOW

CODE FOR Q.22

1=MUTELLE/
COMMUNITY HEALTH
INSURANCE
2=RAMA/RSSB, 3=MMI
4=PRIVATE INSURANCE COMPANY
5= EMPLOYER
6=OTHER
8=DON'T KNOW

HOUSEHOLD SCHEDULE

IF AGE 5 OR OLDER						
LINE NO.	DISABILITY					
	26	27	28	29	30	31
	Does (NAME) wear glasses or contact lenses to help them see?	Does (NAME) has difficulty seeing even when wearing glasses or contact lenses? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot see at all? 1 = NO DIFFICULTY SEEING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT SEE AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty seeing? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot see at all? 1 = NO DIFFICULTY SEEING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT SEE AT ALL 8 = DON'T KNOW	Does (NAME) wear a hearing aid? (1)	Does (NAME) has difficulty hearing even when using a hearing aid? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot hear at all? (1) 1 = NO DIFFICULTY HEARING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT HEAR AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty hearing? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot hear at all? 1 = NO DIFFICULTY HEARING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT HEAR AT ALL 8 = DON'T KNOW
1	Y N 1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	Y N 1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
2	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
3	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
4	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
5	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
6	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
7	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
8	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
9	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
10	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8

HOUSEHOLD SCHEDULE

	IF AGE 5 OR OLDER			
LINE NO.	DISABILITY			
	32	33	34	35
	Does (NAME) has difficulty communicating when using his/her usual language? Would you say that (NAME) has some difficulty understanding or being understood, some difficulty, a lot of difficulty, or cannot communicate at all? 1 = NO DIFFICULTY COMMUNICATING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT COMMUNICATE AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty remembering or concentrating? Would you say that (NAME) has some difficulty remembering or concentrating, a lot of difficulty, or cannot remember or concentrate at all? 1 = NO DIFFICULTY REMEMBERING/ CONCENTRATING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT REMEMBER/ CONCENTRATE AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty walking or climbing steps? Would you say that (NAME) has walking or climbing steps, a lot of difficulty, or cannot walk or climb steps at all? 1 = NO DIFFICULTY WALKING OR CLIMBING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT WALK OR CLIMB AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty washing all over or dressing? Would you say that (NAME) has some difficulty washing all over or dressing, a lot of difficulty, or cannot wash all over or dress at all? 1 = NO DIFFICULTY WASHING OR DRESSING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT WASH OR DRESS AT ALL 8 = DON'T KNOW
1	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
2	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
3	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
4	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
5	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
6	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
7	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
9	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
10	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8

HOUSEHOLD SCHEDULE

IF AGE 5 OR OLDER						
LINE NO.	DISABILITY					
	26	27	28	29	30	31
	Does (NAME) wear glasses or contact lenses to help them see?	Does (NAME) has difficulty seeing even when wearing glasses or contact lenses? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot see at all? 1 = NO DIFFICULTY SEEING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT SEE AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty seeing? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot see at all? 1 = NO DIFFICULTY SEEING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT SEE AT ALL 8 = DON'T KNOW	Does (NAME) wear a hearing aid? (1)	Does (NAME) has difficulty hearing even when using a hearing aid? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot hear at all? (1) 1 = NO DIFFICULTY HEARING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT HEAR AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty hearing? Would you say that (NAME) has some difficulty, a lot of difficulty, or cannot hear at all? 1 = NO DIFFICULTY HEARING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT HEAR AT ALL 8 = DON'T KNOW
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12	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
13	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
14	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
15	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
16	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
17	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
18	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
19	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8
20	1 2 ↓ GO TO 28	1 2 3 4 8 (GO TO 29)	1 2 3 4 8	1 2 ↓ GO TO 31	1 2 3 4 8 (GO TO 32)	1 2 3 4 8

HOUSEHOLD SCHEDULE

	IF AGE 5 OR OLDER			
LINE NO.	DISABILITY			
	32	33	34	35
	Does (NAME) has difficulty communicating when using his/her usual language? Would you say that (NAME) has some difficulty understanding or being understood, some difficulty, a lot of difficulty, or cannot communicate at all? 1 = NO DIFFICULTY COMMUNICATING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT COMMUNICATE AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty remembering or concentrating? Would you say that (NAME) has some difficulty remembering or concentrating, a lot of difficulty, or cannot remember or concentrate at all? 1 = NO DIFFICULTY REMEMBERING/ CONCENTRATING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT REMEMBER/ CONCENTRATE AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty walking or climbing steps? Would you say that (NAME) has walking or climbing steps, a lot of difficulty, or cannot walk or climb steps at all? 1 = NO DIFFICULTY WALKING OR CLIMBING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT WALK OR CLIMB AT ALL 8 = DON'T KNOW	Does (NAME) has difficulty washing all over or dressing? Would you say that (NAME) has some difficulty washing all over or dressing, a lot of difficulty, or cannot wash all over or dress at all? 1 = NO DIFFICULTY WASHING OR DRESSING 2 = SOME DIFFICULTY 3 = A LOT OF DIFFICULTY 4 = CANNOT WASH OR DRESS AT ALL 8 = DON'T KNOW
11	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
12	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
13	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
14	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
15	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
16	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
17	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
18	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
19	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8
20	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8	1 2 3 4 8

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING 11 PIPED TO YARD/PLOT 12 PIPED TO NEIGHBOR 13 PUBLIC TAP/STAND PIPE 14 TUBE WELL OR BOREHOLE 21 DUG WELL PROTECTED WELL..... 31 UNPROTECTED WELL 32 WATER FROM SPRING PROTECTED SPRING 41 UNPROTECTED SPRING 42 RAINWATER 51 TANKER TRUCK 61 CART WITH SMALL TANK 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) 81 BOTTLED WATER 91 OTHER _____ 96 (SPECIFY)	→ 107 → 103 → 103
102	What is the main source of water used by your household for other purposes such as cooking and handwashing?	PIPED WATER PIPED INTO DWELLING 11 PIPED TO YARD/PLOT 12 PIPED TO NEIGHBOR 13 PUBLIC TAP/STANDPIPE 14 TUBE WELL OR BOREHOLE 21 DUG WELL PROTECTED WELL..... 31 UNPROTECTED WELL 32 WATER FROM SPRING PROTECTED SPRING 41 UNPROTECTED SPRING 42 RAINWATER 51 TANKER TRUCK 61 CART WITH SMALL TANK 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) 81 BOTTLED WATER 91 OTHER _____ 96 (SPECIFY)	→ 107
103	Where is that water source located?	IN OWN DWELLING 1 IN OWN YARD/PLOT 2 ELSEWHERE 3	→ 107
104	How long does it take you to go there, get water, and come back?	MINUTES..... DON'T KNOW 998	
104A	What is the distance from your home to that water source?	LESS THAN 200 M 1 200 M - 500 M 2 MORE THAN 500 M 3 DON'T KNOW 8	
107	Do you do anything to the water to make it safer to drink?	YES 1 NO 2 DON'T KNOW 8	→ 109

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL A ADD CHLORINE B STRAIN THROUGH A CLOTH C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) D SOLAR DISINFECTION E LET IT STAND AND SETTLE F OTHER X (SPECIFY) DON'T KNOW Z	
108A	Is the water this household uses for drinking stored?	YES 1 NO 2 DON'T KNOW 8	☐ → 109
108B	ASK TO SEE THE CONTAINER(S) IN WHICH WATER IS STORED. RECORD OBSERVATION.	JERRY CAN 1 POT 2 BOTTLE 3 COOKING POT 4 OTHER 6 SPECIFY NOT AVAILABLE TO BE OBSERVED 8	
108C	How many times per week does your household wash these containers?	NO. OF TIMES PER WEEK IF LESS THAN 7 7 OR MORE TIMES PER WEEK 7 DON'T KNOW 8	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM 11 FLUSH TO SEPTIC TANK 12 FLUSH TO PIT LATRINE 13 FLUSH TO SOMEWHERE ELSE 14 FLUSH, DON'T KNOW WHERE 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE 21 PIT LATRINE WITH SLAB 22 PIT LATRINE WITHOUT SLAB/OPEN PIT 23 COMPOSTING TOILET/ (ECOSAN) 31 NO FACILITY/BUSH/FIELD 61 OTHER 96 (SPECIFY)	☐ → 113
110	Do you share this toilet facility with other households?	YES 1 NO 2	☐ → 112
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 0 10 OR MORE HOUSEHOLDS 95 DON'T KNOW 98	
112	Where is this toilet facility located?	IN OWN DWELLING 1 IN OWN YARD/PLOT 2 ELSEWHERE 3	
112A	CLEANLINESS OF THE TOILET FACILITY RECORD OBSERVATION.	TOILET'S PLATE FORM IS DRY AND CLEAN A WITH URINE OR EXCRETA B WITH FLIES C NOT OBSERVED Y	

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																		
113	What type of fuel does your household mainly use for cooking?	ELECTRICITY 01 GAS (LPG/ NATURAL GAS) 02 BIOGAS 03 KEROSENE 04 PEAT/ LIGNITE 05 CHARCOAL 06 WOOD 07 STRAW/SHRUBS/GRASS 08 AGRICULTURAL CROP 09 ANIMAL DUNG 10 BRIQUETTE 11 SAW DUST 12 NO FOOD COOKED IN HOUSEHOLD..... 95 OTHER 96 (SPECIFY)	 → 116																		
114	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE 1 IN A SEPARATE BUILDING 2 OUTDOORS 3 OTHER 6 (SPECIFY)	 → 116																		
115	Do you have a separate room which is used as a kitchen?	YES 1 NO 2																			
116	How many rooms in this household are used for sleeping?	ROOMS																			
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES 1 NO 2	→ 119																		
118	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'. a) Milk cows traditional? b) Milk Cows modern? c) Bulls? d) Goats? e) Sheep? f) Chickens or other poultry? g) Pigs? h) Rabbits? i) Horses, donkeys, or mules?	a) MILK COWS TRADITIONAL b) MILK COWS MODERN c) BULLS d) GOATS e) SHEEP f) CHICKENS/POULTRY g) PIGS h) RABBIT i) HORSES, DONKEYS, MULES <table border="1" style="float: right; margin-top: 10px;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>																			
119	Does any member of this household own any agricultural land?	YES 1 NO 2	→ 121																		
120	How many hectares of agricultural land do members of this household own? IF 95 OR MORE, CIRCLE '950'.	HECTARES 95 OR MORE HECTARES 950 DON'T KNOW 998																			

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																									
121	Does your household have:	<table border="0"> <tr> <td></td><td>YES</td><td>NO</td></tr> <tr> <td>a) Electricity?</td><td>a) ELECTRICITY 1</td><td>2</td></tr> <tr> <td>b) A radio?</td><td>b) RADIO 1</td><td>2</td></tr> <tr> <td>c) A television?</td><td>c) TELEVISION 1</td><td>2</td></tr> <tr> <td>d) A non-mobile telephone?</td><td>d) NON-MOBILE TELEPHONE .. 1</td><td>2</td></tr> <tr> <td>e) A computer?</td><td>e) COMPUTER 1</td><td>2</td></tr> <tr> <td>f) A refrigerator?</td><td>f) REFRIGERATOR 1</td><td>2</td></tr> <tr> <td>g) A Mattress?</td><td>g) MATLESS 1</td><td>2</td></tr> <tr> <td>h) A bench or at least 3 Chairs?</td><td>h) BENCH OR AT LEAST 3 CHAIRS 1</td><td>2</td></tr> <tr> <td>i) A bed?</td><td>i) BED 1</td><td>2</td></tr> <tr> <td>j) A Table?</td><td>j) TABLE 1</td><td>2</td></tr> <tr> <td>k) A sofa?</td><td>k) SOFA 1</td><td>2</td></tr> <tr> <td>l) A traditional improved stove?</td><td>l) TRADITIONAL IMPROVED STOV 1</td><td>2</td></tr> <tr> <td>m) A Stove?</td><td>m) STOVE 1</td><td>2</td></tr> <tr> <td>n) A Cupboard</td><td>n) CUPBOARD 1</td><td>2</td></tr> <tr> <td>o) A dinning table</td><td>o) DINNING TABLE 1</td><td>2</td></tr> <tr> <td>p) Iron machine</td><td>p) IRON 1</td><td>2</td></tr> <tr> <td>q) A Laundry machine</td><td>q) LAUNDRY MACHINE 1</td><td>2</td></tr> <tr> <td>r) A satellite dish</td><td>r) SATELITE DISH 1</td><td>2</td></tr> </table>		YES	NO	a) Electricity?	a) ELECTRICITY 1	2	b) A radio?	b) RADIO 1	2	c) A television?	c) TELEVISION 1	2	d) A non-mobile telephone?	d) NON-MOBILE TELEPHONE .. 1	2	e) A computer?	e) COMPUTER 1	2	f) A refrigerator?	f) REFRIGERATOR 1	2	g) A Mattress?	g) MATLESS 1	2	h) A bench or at least 3 Chairs?	h) BENCH OR AT LEAST 3 CHAIRS 1	2	i) A bed?	i) BED 1	2	j) A Table?	j) TABLE 1	2	k) A sofa?	k) SOFA 1	2	l) A traditional improved stove?	l) TRADITIONAL IMPROVED STOV 1	2	m) A Stove?	m) STOVE 1	2	n) A Cupboard	n) CUPBOARD 1	2	o) A dinning table	o) DINNING TABLE 1	2	p) Iron machine	p) IRON 1	2	q) A Laundry machine	q) LAUNDRY MACHINE 1	2	r) A satellite dish	r) SATELITE DISH 1	2	
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122	Does any member of this household own:	<table border="0"> <tr> <td></td><td>YES</td><td>NO</td></tr> <tr> <td>a) A watch?</td><td>a) WATCH 1</td><td>2</td></tr> <tr> <td>b) A mobile phone?</td><td>b) MOBILE PHONE 1</td><td>2</td></tr> <tr> <td>c) A bicycle?</td><td>c) BICYCLE 1</td><td>2</td></tr> <tr> <td>d) A motorcycle or motor scooter?</td><td>d) MOTORCYCLE/SCOOTER 1</td><td>2</td></tr> <tr> <td>e) An animal-drawn cart?</td><td>e) ANIMAL-DRAWN CART 1</td><td>2</td></tr> <tr> <td>f) A car or truck?</td><td>f) CAR/TRUCK 1</td><td>2</td></tr> <tr> <td>g) A boat with a motor?</td><td>g) BOAT WITH MOTOR 1</td><td>2</td></tr> <tr> <td>h) A boat without a motor?</td><td>h) BOAT WITHOUT MOTOR 1</td><td>2</td></tr> <tr> <td>i) A camera</td><td>i) CAMERA 1</td><td>2</td></tr> </table>		YES	NO	a) A watch?	a) WATCH 1	2	b) A mobile phone?	b) MOBILE PHONE 1	2	c) A bicycle?	c) BICYCLE 1	2	d) A motorcycle or motor scooter?	d) MOTORCYCLE/SCOOTER 1	2	e) An animal-drawn cart?	e) ANIMAL-DRAWN CART 1	2	f) A car or truck?	f) CAR/TRUCK 1	2	g) A boat with a motor?	g) BOAT WITH MOTOR 1	2	h) A boat without a motor?	h) BOAT WITHOUT MOTOR 1	2	i) A camera	i) CAMERA 1	2																												
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123	Does any member of this household have a bank account?	<table border="0"> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> </table>	YES	1	NO	2																																																						
YES	1																																																											
NO	2																																																											
124	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less often than once a month, or never?	<table border="0"> <tr> <td>DAILY</td><td>1</td></tr> <tr> <td>WEEKLY</td><td>2</td></tr> <tr> <td>MONTHLY</td><td>3</td></tr> <tr> <td>LESS OFTEN THAN ONCE A MONTH</td><td>4</td></tr> <tr> <td>NEVER</td><td>5</td></tr> </table>	DAILY	1	WEEKLY	2	MONTHLY	3	LESS OFTEN THAN ONCE A MONTH	4	NEVER	5																																																
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124A	CHECK 21: AT LEAST ONE "NO" ☐ ALL "YES" ☐		127																																																									
124B	Does your household plan to obtain health insurance for members that are currently not covered?	<table border="0"> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> </table>	YES	1	NO	2																																																						
YES	1																																																											
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127	Does your household have any mosquito nets?	<table border="0"> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> </table>	YES	1	NO	2	139																																																					
YES	1																																																											
NO	2																																																											
128	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS																																																										

MOSQUITO NETS

		NET #1	NET #2	NET #3
129	ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD. IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED 1 NOT OBSERVED 2	OBSERVED 1 NOT OBSERVED 2	OBSERVED 1 NOT OBSERVED 2
130	How many months ago did your household get the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS AGO MORE THAN 36 MONTHS AGO 95 NOT SURE 98	MONTHS AGO MORE THAN 36 MONTHS AGO 95 NOT SURE 98	MONTHS AGO MORE THAN 36 MONTHS AGO 95 NOT SURE 98
131	OBSERVE OR ASK BRAND/TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	LONG-LASTING INSECTICIDE-TREATED NET (LLIN) ROYAL SENTRY 11 DAWAPLUS 2.0 12 INTERCEPTOR G2 .. 13 YAHE 14 PERMANET 3.0 15 MIRANET 16 OTHER/DON'T KNOW BRAND 17 OTHER TYPE 96 DON'T KNOW TYPE .. 98	LONG-LASTING INSECTICIDE-TREATED NET (LLIN) ROYAL SENTRY 11 DAWAPLUS 2.0 12 INTERCEPTOR G2 .. 13 YAHE 14 PERMANET 3.0 15 MIRANET 16 OTHER/DON'T KNOW BRAND 17 OTHER TYPE 96 DON'T KNOW TYPE .. 98	LONG-LASTING INSECTICIDE-TREATED NET (LLIN) ROYAL SENTRY 11 DAWAPLUS 2.0 12 INTERCEPTOR G2 .. 13 YAHE 14 PERMANET 3.0 15 MIRANET 16 OTHER/DON'T KNOW BRAND 17 OTHER TYPE 96 DON'T KNOW TYPE .. 98
134	Did you get the net through a HH Mosquito net mass distribution campaign, during an antenatal care visit, or during an immunization visit?	YES, MASS DIST. VILLAGE CAMPAIGN 1 YES, ANC 2 YES, IMMUNIZATION VISIT 3 (SKIP TO 135A) ← NO 4	YES, MASS DIST. VILLAGE CAMPAIGN 1 YES, ANC 2 YES, IMMUNIZATION VISIT 3 (SKIP TO 135A) ← NO 4	YES, MASS DIST. VILLAGE CAMPAIGN 1 YES, ANC 2 YES, IMMUNIZATION VISIT 3 (SKIP TO 135A) ← NO 4
135	Where did you get the net?	HEALTH CENTER 01 DISTRICT PHARMACY 02 PRIVATE PHARMACY .. 03 SHOP/MARKET 04 CHW 05 RELIGIOUS INSTITUTION 06 SCHOOL 07 OTHER 96 DON'T KNOW 98	HEALTH CENTER 01 DISTRICT PHARMACY 02 PRIVATE PHARMACY .. 03 SHOP/MARKET 04 CHW 05 RELIGIOUS INSTITUTION 06 SCHOOL 07 OTHER 96 DON'T KNOW 98	HEALTH CENTER 01 DISTRICT PHARMACY 02 PRIVATE PHARMACY .. 03 SHOP/MARKET 04 CHW 05 RELIGIOUS INSTITUTION 06 SCHOOL 07 OTHER 96 DON'T KNOW 98
135A	OBSERVE CONDITION OF MOSQUITO NET: DOES IT HAVE HOLES THAT ARE EQUAL TO OR LARGER THAN THE TIP OF YOUR THUMB?	YES 1 NO 2 NOT OBSERVED 8	YES 1 NO 2 NOT OBSERVED 8	YES 1 NO 2 NOT OBSERVED 8
135B	OBSERVE OR ASK THE SHAPE OF THE MOSQUITO NET.	CONICAL 1 RECTANGLE 2 NOT OBSERVED 8	CONICAL 1 RECTANGLE 2 NOT OBSERVED 8	CONICAL 1 RECTANGLE 2 NOT OBSERVED 8

MOSQUITO NETS

		NET #1	NET #2	NET #3
136	Did anyone sleep under this mosquito net last night?	YES 1 NO 2 (SKIP TO 137A) ← NOT SURE 8	YES 1 NO 2 (SKIP TO 137A) ← NOT SURE 8	YES 1 NO 2 (SKIP TO 137A) ← NOT SURE 8
137	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM HOUSEHOLD SCHEDULE.	NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. SKIP TO 138	NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. SKIP TO 138	NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. ----- NAME _____ LINE NO. SKIP TO 138
137A	Why did no one sleep under this mosquito net?	DAMAGED 1 DIFFICULT TO HUNG 2 NO SLEEPING BED 3 DON'T LIKE IT 4 ABSENT LAST NIGHT 5 OTHER 6 _____ SPECIFY DON'T KNOW 8	DAMAGED 1 DIFFICULT TO HUNG 2 NO SLEEPING BED 3 DON'T LIKE IT 4 ABSENT LAST NIGHT 5 OTHER 6 _____ SPECIFY DON'T KNOW 8	DAMAGED 1 DIFFICULT TO HUNG 2 NO SLEEPING BED 3 DON'T LIKE IT 4 ABSENT LAST NIGHT 5 OTHER 6 _____ SPECIFY DON'T KNOW 8
138		GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO TO 129 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 139.

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
139	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE 1 OBSERVED, MOBILE 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT 3 NOT OBSERVED, NO PERMISSION TO SEE .. 4 NOT OBSERVED, OTHER REASON 5	→ 142
140	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE 1 WATER IS NOT AVAILABLE 2	
141	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) A ASH, MUD, SAND B NONE Y	
142	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND 11 DUNG 12 RUDIMENTARY FLOOR WOOD PLANKS 21 BRICKS WITHOUT CEMENT 22 FINISHED FLOOR PARQUET OR POLISHED WOOD 31 VINYL OR ASPHALT STRIPS 32 CERAMIC TILES/ COASTAL BRICK 33 CEMENT 34 CARPET 35 OTHER _____ 96 (SPECIFY)	
143	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	NATURAL ROOFING NO ROOF 11 THATCH/PALM LEAF 12 RUDIMENTARY ROOFING RUSTIC MATERIAL/ PLASTIC 21 FINISHED ROOFING METAL SHEET 31 CALAMINE / CEMENT FIBER 32 CERAMIC TILES 33 CEMENT/ CONCRETE 34 INDUSTRIAL TILES 35 OTHER _____ 96 (SPECIFY)	

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
144	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	NATURAL WALLS CANE/PALM/TRUNKS 11 RUDIMENTARY WALLS BAMBOO / TREE TRUNKS WITH MUD 21 STONE WITH MUD 22 UNCOVERED ADOBE 23 REUSED WOOD 24 PLASTIC SHEETING 25 FINISHED WALLS TREE TRUNKS WITH MUD AND CEMENT .. 31 STONE WITH LIME/CEMENT 32 OVEN FIRED BRICKS 33 OVEN FIRED BRICKS WITH CEMENT 34 CEMENT BLOCK 35 COVERED ADOBE WITH CEMENT 36 WOOD PLANKS/SHINGLES 37 OTHER 96 (SPECIFY)									
144A	CHECK COVER PAGE: HOUSEHOLD SELECTED FOR MICRONUTRIENT BIOMAKER	YES 1 NO 2	→ 146								
145	I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? COLLECT SALT AND PLACE IN INDICATED CONTAINER PUT THE 2ND BAR CODE LABEL ON SALT CONTAINER, AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NO SALT IN THE HOUSEHOD 99994 REFUSED 99995 OTHER 99996 (SPECIFY REASON)									
145A	CHECK THE TYPE OF SALT	REFINED SALT 1 LARGER CRISTAL SALT 2 OTHER 6									
146	RECORD THE TIME.	HOURS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr></table> MINUTES <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr><tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr></table>									

SELECTION OF WOMAN/ MAN FOR THE DOMESTIC VIOLENCE QUESTIONS (PAPER OPTION)¹

DVH00	CHECK COVER PAGE: HOUSEHOLD SELECTED FOR WOMAN / MAN DV MODULE? YES ☐ NO ☐ → END INTERVIEW							
LOOK AT THE LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN / MEN (COLUMN 9 / 10) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE DOMESTIC VIOLENCE QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE. EXAMPLE: THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER IS '216' AND THE HOUSEHOLD SCHEDULE COLUMN 9 / 10 SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN/MEN AGE 15-49/ 15-59 IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN / MEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN/ MAN WHO IS ELIGIBLE FOR THE WOMAN'S/ MAN'S INTERVIEW (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER/ HIS NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE.								
LAST DIGIT OF THE HOUSE- HOLD QUESTION- NAIRE SERIAL NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN / MEN AGE 15-49 IN HOUSEHOLD SCHEDULE COLUMN 9							
	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5
DVH01	NAME OF SELECTED WOMAN / MAN _____				HH LINE NUMBER OF SELECTED WOMAN / MAN 			

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

WOMAN'S QUESTIONNAIRE

MINECOFIN

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

MINISTRY OF HEALTH

IDENTIFICATION (1)

PROVINCE: _____ DISTRICT: _____ SECTOR: _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER

STRUCTURE NUMBER

HOUSEHOLD NUMBER

NAME AND LINE NUMBER OF WOMAN _____

CHECK COVER PAGE OF HOUSEHOLD QUESTIONNAIRE: HOUSEHOLD SELECTED FOR WOMAN DV
MODULE? (1=YES, 2=NO)

CHECK HOUSEHOLD QUESTIONNAIRE DVH01: WOMAN SELECTED FOR DV MODULE? (1=YES, 2=NO)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT								
DATE	_____	_____	_____	DAY <table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
INTERVIEWER'S NAME	_____	_____	_____	MONTH <table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
RESULT*	_____	_____	_____	YEAR <table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
NEXT VISIT: DATE	_____	_____		INT. NO. <table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
TIME	_____	_____		RESULT* <table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								
				TOTAL NUMBER OF VISITS <table border="1"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>								

*RESULT CODES: 1 COMPLETED 4 REFUSED 7 OTHER _____
 2 NOT AT HOME 5 PARTLY COMPLETED SPECIFY
 3 POSTPONED 6 INCAPACITATED

LANGUAGE OF QUESTIONNAIRE**

0	1

 LANGUAGE OF INTERVIEW**

 NATIVE LANGUAGE OF RESPONDENT**

 TRANSLATOR USED (YES = 1, NO = 2)

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
 01 ENGLISH
 02 KINYARWANDA

TEAM LEADER		FIELD EDITOR		OFFICE EDITOR	KEYED BY												
NAME	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					NAME	<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					<table border="1"><tr><td></td><td></td></tr></table>			<table border="1"><tr><td></td><td></td></tr></table>		
	NUMBER		NUMBER	NUMBER	NUMBER												

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with National Institute of Statistics of Rwanda. We are conducting a survey about health and other topics all over Rwanda. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES
TO BE INTERVIEWED .. 1

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED .. 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS MINUTES	
102	How long have you been living continuously in this village? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ALWAYS 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CAPITAL CITY 1 TOWN 2 RURAL AREA 3	
104	Before you moved here, which province did you live in?	KIGALI 01 SOUTH 02 WEST 03 NORTH 04 EAST 05 OUTSIDE OF COUNTRY 96	
105	In what month and year were you born?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
107	Have you ever attended school?	YES 1 NO 2	→ 111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRE-PRIMARY 1 PRIMARY 2 POST-PRIMARY/VOCATIONAL 3 SECONDARY 4 HIGHER 5	
109	What is the highest (grade/form/year) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEAR	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
110	CHECK 108: ☐ PRIMARY OR PRE-PRIMARY ☐ POST-PRIMARY/VOCATIONAL SECONDARY HIGHER	→ 113	
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL 1 ABLE TO READ ONLY PART OF THE SENTENCE 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE 4 (SPECIFY LANGUAGE) BLIND/ VISUALLY IMPAIRED 5	
112	CHECK 111: ☐ CODE '2', '3' OR '4' CIRCLED ☐ CODE '1' OR '5' CIRCLED	→ 114	
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3	
116	Do you own a mobile telephone?	YES 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES 1 NO 2	
119	Have you ever used the internet?	YES 1 NO 2	→ 122
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES 1 NO 2	→ 122
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY 1 AT LEAST ONCE A WEEK 2 LESS THAN ONCE A WEEK 3 NOT AT ALL 4	
122	What is your religion?	CATHOLIC 1 PROTESTANT 2 ADVENTIST 3 MUSLIM 4 TRADITIONAL 5 OTHER 6 SPECIFY NO RELIGION 7	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES NONE 00	→ 201
125	In the last 12 months, have you been away from home for more than one month at a time?	YES 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES 1 NO 2	→ 206								
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES 1 NO 2	→ 204								
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES 1 NO 2	→ 206								
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
205C	Where do your sons or daughters who do not live with you live? CIRCLE ALL MENTIONED.	BOARDING SCHOOL A RELATIVE B IN THE STREET C WORK D SPECIFY MARRIED E OTHER X (SPECIFY) DON'T KNOW Z									
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES 1 NO 2	→ 208								
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) GIRLS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL ____ births during your life. Is that correct? YES ☐ ↓ NO ☐ ↓ PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208: ONE OR MORE BIRTHS ☐ ↓ NO BIRTHS ☐		→ 226								

SECTION 2. REPRODUCTION

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 10 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.

212	213	214	215	216	217	218	219	220	221
What name was given to your (first/next) baby?	Is (NAME) a boy or a girl?	Were any of these births twins?	On what day, month, and year was (NAME) born?	Is (NAME) still alive?	How old was (NAME) at (NAME)'s last birthday?	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
RECORD NAME.					RECORD AGE IN COMPLETED YEARS.				
BIRTH HISTORY NUMBER.									
01	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 221)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (NEXT BIRTH)	DAYS 1 MONTHS 2 YEARS 3	
02	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 221)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
03	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 221)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
04	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 221)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2
05	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 (SKIP TO 221)	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER (SKIP TO 221)	DAYS 1 MONTHS 2 YEARS 3	YES (ADD BIRTH) 1 NO (NEXT BIRTH) 2

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES 1 (RECORD BIRTH(S) IN TABLE) ← NO 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY NUMBERS ARE SAME ☐ NUMBERS ARE DIFFERENT ☐ (PROBE AND RECONCILE) ←		
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2014-2019	NUMBER OF BIRTHS NONE 0	→ 226
225	C FOR EACH BIRTH IN 2014-2019, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES 1 NO 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. C ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS	
228	When you got pregnant, did you want to get pregnant at that time?	YES 1 NO 2	→ 230
229	CHECK 208: TOTAL NUMBER OF BIRTHS ONE OR MORE ☐ a) Did you want to have a baby later on or did you not want any more children? NONE ☐ b) Did you want to have a baby later on or did you not want any children?	LATER 1 NO MORE/NONE 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES 1 NO 2	→ 239
231	When did the last such pregnancy end?	MONTH YEAR	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
232	CHECK 231: LAST PREGNANCY ☐ → 234 ENDED IN 2014-2019 LAST PREGNANCY ☐ → 239 ENDED IN 2013 OR EARLIER			
LINE NO.	233 In what month and year did the preceding such pregnancy end?	234 How many months pregnant were you when that pregnancy ended?	235 (1) Since January 2014, have you had any other pregnancies that did not result in a live birth?	
01		 NUMBER OF MONTHS	YES 1 NO 2	→ NEXT LINE → 236
02	MONTH YEAR	 NUMBER OF MONTHS	YES 1 NO 2	→ NEXT LINE → 236
03	MONTH YEAR	 NUMBER OF MONTHS	YES 1 NO 2	→ NEXT LINE → 236
04	MONTH YEAR	 NUMBER OF MONTHS	YES 1 NO 2	→ 236
236	C FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2014-2019 OR LATER, ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY. IF THERE ARE MORE THAN FOUR PREGNANCIES THAT DID NOT END IN A LIVE BIRTH, USE AN ADDITIONAL QUESTIONNAIRE STARTING ON THE SECOND LINE.			
237	Did you have any miscarriages, abortions or stillbirths that ended before 2014?	YES 1 NO 2		→ 239
238	When did the last such pregnancy that terminated before 2014 end?	MONTH YEAR		

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
239	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4 IN MENOPAUSE/ HAS HAD HYSTERECTOMY 994 BEFORE LAST BIRTH 995 NEVER MENSTRUATED 996	<table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
240	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES 1 NO 2 DON'T KNOW 8	→ 242								
241	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS 1 DURING HER PERIOD 2 RIGHT AFTER HER PERIOD HAS ENDED 3 HALFWAY BETWEEN TWO PERIODS 4 OTHER 6 (SPECIFY) DON'T KNOW 8									
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES 1 NO 2 DON'T KNOW 8									

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES 1 NO 2
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES 1 NO 2
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES 1 NO 2
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	CHECK 226: NOT PREGNANT ☐ OR UNSURE ↓	PREGNANT ☐ →	312
303	Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?	YES 1 NO 2	→ 312
304	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION A MALE STERILIZATION B IUD C INJECTABLES D IMPLANTS E PILL F CONDOM G FEMALE CONDOM H EMERGENCY CONTRACEPTION I STANDARD DAYS METHOD J LACTATIONAL AMENORRHEA METHOD K RHYTHM METHOD L WITHDRAWAL M OTHER MODERN METHOD X OTHER TRADITIONAL METHOD Y	☐ → 307 ☐ → 309 → 306 ☐ → 309
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MICROGYNON 01 MICROLYTE 02 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	☐ → 309
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	PRUDENCE 01 PLAISIR 02 LOVE 03 GENERIC CONDOM 04 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	☐ → 309

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP												
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR / PARASTATE REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 OUTREACH 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER 96 (SPECIFY) DON'T KNOW 98													
308	In what month and year was the sterilization performed?	MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>													→ 310
309	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>													
310	CHECK 308 AND 309, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308 OR 309 NO ☐ ↓ YES ☐ ↑ GO BACK TO 308 OR 309, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).														

SECTION 3. CONTRACEPTION (CAPI OPTION) (6)

311	CHECK 308 AND 309: YEAR IS 2014-2019 ☐ C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. THEN CONTINUE ↓ YEAR IS 2013 OR EARLIER ☐ C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2014 . THEN ↓ (SKIP TO 324) ←

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ANY METHOD USED ☐		→ 315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES 1 NO 2	→ 326
315	CHECK 304: CIRCLE/ CHOOSE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE/CHOOSE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED 00 FEMALE STERILIZATION 01 MALE STERILIZATION 02 IUD 03 INJECTABLES 04 IMPLANTS 05 PILL 06 CONDOM 07 FEMALE CONDOM 08 EMERGENCY CONTRACEPTION 09 STANDARD DAYS METHOD 10 LACTATIONAL AMENORRHEA METHOD 11 RHYTHM METHOD 12 WITHDRAWAL 13 OTHER MODERN METHOD 95 OTHER TRADITIONAL METHOD 96	→ 326 → 319 → 327 → 323
316	You first started using (CURRENT METHOD) in (DATE FROM 309). Where did you get it at that time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 OUTREACH 15 OTHER PUBLIC SECTOR 16 _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 FAMILY PLANING CLINIC 25 OTHER PRIVATE HEALTH 26 _____ (SPECIFY) OTHER SOURCE SHOP/ BAR 31 CHURCH 32 FRIEND/RELATIVE 33 YOUTH CENTER 34 OTHER 96 _____ (SPECIFY)	
317	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD 03 INJECTABLES 04 IMPLANTS 05 PILL 06 CONDOM 07 FEMALE CONDOM 08 EMERGENCY CONTRACEPTION 09 STANDARD DAYS METHOD 10 OTHER MODERN METHOD 95 OTHER TRADITIONAL METHOD 96	→ 323 → 322 → 323

SECTION 3. CONTRACEPTION

[illegible]

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 OUTREACH 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 FAMILY PLANING CLINIC 25 OTHER PRIVATE HEALTH _____ 26 (SPECIFY) OTHER SOURCE SHOP/ BAR 31 CHURCH 32 FRIEND/RELATIVE 33 YOUTH CENTER 34 COMMUNITY HEALTH WORKER 35 OTHER 96 _____ (SPECIFY)	→ 327
326	Do you know of a place where you can obtain a method of family planning?	YES 1 NO 2	
327	In the last 12 months, were you visited by a health provider?	YES 1 NO 2	→ 329
328	Did the health provider talk to you about family planning?	YES 1 NO 2	
329	CHECK 202: CHILDREN LIVING WITH THE YES ☐ NO ☐ a) In the last 12 months, have you visited a health facility for care for yourself or your children? b) In the last 12 months, have you visited a health facility for care for yourself?	YES 1 NO 2	→ 401
330	Did any staff member at the health facility speak to you about family planning methods?	YES 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS ☐ IN 2014-2019 NO BIRTHS IN ☐ 2014-2019 → 648		
402	CHECK 215. RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2014-2019. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER
404	FROM 212 AND 216:	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES 1 (SKIP TO 408) ← NO 2	YES 1 (SKIP TO 426) ← NO 2
406	CHECK 208: ONLY ONE BIRTH ☐ a) Did you want to have a baby later on, or did you not want any children? MORE THAN ONE BIRTH ☐ b) Did you want to have a baby later on, or did you not want any more children?	LATER 1 NO MORE/NONE 2 (SKIP TO 408) ←	LATER 1 NO MORE/NONE 2 (SKIP TO 426) ←
407	How much longer did you want to wait?	MONTHS 1 YEARS 2 DON'T KNOW 998	MONTHS 1 YEARS 2 DON'T KNOW 998
408	Did you see anyone for antenatal care for this pregnancy?	YES 1 NO 2 (SKIP TO 414) ←	
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR A NURSE/MIDWIFE B AUXILIARY MIDWIFE C OTHER PERSON TRADITIONAL BIRTH ATTENDANT D COMMUNITY/ VILLAGE HEALTH WORKER E COMMUNITY HEALTH MOTHER AND CHILD F OTHER _____ X (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME A OTHER HOME B PUBLIC SECTOR REF. HOSPITAL C PROV/DIST. HOSPITAL D HEALTH CENTER E HEALTH POST F OUTREACH G OTHER PUBLIC FACILITY H _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC I CLINIC J DISPENSARY K OTHER PRIVATE MED. FACILITY L _____ (SPECIFY) OTHER X (SPECIFY)	
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS DON'T KNOW 98	
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES DON'T KNOW 98	
412A	CHECK 412:	2 OR MORE TIMES ☐ LESS THAN 2 TIMES ☐ ↓ (SKIP TO 413) ←	
412B	How many months pregnant were you when you received your second antenatal care for this pregnancy?	MONTHS DON'T KNOW 98	
412C	CHECK 412:	3 OR MORE TIMES ☐ LESS THAN 3 TIMES ☐ ↓ (SKIP TO 413) ←	
412D	How many months pregnant were you when you received your third antenatal care for this pregnancy?	MONTHS DON'T KNOW 98	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____															
412E	CHECK 412:	4 OR MORE ☐ TIMES LESS THAN 4 TIMES (SKIP TO 413)																
412F	How many months pregnant were you when you received your fourth antenatal care for this pregnancy?	MONTHS DON'T KNOW 98																
413	As part of your antenatal care during this pregnancy, were any of the following done at least once: a) Was your blood pressure measured? b) Did you give a urine sample? c) Did you give a blood sample? d) Malnutrition screening (MID UPPER ARM CIRCUMFERENCE)?	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a) BP</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) URINE</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) BLOOD</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) CIRCUMFERENCE</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	a) BP	1	2	b) URINE	1	2	c) BLOOD	1	2	d) CIRCUMFERENCE	1	2	
	YES	NO																
a) BP	1	2																
b) URINE	1	2																
c) BLOOD	1	2																
d) CIRCUMFERENCE	1	2																
413E	During (any of) your antenatal care visit(s), were you told about things to look out for that might suggest problems with the pregnancy?	YES 1 NO 2 DON'T KNOW 8																
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES 1 NO 2 (SKIP TO 417) DON'T KNOW 8																
415	During this pregnancy, how many times did you get a tetanus injection?	TIMES DON'T KNOW 8																
416	CHECK 415:	2 OR MORE ☐ TIMES OTHER ☐ (SKIP TO 420)																

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
417	At any time before this pregnancy, did you receive any tetanus injections?	YES 1 NO 2 (SKIP TO 420) ← DON'T KNOW 8	
418	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES DON'T KNOW 8	
419	CHECK 418: ONLY ☐ ONE a) How many years ago did you receive that tetanus injection? MORE THAN ONE ☐ TIME b) How many years ago did you receive the last tetanus injection prior to this pregnancy?	YEARS AGO	
420	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP.	YES 1 NO 2 (SKIP TO 422) ← DON'T KNOW 8	
421	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS DON'T KNOW 998	
422	During this pregnancy, did you take any drug for intestinal worms?	YES 1 NO 2 DON'T KNOW 8	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
426	When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small?	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8
427	Was (NAME) weighed at birth?	YES 1 NO 2 (SKIP TO 429) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 429) ← DON'T KNOW 8
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 . KG FROM RECALL 2 . DON'T KNOW 99998	KG FROM CARD 1 . KG FROM RECALL 2 . DON'T KNOW 99998
429	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR A NURSE/MIDWIFE B AUXILIARY MIDWIFE C OTHER PERSON TRADITIONAL BIRTH ATTENDANT D COMMUNITY HEALTH WORKER E COMMUNITY HEALTH MOTHER AND CHILD F RELATIVE/FRIEND G OTHER X _____(SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR A NURSE/MIDWIFE B AUXILIARY MIDWIFE C OTHER PERSON TRADITIONAL BIRTH ATTENDANT D COMMUNITY HEALTH WORKER E COMMUNITY HEALTH MOTHER AND CHILD F RELATIVE/FRIEND G OTHER X _____(SPECIFY) NO ONE ASSISTED Y

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____												
430	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 (SKIP TO 434) ← OTHER HOME 12 PUBLIC SECTOR REFERRAL HOSPITAL .. 21 PROVINCIAL/DISTRICT HOSPITAL 22 HEALTH CENTER 23 HEALTH POST 24 OTHER PUBLIC SECTOR 26 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 31 CLINIC 32 DISPENSARY 33 OTHER PRIVATE HEALTH 36 (SPECIFY) OTHER 96 (SPECIFY) (SKIP TO 434) ←	HOME HER HOME 11 (SKIP TO 434) ← OTHER HOME 12 PUBLIC SECTOR REFERRAL HOSPITAL .. 21 PROVINCIAL/DISTRICT HOSPITAL 22 HEALTH CENTER 23 HEALTH POST 24 OTHER PUBLIC SECTOR 26 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 31 CLINIC 32 DISPENSARY 33 OTHER PRIVATE HEALTH 36 (SPECIFY) OTHER 96 (SPECIFY) (SKIP TO 434) ←												
431	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW 998													
432	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES 1 NO 2 (SKIP TO 434) ←	YES 1 NO 2 (SKIP TO 434) ←												
433	When was the decision made to have the caesarean section? Was it before or after your labor pains started?	BEFORE 1 AFTER 2	BEFORE 1 AFTER 2												
434	Immediately after the birth, was (NAME) put on your chest?	YES 1 NO 2 (SKIP TO 434B) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 459) ← DON'T KNOW 8												
434A	Was (NAME)'s bare skin touching your bare skin?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8												

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____						
434B	CHECK 430: PLACE OF DELIVERY	CODE 11, 12, OR 96 CIRCLED ☐ OTHER ☐ (SKIP TO 449) ←							
435	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES 1 NO 2 (SKIP TO 438) ←							
436	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW 998							
437	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 AUXILIARY MIDWIFE 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY HEALTH WORKER 22 COMMUNITY HEALTH MOTHER AND CHILD 23 OTHER 96 (SPECIFY)							
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check on (NAME)'s health while you were still in the facility?	YES 1 NO 2 (SKIP TO 441) ← DON'T KNOW 8							
439	How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW 998							
440	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 AUXILIARY MIDWIFE 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY HEALTH WORKER 22 COMMUNITY HEALTH MOTHER AND CHILD 23 OTHER 96 (SPECIFY)							

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____						
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES 1 NO 2 (SKIP TO 445) ←							
442	How long after delivery did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW 998							
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 AUXILIARY MIDWIFE 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY HEALTH WORKER 22 COMMUNITY HEALTH MOTHER AND CHILD 23 OTHER 96 (SPECIFY)							
444	Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR REFERRAL HOSPITAL 21 PROVINCIAL/DISTRICT HOSPITAL 22 HEALTH CENTER 23 HEALTH POST 24 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 31 CLINIC 32 DISPENSARY 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER 96 (SPECIFY)							
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider or a traditional birth attendant check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES 1 NO 2 (SKIP TO 457) ← DON'T KNOW 8							

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____						
446	How many hours, days or weeks after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW 998							
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 AUXILIARY MIDWIFE 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY HEALTH WORKER 22 COMMUNITY HEALTH MOTHER AND CHILD 23 OTHER 96 (SPECIFY)							
448	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR REFERRAL HOSPITAL .. 21 PROVINCIAL/DISTRICT HOSPITAL 22 HEALTH CENTER 23 HEALTH POST 24 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 31 CLINIC 32 DISPENSARY 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER 96 (SPECIFY) (SKIP TO 457) ←							
449	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES 1 NO 2 (SKIP TO 453) ←							

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____						
450	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 <table border="1"><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW 998							
451	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 AUXILIARY MIDWIFE 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY HEALTH WORKER 22 COMMUNITY HEALTH MOTHER AND CHILD 23 OTHER 96 (SPECIFY)							
452	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR REFERRAL HOSPITAL 21 PROVINCIAL/DISTRICT HOSPITAL 22 HEALTH CENTER 23 HEALTH POST 24 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 31 CLINIC 32 DISPENSARY 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER 96 (SPECIFY)							
453	I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES 1 NO 2 (SKIP TO 457) ← DON'T KNOW 8							

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____						
454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH 1 <table border="1"><tr><td></td><td></td></tr></table> DAYS AFTER BIRTH 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AFTER BIRTH 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW 998							
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR 11 NURSE/MIDWIFE 12 AUXILIARY MIDWIFE 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY HEALTH WORKER 22 COMMUNITY HEALTH MOTHER AND CHILD 23 OTHER 96 (SPECIFY)							
456	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME HER HOME 11 OTHER HOME 12 PUBLIC SECTOR REFERRAL HOSPITAL 21 PROVINCIAL/DISTRICT HOSPITAL 22 HEALTH CENTER 23 HEALTH POST 24 OTHER PUBLIC SECTOR 26 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 31 CLINIC 32 DISPENSARY 33 OTHER PRIVATE MEDICAL SECTOR 36 (SPECIFY) OTHER 96 SPECIFY							

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	
		NAME _____	NAME _____	
457	During the first 24 hours after (NAME)'s birth, did any health care provider do the following: a) Examine the cord? b) Measure (NAME)'s temperature? c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding? e) Observe (NAME) breastfeeding?	YES NO DK a) CORD 1 2 8 b) TEMP. 1 2 8 c) SIGNS 1 2 8 d) COUNSEL BREAST-FEED 1 2 8 e) OBSERVE BREAST-FEED 1 2 8		
457F	How many times have you Altogether been checked after delivering (NAME)?	TIMES		
458	Has your menstrual period returned since the birth of (NAME)?	YES 1 (SKIP TO 460) ← NO 2 (SKIP TO 461) ←		
459	Did your period return between the birth of (NAME) and your next pregnancy?			YES 1 NO 2 (SKIP TO 463) ←
460	For how many months after the birth of (NAME) did you not have a period?	MONTHS DON'T KNOW 98		MONTHS DON'T KNOW 98
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT ☐ PREGNANT OR UNSURE ☐ (SKIP TO 463) ←		
462	Have you had sexual intercourse since the birth of (NAME)?	YES 1 NO 2 (SKIP TO 464) ←		
463	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS DON'T KNOW 98	MONTHS DON'T KNOW 98	
464	Did you ever breastfeed (NAME)?	YES 1 (SKIP TO 466) ← NO 2	YES 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____								
465	CHECK 404: IS CHILD LIVING?	LIVING ☐ DEAD ☐ (SKIP TO 470) ← (SKIP TO 471) ←									
466	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY 000 HOURS 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
467	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES 1 NO 2 GO TO 468 ←									
467A	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) A PLAIN WATER B SUGAR OR GLUCOSE WATER C GRUPE WATER D SUGAR-SALT-WATER SOLUTION E FRUIT JUICE F INFANT FORMULA G TEA/INFUSIONS H COFFEE I HONEY J OTHER _____ X (SPECIFY)									
468	CHECK 404: CHILD LIVING	LIVING ☐ DEAD ☐ ↓ (SKIP TO 470A) ←	LIVING ☐ DEAD ☐ ↓ (SKIP TO 470A) ←								
469	Are you still breastfeeding (NAME)?	YES 1 NO 2									
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8								
470A	CHECK 430: CODE 11,12, OR 96 CIRCLED	YES ☐ NO ☐ ↓ (SKIP TO 471) ←	YES ☐ NO ☐ ↓ (SKIP TO 471) ←								
470B	Why did you not deliver (NAME) at a health facility?	FACILITY COST TOO MUCH 01 TOO FAR/ NO TRANSPORT 02 DON'T TRUST FACILITY 03 NO FEMALE PROVIDER 04 HUSBAND FAMILY DON'T ALLOW 05 NOT NECESSARY/ EASY TO DELIVER/COMFORTABLE POSITION 06 CUSTOMARY TO DELIVER AT HOME 07 OTHER _____ 96 SPECIFY	FACILITY COST TOO MUCH 01 TOO FAR/NO TRANSPORT 02 DON'T TRUST FACILITY 03 NO FEMALE PROVIDER 04 HUSBAND FAMILY DON'T ALLOW 05 NOT NECESSARY/ EASY TO DELIVER/COMFORTABLE POSITION 06 CUSTOMARY TO DELIVER AT HOME 07 OTHER _____ 96 SPECIFY								
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.								

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2016-2019? ONE OR MORE BIRTHS IN 2016-2019 ☐ NO BIRTHS IN 2016-2019 ☐		→ 601
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2016-2019. NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER		
503A	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 501B
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD 1 YES, HAS ONLY AN OTHER DOCUMENT 2 YES, HAS CARD AND OTHER DOCUMENT 3 NO, NO CARD AND NO OTHER DOCUMENT .. 4	→ 507A → 507A
505A	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2	
506A	CHECK 504A: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN 1 YES, ONLY OTHER DOCUMENT SEEN 2 YES, CARD AND OTHER DOCUMENT SEEN .. 3 NO CARD AND NO OTHER DOCUMENT SEEN .. 4	→ 511A

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																							
	NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER																																																																									
508A	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED. <table border="1"> <thead> <tr> <th></th><th>DAY</th><th>MONTH</th><th>YEAR</th></tr> </thead> <tbody> <tr><td>BCG</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 1</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 2</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 3</td><td></td><td></td><td></td></tr> <tr><td>INACTIVATED POLIO VACCINE (IPV)</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 1</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 2</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 3</td><td></td><td></td><td></td></tr> <tr><td>PNEUMOCOCCAL 1</td><td></td><td></td><td></td></tr> <tr><td>PNEUMOCOCCAL 2</td><td></td><td></td><td></td></tr> <tr><td>PNEUMOCOCCAL 3</td><td></td><td></td><td></td></tr> <tr><td>ROTAVIRUS 1</td><td></td><td></td><td></td></tr> <tr><td>ROTAVIRUS 2</td><td></td><td></td><td></td></tr> <tr><td>MEASLES AND RUBELLA 1</td><td></td><td></td><td></td></tr> <tr><td>MEASLES AND RUBELLA 2</td><td></td><td></td><td></td></tr> <tr><td>VITAMIN A (MOST RECENT)</td><td></td><td></td><td></td></tr> </tbody> </table>		DAY	MONTH	YEAR	BCG				ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)				ORAL POLIO VACCINE (OPV) 1				ORAL POLIO VACCINE (OPV) 2				ORAL POLIO VACCINE (OPV) 3				INACTIVATED POLIO VACCINE (IPV)				DPT-HEP.B-HIB (PENTAVALENT) 1				DPT-HEP.B-HIB (PENTAVALENT) 2				DPT-HEP.B-HIB (PENTAVALENT) 3				PNEUMOCOCCAL 1				PNEUMOCOCCAL 2				PNEUMOCOCCAL 3				ROTAVIRUS 1				ROTAVIRUS 2				MEASLES AND RUBELLA 1				MEASLES AND RUBELLA 2				VITAMIN A (MOST RECENT)				
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VITAMIN A (MOST RECENT)																																																																										
509A	CHECK 508A: 'BCG' TO '[MEASLES CONTAINING VACCINE] 2' ALL RECORDED? NO ☐ YES ☐	→ 525A																																																																								
510A	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT (THEN SKIP TO 525A) NO 2 DON'T KNOW 8 (WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525A)																																																																								

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES 1 NO 2 DON'T KNOW 8	☐ → 525A
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES 1 NO 2 DON'T KNOW 8	
514A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES 1 NO 2 DON'T KNOW 8	☐ → 517A
515A	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS 1 LATER 2	
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
516A1	The last time (NAME) received the polio drops, did (NAME) also get an IPV injection in the arm to protect against polio?	YES 1 NO 2 DON'T KNOW 8	
517A	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES 1 NO 2 DON'T KNOW 8	☐ → 519A
518A	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
519A	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia?	YES 1 NO 2 DON'T KNOW 8	→ 521A
520A	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521A	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhea?	YES 1 NO 2 DON'T KNOW 8	→ 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523A	Has (NAME) ever received a measles vaccination, that is, an injection in the arm to prevent measles?	YES 1 NO 2 DON'T KNOW 8	→ 525A
524A	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
525A	In the last 7 days was (NAME) given: a) Ongera intungamubiri? IF YES: How many times did (NAME) took Ongera intungamubiri?	YES NO DK a) ONGERA INTUNGAMUBIRI .. 1 2 8 TIMES	
526A	CONTINUE WITH 501B.		

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2019? MORE BIRTHS IN 2016-2019 ☐ NO MORE BIRTHS IN 2016-2019 ☐		→ 601
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE NEXT-TO-LAST CHILD BORN IN 2016-2019. NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER		
503B	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 526B
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD 1 YES, HAS ONLY AN OTHER DOCUMENT 2 YES, HAS CARD AND OTHER DOCUMENT 3 NO, NO CARD AND NO OTHER DOCUMENT .. 4	→ 507B → 507B
505B	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2	
506B	CHECK 504B: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511B
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN 1 YES, ONLY OTHER DOCUMENT SEEN 2 YES, CARD AND OTHER DOCUMENT SEEN .. 3 NO CARD AND NO OTHER DOCUMENT SEEN .. 4	→ 511B

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																												
	NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER <table border="1"><tr><td></td><td></td></tr></table>																																																																														
508B	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED. <table border="1"> <thead> <tr> <th></th> <th>DAY</th> <th>MONTH</th> <th>YEAR</th> </tr> </thead> <tbody> <tr><td>BCG</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 1</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 2</td><td></td><td></td><td></td></tr> <tr><td>ORAL POLIO VACCINE (OPV) 3</td><td></td><td></td><td></td></tr> <tr><td>INACTIVATED POLIO VACCINE (IPV)</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 1</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 2</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 3</td><td></td><td></td><td></td></tr> <tr><td>DPT-HEP.B-HIB (PENTAVALENT) 4</td><td></td><td></td><td></td></tr> <tr><td>PNEUMOCOCCAL 1</td><td></td><td></td><td></td></tr> <tr><td>PNEUMOCOCCAL 2</td><td></td><td></td><td></td></tr> <tr><td>PNEUMOCOCCAL 3</td><td></td><td></td><td></td></tr> <tr><td>ROTAVIRUS 1</td><td></td><td></td><td></td></tr> <tr><td>ROTAVIRUS 2</td><td></td><td></td><td></td></tr> <tr><td>MEASLES AND RUBELLA 1</td><td></td><td></td><td></td></tr> <tr><td>MEASLES AND RUBELLA 2</td><td></td><td></td><td></td></tr> <tr><td>VITAMIN A (MOST RECENT)</td><td></td><td></td><td></td></tr> </tbody> </table>		DAY	MONTH	YEAR	BCG				ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)				ORAL POLIO VACCINE (OPV) 1				ORAL POLIO VACCINE (OPV) 2				ORAL POLIO VACCINE (OPV) 3				INACTIVATED POLIO VACCINE (IPV)				DPT-HEP.B-HIB (PENTAVALENT) 1				DPT-HEP.B-HIB (PENTAVALENT) 2				DPT-HEP.B-HIB (PENTAVALENT) 3				DPT-HEP.B-HIB (PENTAVALENT) 4				PNEUMOCOCCAL 1				PNEUMOCOCCAL 2				PNEUMOCOCCAL 3				ROTAVIRUS 1				ROTAVIRUS 2				MEASLES AND RUBELLA 1				MEASLES AND RUBELLA 2				VITAMIN A (MOST RECENT)					
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509B	CHECK 508B: 'BCG' TO '[MEASLES CONTAINING VACCINE] 2' ALL RECORDED? NO ☐ YES ☐ → 525B																																																																														
510B	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508B THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT (THEN SKIP TO 525B) NO 2 DON'T KNOW 8 (WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525B)																																																																													

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES 1 NO 2 DON'T KNOW 8	→ 525B
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES 1 NO 2 DON'T KNOW 8	
514B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES 1 NO 2 DON'T KNOW 8	→ 517B
515B	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS 1 LATER 2	
516B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
516B1	The last time (NAME) received the polio drops, did (NAME) also get an IPV injection in the arm to protect against polio?	YES 1 NO 2 DON'T KNOW 8	
517B	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES 1 NO 2 DON'T KNOW 8	→ 519B
518B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
519B	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia?	YES 1 NO 2 DON'T KNOW 8	☐ → 521B
520B	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521B	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhea?	YES 1 NO 2 DON'T KNOW 8	☐ → 523B
522B	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523B	Has (NAME) ever received a measles vaccination, that is, an injection in the arm to prevent measles?	YES 1 NO 2 DON'T KNOW 8	☐ → 525B
524B	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
525B	In the last 7 days was (NAME) given: a) Ongera intungamubiri? IF YES: How many times did (NAME) took Ongera intungamubiri?	YES NO DK a) ONGERA INTUNGAMUBIR 1 2 8 TIMES	
526B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2019? MORE BIRTHS IN 2016-2019 ☐ (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE) ←	NO MORE BIRTHS IN 2016-2019 ☐ →	→ 601

SECTION 6. CHILD HEALTH AND NUTRITION

601	CHECK 224: ONE OR MORE BIRTHS IN 2014-2019 NO BIRTHS IN 2014-2019 → 648		
602	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2014-2019. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
603	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER
604	FROM 212 AND 216:	NAME _____ LIVING DEAD (SKIP TO 646) ←	NAME _____ LIVING DEAD (SKIP TO 646) ←
605	In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
607	Was (NAME) given any drug for intestinal worms in the last six months?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
608	Has (NAME) had diarrhea in the last 2 weeks?	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8
608A	Was there any blood in the stools?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
609	CHECK 469: CURRENTLY BREASTFEEDING? YES ☐ a) Now I would like to know how much (NAME) was given to drink during the diarrhea including breast milk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? NO/ NOT ASKED ☐ b) Now I would like to know how much (NAME) was given to drink during the diarrhea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8
610	When (NAME) had diarrhea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
610A	CHECK 469: CURRENTLY BREASTFEEDING? YES ☐ ↓ NO/ NOT ASKED ☐ ← SKIP TO 611		
610B	When (NAME) had diarrhea, did you continue to breastfeed him/her?	YES 1 NO 0	
611	Did you seek advice or treatment for the diarrhea from any source?	YES 1 NO 2 (SKIP TO 615) ←	YES 1 NO 2 (SKIP TO 615) ←

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S)) COMMUNITY HEALTH	PUBLIC SECTOR REFERRAL HOSPITAL . . . A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE KIOSK/ SHOP M TRADITIONAL HEALER N CHURCH O FRIEND/RELATIVE P OTHER _____ X (SPECIFY)	PUBLIC SECTOR REFERRAL HOSPITAL . . . A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE KIOSK/ SHOP M TRADITIONAL HEALER N CHURCH O FRIEND/RELATIVE P OTHER _____ X (SPECIFY)
613	CHECK 612:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 615) ←	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 615) ←
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE _____ ☐	FIRST PLACE _____ ☐

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
615	Was (NAME) given any of the following at any time since (NAME) started having the diarrhea: a) A pre-packaged ORS liquid? b) A government-recommended homemade fluid? c) Zinc tablets or syrup?	YES NO DK a) ORS LIQUID .. 1 2 8 b) HOMEMADE FLUID .. 1 2 8 c) ZINC 1 2 8	YES NO DK a) ORS LIQUID .. 1 2 8 b) HOMEMADE FLUID .. 1 2 8 c) ZINC 1 2 8
616	CHECK 615: ANY 'YES' ☐ ↓ ALL 'NO' OR 'DK' ☐ ↓ a) Was anything else given to treat the diarrhea? b) Was anything given to treat the diarrhea?	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 618) ← DON'T KNOW 8
617	CHECK 615: ANY 'YES' ☐ ↓ ALL 'NO' OR 'DK' ☐ ↓ a) What else was given to treat the diarrhea? b) What was given to treat the diarrhea? Anything else? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ANTIBIOTIC A ANTIMOTILITY B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) C UNKNOWN PILL OR SYRUP D INJECTION ANTIBIOTIC E NON-ANTIBIOTIC F UNKNOWN INJECTION G (IV) INTRAVENOUS H HOME REMEDY/ HERBAL MEDICINE I OTHER X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC A ANTIMOTILITY B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) C UNKNOWN PILL OR SYRUP D INJECTION ANTIBIOTIC E NON-ANTIBIOTIC F UNKNOWN INJECTION G (IV) INTRAVENOUS H HOME REMEDY/ HERBAL MEDICINE I OTHER X (SPECIFY)
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES 1 NO 2 (SKIP TO 620) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 620) ← DON'T KNOW 8
619	At any time during the illness, did (NAME) have blood taken from (NAME)'s finger or heel for testing?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
620	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH	
		NAME _____		NAME _____	
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES 1 NO 2 (SKIP TO 623) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 623) ← DON'T KNOW 8		
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY 1 NOSE ONLY 2 BOTH 3 OTHER 6 (SPECIFY) DON'T KNOW 8 (SKIP TO 624) ←	CHEST ONLY 1 NOSE ONLY 2 BOTH 3 OTHER 6 (SPECIFY) DON'T KNOW 8 (SKIP TO 624) ←		
623	CHECK 618: HAD FEVER?	YES NO OR DK ☐ ↓ (SKIP TO 646) ←	YES NO OR DK ☐ ↓ (SKIP TO 646) ←		
623A	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8		
623B	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8		
624	Did you seek advice or treatment for the illness from any source?	YES 1 NO 2 (SKIP TO 629) ←	YES 1 NO 2 (SKIP TO 629) ←		

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	PUBLIC SECTOR REFERRAL HOSPITAL .. A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE KIOSK/ SHOP M TRADITIONAL HEALER N CHURCH O FRIEND/RELATIVE P OTHER _____ X (SPECIFY)	PUBLIC SECTOR REFERRAL HOSPITAL .. A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER SOURCE KIOSK/ SHOP M TRADITIONAL HEALER N CHURCH O FRIEND/RELATIVE P OTHER _____ X (SPECIFY)
626	CHECK 625:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 628) ←	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 628) ←
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE ☐	FIRST PLACE ☐

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS	DAYS
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES 1 NO 2 (SKIP TO 646) ← DON'T KNOW 8	YES 1 NO 2 (SKIP TO 646) ← DON'T KNOW 8
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIMALARIAL DRUGS ACT (COARTEM) A QUININE B ARTESUNATE C OTHER ANTIMALARIAL E _____ (SPECIFY) ANTIBIOTIC DRUGS PILL / SYRUP F INJECTION / IV G OTHER DRUGS ASPIRIN H PARACETAMOL I IBUPROFEN J OTHER (SPECIFY) DON'T KNOW Z	ANTIMALARIAL DRUGS ACT (COARTEM) A QUININE B ARTESUNATE C OTHER ANTIMALARIAL E _____ (SPECIFY) ANTIBIOTIC DRUGS PILL / SYRUP F INJECTION / IV G OTHER DRUGS ASPIRIN H PARACETAMOL I IBUPROFEN J OTHER X _____ (SPECIFY) DON'T KNOW Z
631	CHECK 630: ANY CODE A-D CIRCLED?	YES NO ☐ ☐ ↓ (SKIP TO 646) ←	YES NO ☐ ☐ ↓ (SKIP TO 646) ←
632	CHECK 630: ACT (COARTEM) (‘A’) GIVEN	CODE ‘A’ CIRCLED CODE ‘A’ NOT CIRCLED ☐ ☐ ↓ (SKIP TO 636) ←	CODE ‘A’ CIRCLED CODE ‘A’ NOT CIRCLED ☐ ☐ ↓ (SKIP TO 636) ←

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
633	How long after the fever started did (NAME) first take ACT (COARTEM)?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
636	CHECK 630: QUININE ('B') GIVEN	CODE 'B' CIRCLED ☐ CODE 'B' NOT CIRCLED ☐  (SKIP TO 638) ←	CODE 'B' CIRCLED ☐ CODE 'B' NOT CIRCLED ☐  (SKIP TO 638) ←
637	How long after the fever started did (NAME) first take QUININE?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
638	CHECK 630: ALTESUNATE ('C') GIVEN	CODE 'C' CIRCLED ☐ CODE 'C' NOT CIRCLED ☐ ↓ (SKIP TO 640) ←	CODE 'C' CIRCLED ☐ CODE 'C' NOT CIRCLED ☐ ↓ (SKIP TO 640) ←
639	How long after the fever started did (NAME) first take artesunate?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
640	CHECK 630: OTHER ANTIMALARIAL ('D') GIVEN	CODE 'D' CIRCLED ☐ CODE 'D' NOT CIRCLED ☐ ↓ (SKIP TO 646) ←	CODE 'D' CIRCLED ☐ CODE 'D' NOT CIRCLED ☐ ↓ (SKIP TO 646) ←
641	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8	SAME DAY 0 NEXT DAY 1 TWO DAYS AFTER FEVER 2 THREE OR MORE DAYS AFTER FEVER 3 DON'T KNOW 8
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 647.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 647.

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
647	CHECK 615(a) AND 615(b), ALL COLUMNS: NO CHILD RECEIVED FLUID ☐ FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID	ANY CHILD RECEIVED FLUID ☐ FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID	→ 649
648	Have you ever heard of a special product called ORS you can get for the treatment of diarrhea?	YES 1 NO 2	
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2017-2019 LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ _____ (NAME OF YOUNGEST CHILD LIVING WITH HER) ↓	NONE ☐	→ 701

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:				
	a) Plain water?	a) 1	2	8	
	b) Juice or juice drinks?	b) 1	2	8	
	c) Clear broth?	c) 1	2	8	
	d) Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	d) 1	2	8	
		NUMBER OF TIMES DRANK			
	e) Infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	e) 1	2	8	
		NUMBER OF TIMES DRANK			
	f) Any other liquids?	f) 1	2	8	
	g) Yogurt? IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	g) 1	2	8	
		NUMBER OF TIMES ATE			
	h) Sosoma, Nutrutoto, CSB+, Cerelac, phosphatin?	h) 1	2	8	
	i) Bread, rice, noodles, porridge, or other foods made from grains?	i) 1	2	8	
	j) Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	j) 1	2	8	
	k) White potatoes, white yams, manioc, cassava, or any other foods made from roots?	k) 1	2	8	
	l) Any dark green, leafy vegetables?	l) 1	2	8	
	m) Ripe mangoes, avocados, papayas, banana or other fruit with A vitamin ?	m) 1	2	8	
	n) Any other fruits or vegetables?	n) 1	2	8	
	o) Liver, kidney, heart, or other organ meats?	o) 1	2	8	
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p) 1	2	8	
	q) Eggs?	q) 1	2	8	
	r) Fresh or dried fish or shellfish?	r) 1	2	8	
	s) Any foods made from beans, peas, lentils, or nuts?	s) 1	2	8	
	t) Cheese or other food made from milk?	t) 1	2	8	
	u) Any other solid, semi-solid, or soft food?	u) 1	2	8	

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
651	CHECK 650 (CATEGORIES 'g' THROUGH 'u'): NOT A SINGLE 'YES' ☐ AT LEAST ONE 'YES' ☐		→ 653
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES 1 (GO BACK TO 650 TO RECORD FOOD EATEN YESTERDAY) (THEN CONTINUE TO 653) NO 2	→ 653A
653	How many times did (NAME FROM 649) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DON'T KNOW 8	
653A	In the last month, did you participate in the monthly growth monitoring and nutrition promotion sessions conducted by the community health workers?	YES 1 NO 2	→ 654
653B	What is the main reason you did not participate in this growth monitoring and nutrition promotion session last month?	NOT AWARE ABOUT THESE SESSIONS 1 DO NOT HAVE TIME TO ATTEND 2 DO NOT FIND IT RELEVANT TO ATTEND 3 SITE IS TOO FAR FOR ME TO ATTEND 4 NO MEANS TO CONTRIBUTE TO THE COOKING DEMONSTRATION 5 MY CHILD WAS SICK 6 FAMILY EMERGENCY 7 OTHER 8 SPECIFY SPECIFY	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE 01 PUT/RINSED INTO TOILET OR LATRINE 02 PUT/RINSED INTO DRAIN OR DITCH 03 THROWN INTO GARBAGE 04 BURIED 05 LEFT IN THE OPEN 06 OTHER 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODINGS CATEGORIES	SKIP																																			
655	CHECK 217 AND 218: ANY CHILD 0-4 YEARS OLD LIVING WITH HIS/HER MOTHER? YES ☐ NO ☐		→701																																			
656	CHECK 217 AND 218: SELECT THE YOUNGEST CHILD AGED 0-4 LIVING WITH HIS/HER MOTHER AND RECORD NAME AND LINE NUMBER NAME OF THE YOUNGEST CHILD FROM Q.212 _____ LINE NUMBER OF THE YOUNGEST CHILD (Q.219)																																					
657	Now I would like to ask you about (NAME); your youngest child that is 0-4 years old																																					
657A	In the past 3 days, did you or any household member over 15 years of age engage in any of the following activities with (NAME)? IF YES, ASK: Who engaged in this activity with (NAME)? a) Read books to or looked at picture with (NAME)? b) Told stories to (NAME)? c) Sang songs to (NAME) or with (NAME), including lullabies? d) Took (NAME) outside the home, compound, yard or enclosure? e) Played with (NAME) f) Named, counted, or drew things to or with (NAME)?	<table border="1"> <thead> <tr> <th></th> <th>MOTHER</th> <th>FATHER</th> <th>OTHER</th> <th>NO ONE</th> </tr> </thead> <tbody> <tr> <td>a) READ BOOKS</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>b) TOLD STORIES</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>c) SANG SONGS</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>d) TOOK OUTSIDE</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>e) PLAYED WITH</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>f) NAMED OR COUNTED</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> </tbody> </table>		MOTHER	FATHER	OTHER	NO ONE	a) READ BOOKS	A	B	X	Y	b) TOLD STORIES	A	B	X	Y	c) SANG SONGS	A	B	X	Y	d) TOOK OUTSIDE	A	B	X	Y	e) PLAYED WITH	A	B	X	Y	f) NAMED OR COUNTED	A	B	X	Y	
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e) PLAYED WITH	A	B	X	Y																																		
f) NAMED OR COUNTED	A	B	X	Y																																		
658	How many children's books or picture books do you have for (NAME)?	NONE 00 NUMBER OF CHILDREN'S BOOKS ... TEN OR MORE BOOKS 10																																				
659	I am interested in learning about the things that (name) plays with when he/she is at home. Does he/she play with: a) Homemade toys (such as dolls, cars, or other toys made at home)? b) Toys from a shop or manufactured toys? c) Household objects (such as bowls or pots) or objects found outside (such as sticks, rocks, animal shells or leaves)? IF THE RESPONDENT SAYS "YES" TO THE CATEGORIES ABOVE, THEN PROBE TO LEARN SPECIFICALLY WHAT THE CHILD PLAYS WITH TO ASCERTAIN THE RESPONSE.	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>HOMEMADE TOYS</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>TOYS FROM SHOP</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>OR OUTSIDE OBJECTS</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	HOMEMADE TOYS	1	2	8	TOYS FROM SHOP	1	2	8	OR OUTSIDE OBJECTS	1	2	8																				
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660	Sometimes adults taking care of children have to leave the house to go shopping, wash clothes, or for other reasons and have to leave young children. On how many days in the past week was (name): a) Left alone for more than an hour? b) Left in the care of another child, that is, someone less than 10 years old, for more than an hour? IF 'NONE' ENTER '0'. IF 'DON'T KNOW' ENTER '8'	NUMBER OF DAYS LEFT ALONE MORE THAN AN HOUR NUMBER OF DAYS LEFT WITH ANOTHER CHILD FOR MORE THAN AN HOUR																																				
660C	Do you attend any of the following forms of Parenting Education program in the last month? d) Umugoroba w'ababyeyi? e) Inshuti z'umuryango? f) Community Parenting Session in ecd facility? g) Parenting Programmes religious sessions? h) Parenting Programmes from women's groups? i) Community Theatre?	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>UMUGOROBA W'ABABYEYI</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>INSHUTI Z'UMURYANGO</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>COMMUNITY PARENTING SESSION IN ECD FACILITY</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>PARENTING PROGRAMMES RELIGIOUS SESSIONS</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>PARENTING PROGRAMMES FROM WOMEN'S GROUPS</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>COMMUNITY THEATRE</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	UMUGOROBA W'ABABYEYI	1	2	8	INSHUTI Z'UMURYANGO	1	2	8	COMMUNITY PARENTING SESSION IN ECD FACILITY	1	2	8	PARENTING PROGRAMMES RELIGIOUS SESSIONS	1	2	8	PARENTING PROGRAMMES FROM WOMEN'S GROUPS	1	2	8	COMMUNITY THEATRE	1	2	8								
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661	VERIFY 217: AGE OF THE CHILD CHILD 0 OR 1 CHILD 2 OR 3 OR 4 YEARS YEAR ↓		664
662	VERIFY 217 AND 218: ANY CHILD AGE 2-4 LIVING WITH HIS/HER MOTHER? YES NO		701
663	CHECK 217 AND 218: SELECT THE YOUNGEST CHILD AGE 2 OR 3 OR 4 LIVING WITH HIS/HER MOTHER AND RECORD NAME AND LINE NUMBER NAME OF YOUNGEST CHILD AGE 2 OR 3 OR 4 FROM Q.212 _____ LINE NUMBER OF YOUNGEST CHILD AGE 2 OR 3 OR 4 FROM Q.219		
664	Does (NAME) attend any organized learning or early childhood education programme, such as a private or government facility, including kindergarten or community child care?	YES 1 NO 2 DON'T KNOW 8	
665	In the past 7 days, about how many hours did (NAME) go to that place:	NUMBER OF HOURS	
667	I would like to ask you some questions about the health and development of (NAME). Children do not all develop and learn at the same rate. For example, some walk earlier than others. These questions are related to several aspects of (NAME)'s development. Can (NAME) identify or name at least ten letters of the alphabet?	YES 1 NO 2 DK 8	
668	Can (NAME) read at least four simple, popular words?	YES 1 NO 2 DK 8	
669	Does (NAME) know the name and recognize the symbol of all numbers from 1 to 10?	YES 1 NO 2 DK 8	
670	Can (NAME) pick up a small object with two fingers, like a stick or a rock from the ground?	YES 1 NO 2 DK 8	
671	Is (NAME) sometimes too sick to play?	YES 1 NO 2 DK 8	
672	Does (NAME) follow simple directions on how to do something correctly?	YES 1 NO 2 DK 8	
673	When given something to do, is (NAME) able to do it independently?	YES 1 NO 2 DK 8	
674	Does (NAME) get along well with other children?	YES 1 NO 2 DK 8	
675	Does (NAME) kick, bite, or hit other children or adults?	YES 1 NO 2 DK 8	
676	Does (NAME) get distracted easily?	YES 1 NO 2 DK 8	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED 1 YES, LIVING WITH A MAN 2 NO, NOT IN UNION 3	→ 704
702	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED 1 YES, LIVED WITH A MAN 2 NO 3	→ 712
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED 1 DIVORCED 2 SEPARATED 3	→ 709
704	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER 1 STAYING ELSEWHERE 2	
705	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME LINE NO.	
706	Does your (husband/partner) have other wives or does he live with other women as if married?	YES 1 NO 2 DON'T KNOW 8	→ 709
707	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS DON'T KNOW 98	
708	Are you the first, second, ... wife?	RANK	
709	Have you been married or lived with a man only once or more than once?	ONLY ONCE 1 MORE THAN ONCE 2	
710	CHECK 709: MARRIED/ LIVED WITH A MAN ONLY ONCE ↓ MARRIED/ LIVED WITH A MAN MORE THAN ONCE ↓ a) In what month and year did you start living with your (husband/partner)? b) Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	→ 712
711	How old were you when you first started living with him?	AGE	
712	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE		
713	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE 00 AGE IN YEARS	→ 731
714	I would like to ask you about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	→ 716 → 727

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
715	When was the last time you had sexual intercourse with this person?		DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3
716	The last time you had sexual intercourse with this person, was a condom used?	YES 1 NO 2 (SKIP TO 718) ←	YES 1 NO 2 (SKIP TO 718) ←	YES 1 NO 2 (SKIP TO 718) ←
717	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
718	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	HUSBAND 1 LIVE-IN PARTNER 2 BOYFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE 4 CLIENT/SEX WORKER 5 OTHER 6 (SPECIFY)	HUSBAND 1 LIVE-IN PARTNER 2 BOYFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE 4 CLIENT/SEX WORKER 5 OTHER 6 (SPECIFY)	HUSBAND 1 LIVE-IN PARTNER 2 BOYFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE 4 CLIENT/SEX WORKER 5 OTHER 6 (SPECIFY)
719	How long ago did you first have sexual intercourse with this person?	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4
720	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
720A	How many times during the last month did you have sexual intercourse with this person?	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
721	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
722	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES 1 (GO BACK TO 715 IN NEXT COLUMN) ← NO 2 (SKIP TO 724) ←	YES 1 (GO BACK TO 715 IN NEXT COLUMN) ← NO 2 (SKIP TO 724) ←	
723	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS .. DON'T KNOW 98
723A	In total, with how many different people have you had sexual intercourse in the last month? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST MONTH .. DON'T KNOW 98

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
724	CHECK 106: AGE 15-24 ☐ ↓ AGE 25-49 ☐ → 727		
725	CHECK 701: NOT ☐ IN A UNION ↓ CURRENTLY MARRIED/ LIVING WITH A MAN ☐ → 727		
726	In the past 12 months have you had sex or been sexually involved with anyone because he gave you or told you he would give you gifts, cash, or anything else?	YES 1 NO 2	
727	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME DON'T KNOW 98	
728	CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): YES, ☐ CONDOM USED ↓ NO, ☐ CONDOM NOT USED NOT ☐ ASKED → 730A → 730A		
729	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	PRUDENCE 01 PLAISIR 02 LOVE 03 GENERIC CONDOM 04 OTHER 96 (SPECIFY) DON'T KNOW 98	
730	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 COMMUNITY HEALTH WORKER 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 FAMILY PLANING CLINIC 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE SHOP/BAR/ KIOSK CONDOM 31 CHURCH 32 FRIEND/RELATIVE 33 YOUTH CENTER 34 OTHER 96 (SPECIFY) DON'T KNOW 98	
730A	If you wanted to, could you get a male condom by yourself ?	YES 1 NO 2 DON'T KNOW MALE CONDOM 3 DON'T KNOW/UNSURE 8	
731	PRESENCE OF OTHERS DURING THIS SECTION.	YES NO CHILDREN <10 1 2 MALE ADULTS 1 2 FEMALE ADULTS 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 304: NEITHER ☐ STERILIZED ↓	HE OR SHE ☐ STERILIZED →	813
802	CHECK 226: PREGNANT ☐ ↓	NOT PREGNANT ☐ OR UNSURE →	804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD 1 NO MORE 2 UNDECIDED/ DON'T KNOW 8	→ 805 → 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED/DON'T KNOW 8	→ 807 → 813 → 811
805	CHECK 226: NOT PREGNANT ☐ OR UNSURE ↓ a) How long would you like to wait from now before the birth of (a/another) child?	PREGNANT ☐ ↓ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child? MONTHS 1 YEARS 2 SOON/NOW 993 SAYS SHE CAN'T GET PREGNANT 994 AFTER MARRIAGE 995 OTHER 996 (SPECIFY) DON'T KNOW 998	→ 811 → 813 → 811
806	CHECK 226: NOT PREGNANT ☐ OR UNSURE ↓	PREGNANT ☐ →	812
807	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ☐ CURRENTLY USING ↓	CURRENTLY ☐ USING →	813
808	CHECK 805: '24' OR MORE MONTHS ☐ OR '02' OR MORE YEARS ↓	NOT ☐ ASKED ↓	'00-23' MONTHS ☐ OR '00-01' YEAR →
809	CHECK 714: DAYS, WEEKS OR ☐ MONTHS AGO ↓	YEARS ☐ AGO →	→ 811
		NOT ☐ ASKED →	811

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804: WANTS TO HAVE ANOTHER CHILD ☐ a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? _____ WANTS NO MORE/ NONE ☐ b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? _____ RECORD ALL REASONS MENTIONED.	NOT MARRIED A FERTILITY-RELATED REASONS NOT HAVING SEX B INFREQUENT SEX C MENOPAUSAL/HYSTERECTOMY D CAN'T GET PREGNANT E NOT MENSTRUATED SINCE LAST BIRTH F BREASTFEEDING G UP TO GOD/FATALISTIC H OPPOSITION TO USE RESPONDENT OPPOSED I HUSBAND/PARTNER OPPOSED J OTHERS OPPOSED K RELIGIOUS PROHIBITION L LACK OF KNOWLEDGE KNOWS NO METHOD M KNOWS NO SOURCE N METHOD-RELATED REASONS SIDE EFFECTS/HEALTH CONCERNS O LACK OF ACCESS/TOO FAR P COSTS TOO MUCH Q PREFERRED METHOD NOT AVAILABLE R NO METHOD AVAILABLE S INCONVENIENT TO USE T INTERFERES WITH BODY'S NORMAL PROCESSES U OTHER _____ (SPECIFY) X DON'T KNOW Z	
811	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐ NO, NOT CURRENTLY USING ☐ YES, CURRENTLY USING ☐		→ 813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES 1 NO 2 DON'T KNOW 8	
813	CHECK 216: HAS LIVING CHILDREN ☐ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE 00 NUMBER OTHER _____ (SPECIFY) 96	→ 815 → 815
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER .. OTHER _____ (SPECIFY) 96	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	In the last few months have you: a) Heard about family planning on the radio? b) Seen anything about family planning on the television? c) Read about family planning in a newspaper or magazine? d) Received a voice or text message about family planning on a mobile phone?	YES NO a) RADIO 1 2 b) TELEVISION 1 2 c) NEWSPAPER OR MAGAZINE 1 2 d) MOBILE PHONE 1 2	
817	CHECK 701: YES, ☐ CURRENTLY MARRIED YES, ☐ LIVING WITH A MAN NO, ☐ NOT IN A UNION		→ 901
818	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY ☐ USING NOT ☐ CURRENTLY USING NOT ☐ ASKED		→ 820 → 822
819	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT 1 MAINLY HUSBAND/PARTNER 2 JOINT DECISION 3 OTHER 6 (SPECIFY)	→ 821
820	Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT 1 MAINLY HUSBAND/PARTNER 2 JOINT DECISION 3 OTHER 6 (SPECIFY)	
821	CHECK 304: NEITHER ARE ☐ STERILIZED HE OR SHE ARE ☐ STERILIZED		→ 901
822	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER 1 MORE CHILDREN 2 FEWER CHILDREN 3 DON'T KNOW 8	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐	NOT IN ☐ UNION	→ 909
902	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS	
903	Did your (husband/partner) ever attend school?	YES 1 NO 2	→ 906
904	What was the highest level of school he attended: primary, secondary, or higher?	PRE-PRIMARY 1 PRIMARY 2 POST-PRIMARY/VOCATIONAL 3 SECONDARY 4 HIGHER 5 DON'T KNOW 8	→ 906
905	How many years have you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEAR DON'T KNOW 98	
906	Has your (husband/partner) done any work in the last 7 days for at least one hour?	YES 1 NO 2 DON'T KNOW 8	→ 908
907	Has your (husband/partner) done any work in the last 12 months?	YES 1 NO 2 DON'T KNOW 8	→ 909
908	What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?	_____ _____ _____	
909	Aside from your own housework, Have you done any work in the last seven days for at least one hour?	YES 1 NO 2	→ 913
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work for at least one hour?	YES 1 NO 2	→ 913
911	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES 1 NO 2	→ 917
913	What is your occupation? That is, what kind of work do you mainly do?	_____ _____	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER 1 FOR SOMEONE ELSE 2 SELF-EMPLOYED 3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY 1 CASH AND KIND 2 IN KIND ONLY 3 NOT PAID 4	
917	CHECK 701: CURRENTLY ☐ MARRIED/LIVING WITH A MAN ↓ NOT IN UNION ☐ → 925		
918	CHECK 916: CODE '1' OR '2' ☐ CIRCLED ↓ OTHER ☐ → 921		
919	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 OTHER _____ 6 (SPECIFY)	
920	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM 1 LESS THAN HIM 2 ABOUT THE SAME 3 HUSBAND/PARTNER HAS NO EARNINGS 4 DON'T KNOW 8	→ 922
921	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 HUSBAND/PARTNER HAS NO EARNINGS 4 OTHER _____ 6 (SPECIFY)	
922	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 SOMEONE ELSE 4 OTHER 6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 SOMEONE ELSE 4 OTHER 6	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT 1 HUSBAND/PARTNER 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY 3 SOMEONE ELSE 4 OTHER 6																																	
925	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 928																																
926	Do you have a title deed for any house you own?	YES 1 NO 2 DON'T KNOW 8	→ 928																																
927	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8																																	
928	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 931																																
929	Do you have a title deed for any land you own?	YES 1 NO 2 DON'T KNOW 8	→ 931																																
930	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8																																	
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	<table> <tr> <th></th><th>PRES./ LISTEN.</th><th>PRES./ NOT LISTEN.</th><th>NOT PRES.</th></tr> <tr> <td>CHILDREN < 10</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>HUSBAND</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>OTHER MALES</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>OTHER FEMALES</td><td>1</td><td>2</td><td>3</td></tr> </table>		PRES./ LISTEN.	PRES./ NOT LISTEN.	NOT PRES.	CHILDREN < 10	1	2	3	HUSBAND	1	2	3	OTHER MALES	1	2	3	OTHER FEMALES	1	2	3													
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HUSBAND	1	2	3																																
OTHER MALES	1	2	3																																
OTHER FEMALES	1	2	3																																
932	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food? f) If she has sex with someone else? g) If she looks in his telephone?	<table> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> <tr> <td>a) GOES OUT</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) NEGLECTS CHILDREN ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>c) ARGUES</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>d) REFUSES SEX</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>e) BURNS FOOD</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>f) SEX WITH SOMEONE ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>g) LOOKS IN TELEPHONE ..</td><td>1</td><td>2</td><td>8</td></tr> </table>		YES	NO	DK	a) GOES OUT	1	2	8	b) NEGLECTS CHILDREN ..	1	2	8	c) ARGUES	1	2	8	d) REFUSES SEX	1	2	8	e) BURNS FOOD	1	2	8	f) SEX WITH SOMEONE ..	1	2	8	g) LOOKS IN TELEPHONE ..	1	2	8	
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g) LOOKS IN TELEPHONE ..	1	2	8																																
932H	In your opinion, is a parent justified in hitting or beating his children for the following reasons: i) If he/she disobeys? j) If he/she is impolite? k) If he/she has embarrassed the family?	<table> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> <tr> <td>DISOBEY</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>IMPOLITE</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>EMBARR. FAMILY</td><td>1</td><td>2</td><td>8</td></tr> </table>		YES	NO	DK	DISOBEY	1	2	8	IMPOLITE	1	2	8	EMBARR. FAMILY	1	2	8																	
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SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES 1 NO 2	→ 1042
1002	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES 1 NO 2 DON'T KNOW 8	
1003	Can people get HIV from mosquito bites?	YES 1 NO 2 DON'T KNOW 8	
1004	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES 1 NO 2 DON'T KNOW 8	
1005	Can people get HIV by sharing food with a person who has HIV?	YES 1 NO 2 DON'T KNOW 8	
1006	Can people get HIV because of witchcraft or other supernatural means?	YES 1 NO 2 DON'T KNOW 8	
1007	Is it possible for a healthy-looking person to have HIV?	YES 1 NO 2 DON'T KNOW 8	
1007A	Can men reduce their chance of getting the AIDS virus by getting circumcised?	YES 1 NO 2 DON'T KNOW 8	
1008	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	YES NO DK a) DURING PREGNANCY .. 1 2 8 b) DURING DELIVERY 1 2 8 c) BREASTFEEDING 1 2 8	
1009	CHECK 1008: AT LEAST ☐ ONE 'YES' ↓ OTHER ☐ → 1011		
1010	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES 1 NO 2 DON'T KNOW 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
1010A	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.																		
1010B	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus for pre-nuptial purposes?	YES 1 NO 2																	
1010C	CHECK 701, 702, and 703: CURRENTLY MARRIED OR LIVING WITH A MAN ☐ FORMERLY MARRIED OR LIVING WITH A MAN ☐ NEVER MARRIED OR NEVER LIVED WITH A MAN ☐		→ 1011																
1010D	I don't want to know the results, but have you ever been tested as couple with your husband/partner to see if you and/or him have the AIDS virus?	YES 1 NO 2	→ 1011																
1010E	I don't want to know the results, but have you and your husband told each other the results of your tests?	YES 1 NO 2																	
1011	CHECK 208 AND 215: LAST BIRTH IN 2017-2019 ☐ NO BIRTHS ☐ LAST BIRTH IN 2016 OR EARLIER ☐		→ 1027 → 1027																
1012	CHECK 408 FOR LAST BIRTH: HAD ANTENATAL CARE ☐ NO ANTENATAL CARE ☐		→ 1020																
1013	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.																		
1014	During any of the antenatal visits for your last birth were you given any information about: a) Babies getting HIV from their mother? b) Things that you can do to prevent getting HIV? c) Getting tested for HIV?	<table border="0"> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>a) HIV FROM MOTHER ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) THINGS TO DO</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>c) TESTED FOR HIV</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	a) HIV FROM MOTHER ..	1	2	8	b) THINGS TO DO	1	2	8	c) TESTED FOR HIV	1	2	8	
	YES	NO	DK																
a) HIV FROM MOTHER ..	1	2	8																
b) THINGS TO DO	1	2	8																
c) TESTED FOR HIV	1	2	8																
1015	Were you offered a test for HIV as part of your antenatal care?	YES 1 NO 2																	
1016	I don't want to know the results, but were you tested for HIV as part of your antenatal care?	YES 1 NO 2	→ 1020																

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1017	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 COMMUNITY HEALTH WORKER 15 OTHER PUBLIC SECTOR 16 _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 FAMILY PLANING CLINIC 25 OTHER PRIVATE MEDICAL SECTOR 26 _____ (SPECIFY) OTHER SOURCE HOME 31 PLACE OF WORK 32 CORRECTIONAL FACILITY 33 YOUTH CENTER 34 OTHER 96 _____ (SPECIFY)	
1018	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	→ 1020
1019	All women are supposed to receive counseling after being tested. After you were tested, did you receive counseling?	YES 1 NO 2 DON'T KNOW 8	
1020	CHECK 430 FOR LAST BIRTH: ANY CODE ☐ OTHER ☐ '21-36' CIRCLED ↓		→ 1024
1021	Between the time you went for delivery but before the baby was born, were you offered an HIV test?	YES 1 NO 2	
1022	I don't want to know the results, but were you tested for HIV at that time?	YES 1 NO 2	→ 1024
1023	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	→ 1025

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1024	CHECK 1016: YES ☐ NO OR ☐ NOT ASKED		→ 1027
1025	Have you been tested for HIV since that time you were tested during your pregnancy?	YES 1 NO 2	→ 1028
1026	How many months ago was your most recent HIV test?	MONTHS AGO TWO OR MORE YEARS 95	→ 1033
1027	I don't want to know the results, but have you ever been tested for HIV?	YES 1 NO 2	→ 1031
1028	How many months ago was your most recent HIV test?	MONTHS AGO TWO OR MORE YEARS 95	
1029	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	
1030	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 COMMUNITY HEALTH WORKER 15 OTHER PUBLIC SECTOR 16 _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 FAMILY PLANNING CLINIC 25 OTHER PRIVATE MEDICAL SECTOR 26 _____ (SPECIFY) OTHER SOURCE HOME 31 PLACE OF WORK 32 CORRECTIONAL FACILITY 33 YOUTH CENTER 34 OTHER 96 _____ (SPECIFY)	→ 1033

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1031	Do you know of a place where people can go to get an HIV test?	YES 1 NO 2	→ 1033
1032	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D COMMUNITY HEALTH WC E OTHER PUBLIC SECTOR F _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC G CLINIC H DISPENSARY I PHARMACY J FAMILY PLANNING CLINIC K OTHER PRIVATE MEDICAL SECTOR L _____ (SPECIFY) OTHER X _____ (SPECIFY)	
1033	Have you heard of test kits people can use to test themselves for HIV?	YES 1 NO 2	→ 1035
1034	Have you ever tested yourself for HIV using a self-test kit?	YES 1 NO 2	
1035	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1036	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1037	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1038	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1039	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1040	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE 1 DISAGREE 2 DON'T KNOW/NOT SURE/DEPENDS 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1041	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES 1 NO 2 SAYS SHE HAS HIV 3 DON'T KNOW/NOT SURE/DEPENDS 8	
1042	CHECK 1001: HEARD ABOUT ☐ HIV OR AIDS ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT ☐ HIV OR AIDS ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES 1 NO 2	
1043	CHECK 713: HAS HAD SEXUAL ☐ INTERCOURSE ↓ NEVER HAD SEXUAL ☐ INTERCOURSE		→ 1051
1044	CHECK 1042: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ ↓ NO ☐ → 1046		→ 1046
1045	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES 1 NO 2 DON'T KNOW 8	
1046	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES 1 NO 2 DON'T KNOW 8	
1047	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES 1 NO 2 DON'T KNOW 8	
1048	CHECK 1045, 1046, AND 1047: HAS HAD AN ☐ INFECTION (ANY 'YES') ↓ HAS NOT HAD AN ☐ INFECTION OR DOES NOT KNOW		→ 1051

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1049	The last time you had (PROBLEM FROM 1045/1046/1047), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 1051
1050	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR _____ (SPECIFY) G PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K FAMILY PLANNING CLINIC L OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) M OTHER SOURCE KIOSK/SHOP N TRADITIONAL HEALER O FRIEND/RELATIVE P YOUTH CENTER Q OTHER X _____ (SPECIFY)	
1051	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES 1 NO 2 DON'T KNOW 8	
1052	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES 1 NO 2 DON'T KNOW 8	
1053	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ NOT IN UNION ☐		→ 1101
1054	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES 1 NO 2 DEPENDS/NOT SURE 8	
1055	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES 1 NO 2 DEPENDS/NOT SURE 8	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP															
1101	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS NONE 00	→ 1104															
1102	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS NONE 00	→ 1104															
1103	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES 1 NO 2 DON'T KNOW 8																
1104	Do you currently smoke cigarettes every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 1106															
1105	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES																
1106	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 1108															
1107	What other type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	KRETEKS A PIPES FULL OF TOBACCO B CIGARS, CHEROOTS, OR CIGARILLOS C WATER PIPE/SHISHA D SNUFF BY MOUTH E SNUFF BY NOSE F CHEWING TOBACCO G BETEL QUID WITH TOBACCO H OTHER X (SPECIFY)																
1108	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem: a) Getting permission to go to the doctor? b) Getting money needed for advice or treatment? c) The distance to the health facility? d) Not wanting to go alone?	<table border="0"> <thead> <tr> <th></th><th align="center">BIG PROBLEM</th><th align="center">NOT A BIG PROBLEM</th></tr> </thead> <tbody> <tr> <td>a) PERMISSION TO GO</td><td align="center">1</td><td align="center">2</td></tr> <tr> <td>b) GETTING MONEY</td><td align="center">1</td><td align="center">2</td></tr> <tr> <td>c) DISTANCE</td><td align="center">1</td><td align="center">2</td></tr> <tr> <td>d) GO ALONE</td><td align="center">1</td><td align="center">2</td></tr> </tbody> </table>		BIG PROBLEM	NOT A BIG PROBLEM	a) PERMISSION TO GO	1	2	b) GETTING MONEY	1	2	c) DISTANCE	1	2	d) GO ALONE	1	2	
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a) PERMISSION TO GO	1	2																
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d) GO ALONE	1	2																
1108E	How does tuberculosis spread from one person to another? PROBE: Any other ways? RECORD ALL MENTIONED.	THROUGH THE AIR, WHEN SOMEONE WITH TB COUGH, SNEEZ OR SPEAK A THROUGH SHARING UTENSILS B THROUGH TOUCHING A PERSON WITH TB C THROUGH SHARING FOOD OR DRINK WITH A PERSON WITH TB D THROUGH SEXUAL CONTACT E THROUGH MOSQUITO BITES F OTHER X (SPECIFY) DON'T KNOW Z																

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1108F	What are the main ways to avoid TB bacilli spread?	SEEK FOR CARE WHEN HAVING SYMPTOMS SUGGESTIVE OF TB A COVER THE MOUTH WHEN SNEEZING..... B OPEN WINDOWS C OTHER X SPECIFY DON'T KNOW Z	
1108G	Who is most at risk of getting Tuberculosis disease ?	EVERY BODY 1 POOREST PEOPLE 2 HEAVY MANUAL LABOR 3 CHILDREN 4 PEOPLE LIVING WITH HIV 5 HEAVY SMOKERS 6 ELDERLY PEOPLE 7 PEOPLE LIVING WITH A TB CASE 8 OTHER (SPECIFY) 9 SPECIFY DON'T KNOW 96	
1108H	What are the main symptoms of Tuberculosis diseases ?	COUGH OF MORE THAN 2 WEEKS A FEVER B DRENCHING NIGHT SWEATS C UNEXPECTED LOSS OF WEIGHT D GENERAL FATIGUE/MALAISE E CHEST PAIN F DON'T KNOW X	
1108I	Do you currently have the following symptoms? PROBE FOR TIME j) Cough k) Fever l) Drenching night sweats m) Unexpected weight lost n) General fatigue or malaise o) Chest pain	 YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3 YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3 YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3 YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3 YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3 YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3	
1108P	CHECK 1108I: IF AT LEAST ONE SYMPTOM "YES" ☐ CODE "1" OR "2" CIRCLED	IF "NO" TO ALL SYMPTOMS ☐	1109
1108Q	Have you ever sought care or help?	YES 1 NO 2	1109

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																		
1108R	(IF "YES") Where did you seek care or help?	PUBLIC SECTOR REFERRAL HOSPITAL A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR G (SPECIFY) _____ PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K OTHER PRIVATE MEDICAL SECTOR L (SPECIFY) _____ OTHER SOURCE SHOP M TRADITIONAL HEALER N FRIEND/RELATIVE O YOUTH CENTER P OTHER X (SPECIFY) _____																			
1109	Are you covered by any health insurance?	YES 1 NO 2	→ 1110A																		
1110	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTELLE/COMMUNITY HEALTH INSURANCE A RAMA/RSSB B MMI C PRIVATE INSURANCE COMPANY D EMPLOYER E DON'T KNOW Z																			
1110A	CHECK Q106 15 YEARS OLD ☐ 16 - 49 YEARS OLD ☐		→ MM01																		
1110B	Do you currently have a card where HPV vaccinations against cervical cancer are written down? A Human papilloma virus (HPV) vaccine is an injection given on the thigh or upper part of arm when you are at age 12 while attending school or between the ages of 9 – 14 years when you are not enrolled in school, as a protection against cervical cancer.	YES 1 NO 2 DON'T KNOW 8	→ 1110D																		
1110C	May I see the HPV vaccination card? RECORD ALL THE DATES ON THE CARD WRITE "44" IN "DAY" COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED	CARD SEEN 1 1ST DOSE a) <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <th>DD</th><th>MM</th><th>YY</th></tr> <tr> <td> </td><td> </td><td> </td></tr> <tr> <td> </td><td> </td><td> </td></tr> </table> 2ND DOSE b) <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <th>DD</th><th>MM</th><th>YY</th></tr> <tr> <td> </td><td> </td><td> </td></tr> <tr> <td> </td><td> </td><td> </td></tr> </table> CARD NOT SEEN 3	DD	MM	YY							DD	MM	YY							→ 1110I → 1110D
DD	MM	YY																			
DD	MM	YY																			
1110D	Did you ever have a card for HPV vaccine?	YES 1 NO 2 DON'T KNOW 8	→ 1110F																		
1110E	Did you receive HPV vaccine in the previous 5 years?	YES 1 NO 2 DON'T KNOW 8	→ 1110I → MM01																		

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1110F	Did you receive one or two doses of the HPV vaccine?	ONE DOSE 1 TWO DOSES 2 DON'T KNOW 8	
1110I	Sometimes a woman can have a problem of constant leakage of urine or stool from her vagina during the day and night. This problem usually occurs after a difficult childbirth, but may also occur after a sexual assault or after pelvic surgery. Have you ever experienced a constant leakage of urine or stool from your vagina during the day and night called fistula?	YES 1 NO 2	→ MM01
1110J	Have you sought treatment and got cured?	SOUGHT TREATMENT AND GOT CURED 1 SOUGHT TREATMENT, NOT CURED 2 NO TREATMENT SOUGHT 3	

SECTION MM. ADULT AND MATERNAL MORTALITY MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																												
MM01	Now I would like to ask you some questions about your brothers and sisters born to your natural mother, including those who are living with you, those living elsewhere and those who have died. From our experience in prior surveys, we know it may sometimes be difficult to establish a complete list of all the children born to your natural mother. We will work together to draw the most complete list and work to recall all your siblings. Could you please now give me the names of all of your brothers and sisters born to your natural mother. DO NOT FILL IN THE ORDER NUMBER YET. <table> <thead> <tr> <th>NAME</th><th>ORDER NUMBER</th><th>NAME</th><th>ORDER NUMBER</th></tr> </thead> <tbody> <tr><td>a _____</td><td> </td><td>k _____</td><td> </td></tr> <tr><td>b _____</td><td> </td><td>l _____</td><td> </td></tr> <tr><td>c _____</td><td> </td><td>m _____</td><td> </td></tr> <tr><td>d _____</td><td> </td><td>n _____</td><td> </td></tr> <tr><td>e _____</td><td> </td><td>o _____</td><td> </td></tr> <tr><td>f _____</td><td> </td><td>p _____</td><td> </td></tr> <tr><td>g _____</td><td> </td><td>q _____</td><td> </td></tr> <tr><td>h _____</td><td> </td><td>r _____</td><td> </td></tr> <tr><td>i _____</td><td> </td><td>s _____</td><td> </td></tr> <tr><td>j _____</td><td> </td><td>t _____</td><td> </td></tr> </tbody> </table>	NAME	ORDER NUMBER	NAME	ORDER NUMBER	a _____		k _____		b _____		l _____		c _____		m _____		d _____		n _____		e _____		o _____		f _____		p _____		g _____		q _____		h _____		r _____		i _____		s _____		j _____		t _____			
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j _____		t _____																																													
MM02	CHECK MM01: ONE OR MORE BROTHERS ☐ OR SISTERS LISTED NO BROTHERS ☐ OR SISTERS LISTED → MM04																																														
MM03	READ THE NAMES OF THE BROTHERS AND SISTERS TO THE RESPONDENT AND AFTER THE LAST ONE ASK: Are there any other brothers and sisters from the same mother that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN MM01.																																														
MM04	Sometimes people forget to mention children born to their natural mother because they do not live with them or they do not see them very often. Are there any brothers or sisters who do not live with you that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN MM01.																																														
MM05	Sometimes people forget to mention children born to their natural mother because they have died. Are there any brothers or sisters who died that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN MM01.																																														
MM06	Some people have brothers or sisters from the same mother but a different father. Are there any brothers or sisters born to your natural mother, but who have a different natural father, that you have not mentioned? NO ☐ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN MM01.																																														
MM07	COUNT THE NUMBER OF BROTHERS AND SISTERS RECORDED IN MM01. TOTAL BROTHERS AND SISTERS ...																																														
MM08	CHECK MM07: Just to make make sure that I have this right: Your mother had in TOTAL _____ births, excluding you, during her lifetime. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT MM01 AND/OR MM07.																																														
MM09	CHECK MM07: ONE OR MORE BROTHERS/SISTERS ☐ NO BROTHER OR SISTER ☐ → NEXT SECT.																																														
MM10	Please tell me, which brother or sister was born first? And which was born next? RECORD '01' FOR THE ORDER NUMBER IN MM01 FOR THE FIRST BROTHER OR SISTER, '02' FOR THE SECOND, AND SO ON UNTIL YOU HAVE RECORDED THE ORDER NUMBER FOR ALL BROTHERS AND SISTERS.																																														
MM11	How many births did your mother have before you were born? NUMBER OF PRECEDING BIRTHS ...																																														

SECTION MM. ADULT AND MATERNAL MORTALITY MODULE

MM12	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN MM01. ASK MM13 TO MM24 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
MM13	NAME OF BROTHER OR SISTER.	(01) _____	(02) _____	(03) _____	(04) _____	(05) _____	(06) _____
MM14	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
MM15	Is (NAME) still alive?	YES 1 NO 2 GO TO MM17 ← DK 8 GO TO (02) ←	YES 1 NO 2 GO TO MM17 ← DK 8 GO TO (03) ←	YES 1 NO 2 GO TO MM17 ← DK 8 GO TO (04) ←	YES 1 NO 2 GO TO MM17 ← DK 8 GO TO (05) ←	YES 1 NO 2 GO TO MM17 ← DK 8 GO TO (06) ←	YES 1 NO 2 GO TO MM17 ← DK 8 GO TO (07) ←
MM16	How old is (NAME)?	 GO TO (02)	 GO TO (03)	 GO TO (04)	 GO TO (05)	 GO TO (06)	 GO TO (07)
MM17	How many years ago did (NAME) die?						
MM18	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23
MM19	Was (NAME) pregnant when she died?	YES 1 GO TO MM23 ← NO 2	YES 1 GO TO MM23 ← NO 2	YES 1 GO TO MM23 ← NO 2	YES 1 GO TO MM23 ← NO 2	YES 1 GO TO MM23 ← NO 2	YES 1 GO TO MM23 ← NO 2
MM20	Did (NAME) die during childbirth?	YES 1 GO TO (02) ← NO 2	YES 1 GO TO (03) ← NO 2	YES 1 GO TO (04) ← NO 2	YES 1 GO TO (05) ← NO 2	YES 1 GO TO (06) ← NO 2	YES 1 GO TO (07) ← NO 2
MM21	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES 1 NO 2 GO TO MM22A ←	YES 1 NO 2 GO TO MM22A ←	YES 1 NO 2 GO TO MM22A ←	YES 1 NO 2 GO TO MM22A ←	YES 1 NO 2 GO TO MM22A ←	YES 1 NO 2 GO TO MM22A ←
MM22	How many days after the end of the pregnancy did (NAME) die?						
MM22A	How many live born children did (NAME) give birth to during her lifetime						
MM23	Was (NAME)'s death due to an act of violence?	YES 1 GO TO (02) ← NO 2	YES 1 GO TO (03) ← NO 2	YES 1 GO TO (04) ← NO 2	YES 1 GO TO (05) ← NO 2	YES 1 GO TO (06) ← NO 2	YES 1 GO TO (07) ← NO 2
MM24	Was (NAME)'s death due to an accident?	YES 1 NO 2 GO TO (02)	YES 1 NO 2 GO TO (03)	YES 1 NO 2 GO TO (04)	YES 1 NO 2 GO TO (05)	YES 1 NO 2 GO TO (06)	YES 1 NO 2 GO TO (07)
IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION.							

SECTION MM. ADULT AND MATERNAL MORTALITY MODULE

MM12	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN MM01. ASK MM13 TO MM24 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
MM13	NAME OF BROTHER OR SISTER.	(07) _____	(08) _____	(09) _____	(10) _____	(11) _____	(12) _____
MM14	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
MM15	Is (NAME) still alive?	YES 1 NO 2 GO TO MM17 DK 8 GO TO (08)	YES 1 NO 2 GO TO MM17 DK 8 GO TO (09)	YES 1 NO 2 GO TO MM17 DK 8 GO TO (10)	YES 1 NO 2 GO TO MM17 DK 8 GO TO (11)	YES 1 NO 2 GO TO MM17 DK 8 GO TO (12)	YES 1 NO 2 GO TO MM17 DK 8 GO TO (13)
MM16	How old is (NAME)?	 GO TO (08)	 GO TO (09)	 GO TO (10)	 GO TO (11)	 GO TO (12)	 GO TO (13)
MM17	How many years ago did (NAME) die?						
MM18	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23	 IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO MM23
MM19	Was (NAME) pregnant when she died?	YES 1 GO TO MM23 NO 2	YES 1 GO TO MM23 NO 2	YES 1 GO TO MM23 NO 2	YES 1 GO TO MM23 NO 2	YES 1 GO TO MM23 NO 2	YES 1 GO TO MM23 NO 2
MM20	Did (NAME) die during childbirth?	YES 1 GO TO (08) NO 2	YES 1 GO TO (09) NO 2	YES 1 GO TO (10) NO 2	YES 1 GO TO (11) NO 2	YES 1 GO TO (12) NO 2	YES 1 GO TO (13) NO 2
MM21	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES 1 NO 2 GO TO MM22A	YES 1 NO 2 GO TO MM22A	YES 1 NO 2 GO TO MM22A	YES 1 NO 2 GO TO MM22A	YES 1 NO 2 GO TO MM22A	YES 1 NO 2 GO TO MM22A
MM22	How many days after the end of the pregnancy did (NAME) die?						
MM22A	How many live born children did (NAME) give birth to during her lifetime						
MM23	Was (NAME)'s death due to an act of violence?	YES 1 GO TO (08) NO 2	YES 1 GO TO (09) NO 2	YES 1 GO TO (10) NO 2	YES 1 GO TO (11) NO 2	YES 1 GO TO (12) NO 2	YES 1 GO TO (13) NO 2
MM24	Was (NAME)'s death due to an accident?	YES 1 NO 2 GO TO (08)	YES 1 NO 2 GO TO (09)	YES 1 NO 2 GO TO (10)	YES 1 NO 2 GO TO (11)	YES 1 NO 2 GO TO (12)	YES 1 NO 2 GO TO (13)
IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION.							

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
DV00	CHECK COVER PAGE: WOMAN SELECTED FOR DV MODULE? WOMAN SELECTED ☐ FOR THIS SECTION ↓ WOMAN ☐ NOT SELECTED →		CLOSE INTERVIEW																								
DV01	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED 1 ↓ PRIVACY NOT POSSIBLE 2 →		DV32																								
DV01A	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in [COUNTRY]. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.																										
DV02	CHECK 701 AND 702: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/PARTNER') ☐ ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN ☐ →		DV16																								
DV03	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)? a) He (is/was) jealous or angry if you (talk/talked) to other men? b) He frequently (accuses/accused) you of being unfaithful? c) He (does/did) not permit you to meet your female friends? d) He (tries/tried) to limit your contact with your family? e) He (insists/insisted) on knowing where you (are/were) at all times?	<table> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>JEALOUS</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>ACCUSES</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NOT MEET FRIENDS ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NO FAMILY</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>WHERE YOU ARE</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	JEALOUS	1	2	8	ACCUSES	1	2	8	NOT MEET FRIENDS ..	1	2	8	NO FAMILY	1	2	8	WHERE YOU ARE	1	2	8	
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DV04	Now I need to ask some more questions about your relationship with your (last) (husband/partner). A. Did your (last) (husband/partner) ever: a) say or do something to humiliate you in front of others? b) threaten to hurt or harm you or someone you care about? c) insult you or make you feel bad about yourself?	B. How often did this happen during the last 12 months: often, only sometimes, or not at all? <table> <thead> <tr> <th>EVER</th><th>OFTEN</th><th>SOME-TIMES</th><th>NOT IN LAST 12 MONTHS</th></tr> </thead> <tbody> <tr> <td>YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> </tbody> </table>	EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	YES 1 NO 2 ↓	→ 1	2	3	YES 1 NO 2 ↓	→ 1	2	3	YES 1 NO 2 ↓	→ 1	2	3									
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DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																		
DV05	A. Did your (last) (husband/partner) ever do any of the following things to you: <table border="1"> <thead> <tr> <th></th><th>EVER</th><th></th><th>OFTEN</th><th>SOME-TIMES</th><th>NOT IN LAST 12 MONTHS</th></tr> </thead> <tbody> <tr> <td>a) push you, shake you, or throw something at you?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>b) slap you?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>c) twist your arm or pull your hair?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>d) punch you with his fist or with something that could hurt you?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>e) kick you, drag you, or beat you up?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>f) try to choke you or burn you on purpose?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>g) threaten or attack you with a knife, gun, or other weapon?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>h) physically force you to have sexual intercourse with him when you did not want to?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>i) physically force you to perform any other sexual acts you did not want to?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>j) force you with threats or in any other way to perform sexual acts you did not want to?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> </tbody> </table>		EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	a) push you, shake you, or throw something at you?	YES 1 NO 2 ↓	→	1	2	3	b) slap you?	YES 1 NO 2 ↓	→	1	2	3	c) twist your arm or pull your hair?	YES 1 NO 2 ↓	→	1	2	3	d) punch you with his fist or with something that could hurt you?	YES 1 NO 2 ↓	→	1	2	3	e) kick you, drag you, or beat you up?	YES 1 NO 2 ↓	→	1	2	3	f) try to choke you or burn you on purpose?	YES 1 NO 2 ↓	→	1	2	3	g) threaten or attack you with a knife, gun, or other weapon?	YES 1 NO 2 ↓	→	1	2	3	h) physically force you to have sexual intercourse with him when you did not want to?	YES 1 NO 2 ↓	→	1	2	3	i) physically force you to perform any other sexual acts you did not want to?	YES 1 NO 2 ↓	→	1	2	3	j) force you with threats or in any other way to perform sexual acts you did not want to?	YES 1 NO 2 ↓	→	1	2	3	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?	
	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS																																																																
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DV06	CHECK DV05A (a-j): AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐		→ DV09																																																																		
DV07	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95																																																																			
DV08	Did the following ever happen as a result of what your (last) (husband/partner) did to you: a) You had cuts, bruises, or aches? b) You had eye injuries, sprains, dislocations, or burns? c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES 1 NO 2 YES 1 NO 2 YES 1 NO 2																																																																			
DV09	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES 1 NO 2	→ DV11																																																																		
DV10	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN 1 SOMETIMES 2 NOT AT ALL 3																																																																			

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
DV11	Does (did) your (last) (husband/partner) drink alcohol?	YES 1 NO 2	→ DV13																								
DV12	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN 1 SOMETIMES 2 NEVER 3																									
DV13	Are (Were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID 1 SOMETIMES AFRAID 2 NEVER AFRAID 3																									
DV14	CHECK 709: MARRIED MORE ☐ THAN ONCE ↓ MARRIED ONLY ☐ ONCE		→ DV16																								
DV15	A. So far we have been talking about the behavior of your (current/last) (husband/partner). Now I want to ask you about the behavior of any previous (husband/partner). <table border="1"> <thead> <tr> <th></th><th>EVER</th><th></th><th>0 - 11 MONTHS AGO</th><th>12+ MONTHS AGO</th><th>DON'T REMEMBER</th></tr> </thead> <tbody> <tr> <td>a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>c) Did any previous (husband/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> </tbody> </table>		EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER	a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 NO 2 ↓	→	1	2	3	b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES 1 NO 2 ↓	→	1	2	3	c) Did any previous (husband/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?	YES 1 NO 2 ↓	→	1	2	3	B. How long ago did this last happen?	
	EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER																						
a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 NO 2 ↓	→	1	2	3																						
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DV16	CHECK 701 AND 702: EVER MARRIED/EVER ☐ LIVED WITH A MAN ↓ NEVER MARRIED/NEVER ☐ LIVED WITH A MAN ↓ a) From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	→ DV19																								
DV17	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/FATHER A STEP-MOTHER/STEP-FATHER B SISTER/BROTHER C DAUGHTER/SON D OTHER RELATIVE E CURRENT BOYFRIEND F FORMER BOYFRIEND G MOTHER-IN-LAW H FATHER-IN-LAW I OTHER IN-LAW J TEACHER K EMPLOYER/SOMEONE AT WORK L POLICE/SOLDIER M OTHER _____ X (SPECIFY)																									

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV18	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN 1 SOMETIMES 2 NOT AT ALL 3	
DV18A	CHECK DV17 MORE THAN ONE RESPONSE SELECTED ☐ ONLY ONE RESPONSE SELECTED ☐		DV22B
DV18B	Who is the main person that has hurt you in this way in the last 12 months?	MOTHER/STEP-MOTHER 1 FATHER/STEP-FATHER 2 SISTER/BROTHER 3 DAUGHTER/SON 4 OTHER RELATIVE 5 CURRENT BOYFRIEND 6 FORMER BOYFRIEND 7 MOTHER-IN-LAW 8 FATHER-IN-LAW 9 OTHER IN-LAW 10 TEACHER 11 EMPLOYER/SOMEONE AT WORK .. 12 POLICE/SOLDIER 13 OTHER 96 (SPECIFY)	
DV19	CHECK 201, 226, AND 230: EVER BEEN PREGNANT ☐ ('YES' ON 201 OR 226 OR 230) NEVER BEEN PREGNANT ☐		DV22
DV20	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES 1 NO 2	DV22
DV21	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER A MOTHER/STEP-MOTHER B FATHER/STEP-FATHER C SISTER/BROTHER D DAUGHTER/SON E OTHER RELATIVE F FORMER HUSBAND/PARTNER G CURRENT BOYFRIEND H FORMER BOYFRIEND I MOTHER-IN-LAW J FATHER-IN-LAW K OTHER IN-LAW L TEACHER M EMPLOYER/SOMEONE AT WORK .. N POLICE/SOLDIER O OTHER X (SPECIFY)	
DV22	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ NEVER MARRIED/NEVER LIVED WITH A MAN ☐		DV22B
DV22A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	DV23 DV24A

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV22B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	☐ → DV26
DV23	Who was the person who was forcing you the very first time this happened?	CURRENT/FORMER BOYFRIEND .. 01 FATHER/STEP-FATHER 02 BROTHER/STEP-BROTHER 03 OTHER RELATIVE 04 IN-LAW 05 OWN FRIEND/ACQUAINTANCE 06 FAMILY FRIEND 07 TEACHER 08 EMPLOYER/SOMEONE AT WORK .. 09 POLICE/SOLDIER 10 PRIEST/RELIGIOUS LEADER 11 STRANGER 12 OTHER 96 (SPECIFY)	
DV24	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ a) In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ b) In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES 1 NO 2	☐ → DV25
DV24A	CHECK DV05A (h-j) and DV15A(b) AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐		☐ → DV26
DV25	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ a) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband/partner? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ b) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS DON'T KNOW 98	

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
DV26	CHECK DV05A (a-j), DV15A (a,c), DV16, DV20, DV22A, AND DV22B: AT LEAST ONE ☐ NOT A SINGLE ☐ 'YES' ↓ 'YES'		→ DV30								
DV27	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES 1 NO 2	→ DV29								
DV28	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY A HUSBAND'S/PARTNER'S FAMILY .. B CURRENT/FORMER HUSBAND/PARTNER C CURRENT/FORMER BOYFRIEND .. D FRIEND E NEIGHBOR F RELIGIOUS LEADER G DOCTOR/MEDICAL PERSONNEL H POLICE I LAWYER J SOCIAL SERVICE ORGANIZATION .. K OTHER _____ X (SPECIFY)	→ DV30								
DV29	Have you ever told any one about this?	YES 1 NO 2									
DV30	As far as you know, did your father ever beat your mother?	YES 1 NO 2 DON'T KNOW 8									
THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE											
DV31	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES, ONCE YES, MORE THAN ONCE NO HUSBAND 1 2 3 OTHER MALE ADULT .. 1 2 3 FEMALE ADULT 1 2 3									
DV32	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE. _____ _____ _____										
DV33	RECORD THE TIME.	HOURS <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr> <tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr> </table> MINUTES <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr> <tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr> </table>									

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

CODES FOR EACH COLUMN:

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE (2)

- B BIRTHS
P PREGNANCIES
T TERMINATIONS
- 0 NO METHOD
- 1 FEMALE STERILIZATION
2 MALE STERILIZATION
3 IUD
4 INJECTABLES
5 IMPLANTS
6 PILL
7 CONDOM
8 FEMALE CONDOM
9 EMERGENCY CONTRACEPTION
J STANDARD DAYS METHOD
K LACTATIONAL AMENORRHEA METHOD
L RHYTHM METHOD
- M WITHDRAWAL
X OTHER MODERN METHOD
Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
1 BECAME PREGNANT WHILE USING
2 WANTED TO BECOME PREGNANT
3 HUSBAND/PARTNER DISAPPROVED
4 WANTED MORE EFFECTIVE METHOD
5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
7 COSTS TOO MUCH
8 INCONVENIENT TO USE
F UP TO GOD/FATALISTIC
A DIFFICULT TO GET PREGNANT/MENOPAUSAL
D MARITAL DISSOLUTION/SEPARATION
X OTHER

(SPECIFY)

Z DON'T KNOW

(1) Year of fieldwork is assumed to be 2019. For fieldwork beginning in 2020, all references to calendar years should be increased by one; for example, 2013 should be changed to 2014, 2014 should be changed to 2015, 2015 should be changed to 2016, and similarly for all years throughout the questionnaire.

(2) Response categories may be added for other methods, including fertility awareness methods.

				COL. 1	COL. 2
2	04	APR	01		2
0	03	MAR	02		0
2	02	FEB	03		2
0	01	JAN	04		0
	12	DEC	05		
	11	NOV	06		
	10	OCT	07		
2	09	SEP	08		2
0	08	AUG	09		0
	07	JUL	10		
1	06	JUN	11		1
9	05	MAY	12		9
(1)	04	APR	13		
	03	MAR	14		
	02	FEB	15		
	01	JAN	16		
	12	DEC	17		
	11	NOV	18		
	10	OCT	19		
2	09	SEP	20		2
0	08	AUG	21		0
	07	JUL	22		
1	06	JUN	23		1
8	05	MAY	24		8
	04	APR	25		
	03	MAR	26		
	02	FEB	27		
	01	JAN	28		
	12	DEC	29		
	11	NOV	30		
	10	OCT	31		
2	09	SEP	32		2
0	08	AUG	33		0
	07	JUL	34		
1	06	JUN	35		1
7	05	MAY	36		7
	04	APR	37		
	03	MAR	38		
	02	FEB	39		
	01	JAN	40		
	12	DEC	41		
	11	NOV	42		
	10	OCT	43		
2	09	SEP	44		2
0	08	AUG	45		0
	07	JUL	46		
1	06	JUN	47		1
6	05	MAY	48		6
	04	APR	49		
	03	MAR	50		
	02	FEB	51		
	01	JAN	52		
	12	DEC	53		
	11	NOV	54		
	10	OCT	55		
2	09	SEP	56		2
0	08	AUG	57		0
	07	JUL	58		
1	06	JUN	59		1
5	05	MAY	60		5
	04	APR	61		
	03	MAR	62		
	02	FEB	63		
	01	JAN	64		
	12	DEC	65		
	11	NOV	66		
	10	OCT	67		
2	09	SEP	68		2
0	08	AUG	69		0
	07	JUL	70		
1	06	JUN	71		1
4	05	MAY	72		4
	04	APR	73		
	03	MAR	74		
	02	FEB	75		
	01	JAN	76		

MAN'S QUESTIONNAIRE

MINECOFIN

MINISTRY OF HEALTH

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

IDENTIFICATION (1)																					
PROVINCE _____	DISTRICT _____	SECTOR _____																			
NAME OF HOUSEHOLD HEAD _____			<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </table>																		
CLUSTER NUMBER																					
STRUCTURE NUMBER																					
HOUSEHOLD NUMBER																					
NAME AND LINE NUMBER OF MAN _____																					
CHECK COVER PAGE OF HOUSEHOLD QUESTIONNAIRE: HOUSEHOLD SELECTED FOR MAN DV MODULE? (1=YES, 2=NO)					☐ 1 ☐ 2																
CHECK HOUSEHOLD QUESTIONNAIRE DVH01: MAN SELECTED FOR DV MODULE? (1=YES, 2=NO)					☐ 1 ☐ 2																
INTERVIEWER VISITS																					
	1	2	3	FINAL VISIT																	
DATE	_____	_____	_____	DAY	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																
INTERVIEWER'S NAME	_____	_____	_____	MONTH	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																
RESULT*	_____	_____	_____	YEAR	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																
NEXT VISIT: DATE	_____	_____		INT. NO.	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																
TIME	_____	_____		RESULT*	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td></td></tr> </table>																
				TOTAL NUMBER OF VISITS	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td></td></tr> </table>																
*RESULT CODES: 1 COMPLETED 4 REFUSED 7 OTHER _____ 2 NOT AT HOME 5 PARTLY COMPLETED SPECIFY _____ 3 POSTPONED 6 INCAPACITATED																					
LANGUAGE OF QUESTIONNAIRE** 0 1		LANGUAGE OF INTERVIEW** <table border="1" style="width: 40px; height: 20px;"></table>		NATIVE LANGUAGE OF RESPONDENT** <table border="1" style="width: 40px; height: 20px;"></table>																	
LANGUAGE OF QUESTIONNAIRE** ENGLISH		**LANGUAGE CODES: 01 ENGLISH 02 KINYARWANDA																			
SUPERVISOR <table border="1" style="width: 100%; height: 20px;"></table>		FIELD EDITOR <table border="1" style="width: 100%; height: 20px;"></table>		OFFICE EDITOR <table border="1" style="width: 100%; height: 20px;"></table>																	
NAME _____ NUMBER _____		NAME _____ NUMBER _____		NUMBER _____																	

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with [NAME OF ORGANIZATION]. We are conducting a survey about health and other topics all over [NAME OF COUNTRY]. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES
TO BE INTERVIEWED .. 1

RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED .. 2 → END



SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS MINUTES	
102	How long have you been living continuously in this village? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ALWAYS 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CAPITAL CITY 1 TOWN 2 RURAL AREA 3	
104	Before you moved here, which province did you live in?	KIGALI 01 SOUTH 02 WEST 03 NORTH 04 EAST 05 OUTSIDE OF COUNTRY 96	
105	In what month and year were you born?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
107	Have you ever attended school?	YES 1 NO 2	→ 111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRE-PRIMARY 1 PRIMARY 2 POST-PRIMARY/VOCATIONAL 3 SECONDARY 4 HIGHER 5	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP		
109	What is the highest [GRADE/FORM/YEAR] you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEARS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>			
110	CHECK 108: PRIMARY OR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table> SECONDARY HIGHER <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table> → 113				
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL 1 ABLE TO READ ONLY PART OF THE SENTENCE 2 ABLE TO READ WHOLE SENTENCE 3 NO CARD WITH REQUIRED LANGUAGE 4 (SPECIFY LANGUAGE) _____ BLIND/VISUALLY IMPAIRED 5			
112	CHECK 111: CODE '2', '3' OR '4' <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table> CIRCLED CODE '1' OR '5' <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td></tr></table> CIRCLED → 114				
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3			
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3			
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK 1 LESS THAN ONCE A WEEK 2 NOT AT ALL 3			
116	Do you own a mobile telephone?	YES 1 NO 2 → 118			
117	Do you use your mobile phone for any financial transactions?	YES 1 NO 2			
118	Do you have an account in a bank or other financial institution that you yourself use?	YES 1 NO 2			
119	Have you ever used the internet?	YES 1 NO 2 → 122			
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES 1 NO 2 → 122			
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY 1 AT LEAST ONCE A WEEK 2 LESS THAN ONCE A WEEK 3 NOT AT ALL 4			

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
122	What is your religion?	CATHOLIC 1 PROTESTANT 2 ADVENTIST 3 MUSLIM 4 TRADITIONAL 5 OTHER 6 NO RELIGION 7	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES NONE 00	→ 201
125	In the last 12 months, have you been away from home for more than one month at a time?	YES 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES 1 NO 2 DON'T KNOW 8	→ 206								
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES 1 NO 2	→ 204								
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS AT HOME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES 1 NO 2	→ 206								
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) DAUGHTERS ELSEWHERE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
205C	Where do your sons or daughters who do not live with you live?	BOARDING SCHOOL A RELATIVE B IN THE STREET C WORK D SPECIFY _____ MARRIED E OTHER X (SPECIFY) _____ DON'T KNOW Z									
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES 1 NO 2 DON'T KNOW 8	→ 208								
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> b) GIRLS DEAD <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ☐ HAS NOT HAD ANY CHILDREN ☐ HAS HAD ONLY ONE CHILD ☐		→ 211 → 301								
210	Did all of the children you have fathered have the same biological mother?	YES 1 NO 2	→ 211								
210A	In all, how many women have you fathered children with?	NUMBER OF WOMEN <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
211	CHECK 208: HAS HAD MORE THAN ONE CHILD ☐ HAS HAD ONLY ONE CHILD ☐ a) How old were you when your first child was born? b) How old were you when your child was born?	AGE IN YEARS	
212	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ☐ NO LIVING CHILDREN ☐	→ 301	
213	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ ONLY ONE LIVING CHILD ☐ a) How old is your youngest child? b) How old is your child?	AGE IN YEARS	
214	CHECK 213: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐ (YOUNGEST) CHILD IS AGE 3 YEARS OR OLDER ☐	→ 301	
215	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ ONLY ONE LIVING CHILD ☐ a) What is the name of your youngest child? b) What is the name of your child?	_____ (NAME OF (YOUNGEST) CHILD)	
216	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES 1 NO 2 DON'T KNOW 8	→ 218
217	Were you ever present during any of those antenatal check-ups?	PRESENT 1 NOT PRESENT 2	
218	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY 1 OTHER 2	
219	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL 1 ABOUT THE SAME 2 LESS THAN USUAL 3 NOTHING TO DRINK 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES NO	1 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES NO	1 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES NO	1 2
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES NO	1 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES NO	1 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES NO	1 2
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES NO	1 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES NO	1 2
09	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES NO	1 2
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES NO	1 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES NO	1 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES NO	1 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES NO	1 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO Y	

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																										
302	In the last few months have you: a) Heard about family planning on the radio? b) Seen anything about family planning on the television? c) Read about family planning in a newspaper or magazine? d) Received a voice or text message about family planning on a mobile phone?	<table> <tr> <td></td><td>YES</td><td>NO</td></tr> <tr> <td>a) RADIO</td><td>1</td><td>2</td></tr> <tr> <td>b) TELEVISION</td><td>1</td><td>2</td></tr> <tr> <td>c) NEWSPAPER OR MAGAZINE</td><td>1</td><td>2</td></tr> <tr> <td>d) MOBILE PHONE</td><td>1</td><td>2</td></tr> </table>		YES	NO	a) RADIO	1	2	b) TELEVISION	1	2	c) NEWSPAPER OR MAGAZINE	1	2	d) MOBILE PHONE	1	2																												
	YES	NO																																											
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b) TELEVISION	1	2																																											
c) NEWSPAPER OR MAGAZINE	1	2																																											
d) MOBILE PHONE	1	2																																											
303	In the last few months, have you discussed family planning with a health worker or health professional?	<table> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> </table>	YES	1	NO	2																																							
YES	1																																												
NO	2																																												
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	<table> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> <tr> <td>DON'T KNOW</td><td>8</td></tr> </table>	YES	1	NO	2	DON'T KNOW	8	→ 306																																				
YES	1																																												
NO	2																																												
DON'T KNOW	8																																												
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	<table> <tr> <td>JUST BEFORE HER PERIOD BEGINS</td><td>1</td></tr> <tr> <td>DURING HER PERIOD</td><td>2</td></tr> <tr> <td>RIGHT AFTER HER PERIOD HAS ENDED</td><td>3</td></tr> <tr> <td>HALFWAY BETWEEN TWO PERIODS</td><td>4</td></tr> <tr> <td>OTHER _____</td><td>6</td></tr> <tr> <td>(SPECIFY)</td><td></td></tr> <tr> <td>DON'T KNOW</td><td>8</td></tr> </table>	JUST BEFORE HER PERIOD BEGINS	1	DURING HER PERIOD	2	RIGHT AFTER HER PERIOD HAS ENDED	3	HALFWAY BETWEEN TWO PERIODS	4	OTHER _____	6	(SPECIFY)		DON'T KNOW	8																													
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DON'T KNOW	8																																												
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	<table> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> <tr> <td>DON'T KNOW</td><td>8</td></tr> </table>	YES	1	NO	2	DON'T KNOW	8																																					
YES	1																																												
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307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is a woman's concern and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	<table> <tr> <td></td><td>AGREE</td><td>DIS-AGREE</td><td>DK</td></tr> <tr> <td>a) CONTRACEPTION WOMAN'S CONCERN</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>b) WOMEN MAY BECOME PROMISCUOUS</td><td>1</td><td>2</td><td>8</td></tr> </table>		AGREE	DIS-AGREE	DK	a) CONTRACEPTION WOMAN'S CONCERN	1	2	8	b) WOMEN MAY BECOME PROMISCUOUS	1	2	8																															
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b) WOMEN MAY BECOME PROMISCUOUS	1	2	8																																										
307C	CHECK 301 (07) KNOWS MALE CONDOM: YES ☐ NO ☐		→ 401																																										
307D	Do you know of a place where a person can get a male condoms?	<table> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> </table>	YES	1	NO	2	→ 401																																						
YES	1																																												
NO	2																																												
307E	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE(S)) _____	PUBLIC/AGREE SECTOR <table> <tr> <td>REFERRAL HOSPITAL</td><td>A</td></tr> <tr> <td>PROVINCIAL/DISTRICT HOSPITAL</td><td>B</td></tr> <tr> <td>HEALTH CENTER</td><td>C</td></tr> <tr> <td>HEALTH POST</td><td>D</td></tr> <tr> <td>OUTREACH</td><td>E</td></tr> <tr> <td>COMMUNITY HEALTH WORKER</td><td>F</td></tr> <tr> <td>OTHER PUBLIC HEALTH FACILITY _____</td><td>G</td></tr> <tr> <td>(SPECIFY)</td><td></td></tr> </table> PRIVATE MEDICAL SECTOR <table> <tr> <td>POLYCLINIC</td><td>H</td></tr> <tr> <td>CLINIC</td><td>I</td></tr> <tr> <td>DISPENSARY</td><td>J</td></tr> <tr> <td>PHARMACY</td><td>K</td></tr> <tr> <td>FAMILY PLANNING CLINIC</td><td>L</td></tr> <tr> <td>OTHER PRIVATE HEALTH FACILITY _____</td><td>M</td></tr> <tr> <td>(SPECIFY)</td><td></td></tr> </table> OTHER SOURCES <table> <tr> <td>SHOP/BAR/KIOSK CONDOM</td><td>N</td></tr> <tr> <td>TRADITIONAL HEALER</td><td>O</td></tr> <tr> <td>FRIEND/RELATIVE</td><td>P</td></tr> <tr> <td>YOUTH CENTER</td><td>Q</td></tr> <tr> <td>OTHER FACILITY _____</td><td>X</td></tr> <tr> <td>(SPECIFY)</td><td></td></tr> </table>	REFERRAL HOSPITAL	A	PROVINCIAL/DISTRICT HOSPITAL	B	HEALTH CENTER	C	HEALTH POST	D	OUTREACH	E	COMMUNITY HEALTH WORKER	F	OTHER PUBLIC HEALTH FACILITY _____	G	(SPECIFY)		POLYCLINIC	H	CLINIC	I	DISPENSARY	J	PHARMACY	K	FAMILY PLANNING CLINIC	L	OTHER PRIVATE HEALTH FACILITY _____	M	(SPECIFY)		SHOP/BAR/KIOSK CONDOM	N	TRADITIONAL HEALER	O	FRIEND/RELATIVE	P	YOUTH CENTER	Q	OTHER FACILITY _____	X	(SPECIFY)		
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307F	If you wanted to, could you get a male condom by yourself ?	<table> <tr> <td>YES</td><td>1</td></tr> <tr> <td>NO</td><td>2</td></tr> </table>	YES	1	NO	2																																							
YES	1																																												
NO	2																																												

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED 1 YES, LIVING WITH A WOMAN 2 NO, NOT IN UNION 3	☐ → 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED 1 YES, LIVED WITH A WOMAN 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED 1 DIVORCED 2 SEPARATED 3	☐ → 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM 1 STAYING ELSEWHERE 2	
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE WIFE) 1 NO (ONLY ONE WIFE) 2	→ 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS	
407	CHECK 405: ONE WIFE/ PARTNER ☐ a) Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER ☐ b) Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ _____ _____ _____ LINE NUMBER 408 How old was (NAME) on her last birthday? AGE	
408	ASK 408 FOR EACH PERSON.		
409	CHECK 407: ONE WIFE/ PARTNER ☐ MORE THAN ONE WIFE/ PARTNER ☐		→ 411
410	Have you been married or lived with a woman only once or more than once?	MORE THAN ONCE 1 ONLY ONCE 2	
411	CHECK 405 AND 410: BOTH ARE CODE '2' ☐ a) In what month and year did you start living with your (wife/partner)? OTHER ☐ b) Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH DON'T KNOW MONTH 98 YEAR DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
413	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE 00 AGE IN YEARS	→ 501
415	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	→ 417 → 427

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
416	When was the last time you had sexual intercourse with this person?		DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3
417	The last time you had sexual intercourse with this person, was a condom used?	YES 1 NO 2 (SKIP TO 419) ←	YES 1 NO 2 (SKIP TO 419) ←	YES 1 NO 2 (SKIP TO 419) ←
418	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
419	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE 1 LIVE-IN PARTNER 2 GIRLFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)	WIFE 1 LIVE-IN PARTNER 2 GIRLFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)	WIFE 1 LIVE-IN PARTNER 2 GIRLFRIEND NOT LIVING WITH RESPONDENT 3 CASUAL ACQUAINTANCE .. 4 CLIENT/SEX WORKER .. 5 OTHER 6 (SPECIFY)
420	How long ago did you first have sexual intercourse with this person?	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4	DAYS AGO .. 1 WEEKS AGO .. 2 MONTHS AGO .. 3 YEARS AGO .. 4
421	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
422	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
423	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES 1 (GO BACK TO 416 IN NEXT COLUMN) ← NO 2 (SKIP TO 425) ←	YES 1 (GO BACK TO 416 IN NEXT COLUMN) ← NO 2 (SKIP TO 425) ←	
424	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS .. DON'T KNOW 98

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
425	CHECK 419 (ALL COLUMNS): AT LEAST ONE PARTNER ☐ IS A SEX WORKER ↓	NO PARTNERS ☐ ARE SEX WORKERS →	427
426	CHECK 419 AND 417 (ALL COLUMNS): CONDOM USED WITH ☐ EVERY SEX WORKER	OTHER ☐	430 431
427	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES 1 NO 2	429
428	Have you ever paid anyone in exchange for having sexual intercourse?	YES 1 NO 2	431
429	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES 1 NO 2	431
430	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES 1 NO 2 DON'T KNOW 8	
431	In the past 12 months have you given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES 1 NO 2	433
432	Have you ever given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES 1 NO 2	
433	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME DON'T KNOW 98	
434	CHECK 417: MOST RECENT PARTNER (FIRST COLUMN) CONDOM ☐ USED ↓	NOT ASKED ☐ NO CONDOM ☐ USED →	438 438
435	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	PRUDENCE 01 PLAISIR 02 LOVE 03 GENERIC CONDOM 04 OTHER 96 (SPECIFY) DON'T KNOW 98	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
436	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL / DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 OUTREACH 15 COMMUNITY HEALTH WORKER 16 OTHER PUBLIC SECTOR _____ 17 (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 FAMILY PLANING CLINIC 25 OTHER PRIVATE HEALTH _____ 26 (SPECIFY) OTHER SOURCE SHOP 31 CHURCH 32 FRIEND/RELATIVE 33 YOUTH CENTER 34 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
437	The last time you had sex did you or your partner use any method other than a condom to avoid or prevent a pregnancy?	YES 1 NO 2 DON'T KNOW 8	→ 439 → 440
438	The last time you had sex did you or your partner use any method to avoid or prevent a pregnancy?	YES 1 NO 2 DON'T KNOW 8	→ 440
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION A MALE STERILIZATION B IUD C INJECTABLES D IMPLANTS E PILL F CONDOM G FEMALE CONDOM H EMERGENCY CONTRACEPTION I STANDARD DAYS METHOD J LACTATIONAL AMENORRHEA METHOD K RHYTHM METHOD L WITHDRAWAL M OTHER MODERN METHOD X OTHER TRADITIONAL METHOD Y	→ 501
440	Do you know of a place where you can obtain a method of family planning?	YES 1 NO 2	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		→ 514								
502	CHECK 439: MAN NOT STERILIZED ☐ MAN STERILIZED ☐		→ 514								
503	CHECK 407: ONE WIFE/PARTNER ☐ MORE THAN ONE WIFE/PARTNER ☐		→ 509								
504	Is your (wife/partner) currently pregnant?	YES 1 NO 2 DON'T KNOW 8	→ 507								
505	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD 1 NO MORE 2 UNDECIDED/DON'T KNOW 8	→ 514								
506	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> YEARS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> SOON/NOW 993 OTHER 996 (SPECIFY) DON'T KNOW 998									→ 514
507	CHECK 208: HAS FATHERED CHILDREN ☐ HAS NOT FATHERED CHILDREN ☐ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS COUPLE CAN'T GET PREGNANT 3 WIFE/PARTNER STERILIZED 4 UNDECIDED/DON'T KNOW 8	→ 514								
508	CHECK 208: HAS FATHERED CHILDREN ☐ HAS NOT FATHERED CHILDREN ☐ a) How long would you like to wait from now before the birth of another child? b) How long would you like to wait from now before the birth of a child?	MONTHS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> YEARS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> SOON/NOW 993 SAYS COUPLE CAN'T GET PREGNANT 994 OTHER 996 (SPECIFY) DON'T KNOW 998									→ 514
509	Are any of your (wives/partners) currently pregnant?	YES 1 NO 2 DON'T KNOW 8	→ 512								

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
510	Now I have some questions about the future. After the (child/children) you and your (wives/partners) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD 1 NO MORE 2 UNDECIDED/DON'T KNOW 8	→ 514
511	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS 1 YEARS 2 SOON/NOW 993 OTHER 996 (SPECIFY) DON'T KNOW 998	→ 514
512	CHECK 208: HAS FATHERED CHILDREN ☐ HAS NOT FATHERED CHILDREN ☐ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS COUPLE CAN'T GET PREGNANT 3 (WIFE/WIVES/PARTNER(S)) STERILIZED 4 UNDECIDED/DON'T KNOW 8	→ 514
513	CHECK 208: HAS FATHERED CHILDREN ☐ HAS NOT FATHERED CHILDREN ☐ a) How long would you like to wait from now before the birth of another child? b) How long would you like to wait from now before the birth of a child?	MONTHS 1 YEARS 2 SOON/NOW 993 SAYS COUPLE CAN'T GET PREGNANT 994 OTHER 996 (SPECIFY) DON'T KNOW 998	
514	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ NO LIVING CHILDREN ☐ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE 00 NUMBER OTHER 96 (SPECIFY)	→ 601 → 601
515	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER .. OTHER 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days for at least one hour?	YES 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES 1 NO 2	→ 607
604	What is your occupation? That is, what kind of work do you mainly do?		
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY 1 CASH AND KIND 2 IN KIND ONLY 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		→ 612
608	CHECK 606: CODE '1' OR '2' CIRCLED ☐ OTHER ☐		→ 610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT 1 WIFE/PARTNER 2 RESPONDENT AND WIFE/PARTNER JOINTLY .. 3 OTHER 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT 1 WIFE/PARTNER 2 RESPONDENT AND WIFE/PARTNER JOINTLY .. 3 SOMEONE ELSE 4 OTHER 6	
611	Who usually makes decisions about making major household purchases?	RESPONDENT 1 WIFE/PARTNER 2 RESPONDENT AND WIFE/PARTNER JOINTLY .. 3 SOMEONE ELSE 4 OTHER 6	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 615
613	Do you have a title deed for any house you own?	YES 1 NO 2 DON'T KNOW 8	→ 615
614	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8	
615	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY 1 JOINTLY ONLY 2 BOTH ALONE AND JOINTLY 3 DOES NOT OWN 4	→ 618
616	Do you have a title deed for any land you own?	YES 1 NO 2 DON'T KNOW 8	→ 618
617	Is your name on the title deed?	YES 1 NO 2 DON'T KNOW 8	
618	In your opinion, is a husband justified in hitting or beating his wife in the following situations:	YES NO DK a) GOES OUT 1 2 8 b) NEGLECTS CHILDREN .. 1 2 8 c) ARGUES 1 2 8 d) REFUSES SEX 1 2 8 e) BURNS FOOD 1 2 8 f) SEX WITH SOMEONE 1 2 8 g) TELEPHONE 1 2 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES 1 NO 2	→ 727
702	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES 1 NO 2 DON'T KNOW 8	
703	Can people get HIV from mosquito bites?	YES 1 NO 2 DON'T KNOW 8	
704	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES 1 NO 2 DON'T KNOW 8	
705	Can people get HIV by sharing food with a person who has HIV?	YES 1 NO 2 DON'T KNOW 8	
706	Can people get HIV because of witchcraft or other supernatural means?	YES 1 NO 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have HIV?	YES 1 NO 2 DON'T KNOW 8	
707A	Can men reduce their chance of getting the AIDS virus by getting circumcised?	YES 1 NO 2 DON'T KNOW 8	
708	Can HIV be transmitted from a mother to her baby:	YES NO DK a) During pregnancy? a) DURING PREGNANCY ... 1 2 8 b) During delivery? b) DURING DELIVERY 1 2 8 c) By breastfeeding? c) BREASTFEEDING 1 2 8	
709	CHECK 708: AT LEAST ☐ ONE 'YES' ↓ OTHER ☐ → 711		
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES 1 NO 2 DON'T KNOW 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
711A	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus for prenatal purposes?	YES 1 NO 2	
711B	CHECK 401, 402, and 403: CURRENTLY MARRIED OR LIVING WITH A WOMAN ☐ FORMERLY MARRIED OR LIVING WITH A WOMEN ☐ NEVER MARRIED OR NEVER LIVED WITH A WOMAN ☐		712
711C	I don't want to know the results, but have you ever been tested as a couple with your wife/partner to see if you and/or him have the AIDS virus?	YES 1 NO 2	712
711D	I don't want to know the results, but have you and (your wife/partner) told each other the results of your tests?	YES 1 NO 2	
712	I don't want to know the results, but have you ever been tested for HIV?	YES 1 NO 2	716
713	How many months ago was your most recent HIV test?	MONTHS AGO TWO OR MORE YEARS 95	
714	I don't want to know the results, but did you get the results of the test?	YES 1 NO 2	
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 OUTREACH 15 COMMUNITY HEALTH WORKER 16 OTHER PUBLIC SECTOR 17 _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 FAMILY PLANNING CLINIC 25 OTHER PRIVATE MEDICAL SECTOR 26 _____ (SPECIFY) OTHER SOURCE HOME 31 WORKPLACE 32 CORRECTIONAL FACILITY 33 YOUTH CENTER 34 OTHER 96 _____ (SPECIFY)	718
716	Do you know of a place where people can go to get an HIV test?	YES 1 NO 2	718

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
717	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR G _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K FAMILY PLANNING CLINIC L OTHER PRIVATE MEDICAL SECTOR M _____ (SPECIFY) OTHER X _____ (SPECIFY)	
718	Have you heard of test kits people can use to test themselves for HIV?	YES 1 NO 2	→ 720
719	Have you ever tested yourself for HIV using a self-test kit?	YES 1 NO 2	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
720	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
721	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
722	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
723	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
724	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES 1 NO 2 DON'T KNOW/NOT SURE/DEPENDS 8	
725	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE 1 DISAGREE 2 DON'T KNOW/NOT SURE/DEPENDS 8	
726	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES 1 NO 2 SAYS HE HAS HIV 3 DON'T KNOW/NOT SURE/DEPENDS 8	
727	CHECK 701: HEARD ABOUT ☐ HIV OR AIDS ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT ☐ HIV OR AIDS ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES 1 NO 2	
728	CHECK 414: HAS HAD SEXUAL ☐ INTERCOURSE ↓ NEVER HAD SEXUAL ☐ INTERCOURSE → 736		
729	CHECK 727: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ ↓ NO ☐ → 731		
730	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES 1 NO 2 DON'T KNOW 8	
731	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES 1 NO 2 DON'T KNOW 8	
732	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES 1 NO 2 DON'T KNOW 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
733	CHECK 730, 731 AND 732: HAS HAD AN INFECTION (ANY 'YES') ☐ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐		→ 736
734	The last time you had (PROBLEM FROM 730/731/732), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 736
735	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR REFERRAL HOSPITAL A PROVINCIAL/DISTRICT HOSPITAL B HEALTH CENTER C HEALTH POST D OUTREACH E COMMUNITY HEALTH WORKER F OTHER PUBLIC SECTOR G _____ (SPECIFY) PRIVATE MEDICAL SECTOR POLYCLINIC H CLINIC I DISPENSARY J PHARMACY K FAMILY PLANING CLINIC L OTHER PRIVATE HEALTH M _____ (SPECIFY) OTHER SOURCE SHOP/ BAR N TRADITIONAL HEALER O FRIEND/RELATIVE P YOUTH CENTER Q OTHER X _____ (SPECIFY)	
736	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES 1 NO 2 DON'T KNOW 8	
737	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES 1 NO 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES 1 NO 2 DON'T KNOW 8	→ 805
802	How old were you when you got circumcised?	AGE IN COMPLETED YEARS DURING CHILDHOOD (<5 YEARS) 95 DON'T KNOW 98	
803	Who did the circumcision?	TRADITIONAL PRACTITIONER/FAMILY/FRIEND 1 HEALTH WORKER/PROFESSIONAL 2 OTHER 3 DON'T KNOW 8	
804	Where was it done?	HEALTH FACILITY 1 HOME OF A HEALTH WORKER/PROFESSIONAL 2 CIRCUMCISION DONE AT HOME 3 RITUAL SITE 4 OTHER HOME/PLACE 5 DON'T KNOW 8	
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS NONE 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES 1 NO 2 DON'T KNOW 8	
808	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 811 → 810
809	In the past, have you smoked tobacco every day?	YES 1 NO 2	→ 812
810	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 813

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Kreteks? d) Pipes full of tobacco? e) Cigars, cheroots, or cigarillos? f) Number of water pipe sessions? g) Any others? _____ (SPECIFY)	NUMBER DAILY a) MANUFACTURED CIGARETTES b) HAND-ROLLED CIGARETTES c) KRETEKS d) PIPES FULL OF TOBACCO e) CIGARS, CHEROOTS, OR CIGARILLOS f) NUMBER OF WATER PIPE SESSIONS g) OTHERS	→ 813
812	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Kreteks? d) Pipes full of tobacco? e) Cigars, cheroots, or cigarillos? f) Number of water pipe sessions? g) Any others? _____ (SPECIFY)	NUMBER WEEKLY a) MANUFACTURED CIGARETTES b) HAND-ROLLED CIGARETTES c) KRETEKS d) PIPES FULL OF TOBACCO e) CIGARS, CHEROOTS, OR CIGARILLOS f) NUMBER OF WATER PIPE SESSIONS g) OTHERS	
813	Do you currently use smokeless tobacco every day, some days, or not at all?	EVERY DAY 1 SOME DAYS 2 NOT AT ALL 3	→ 815 → 816

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Betel quid with tobacco? e) Any others? _____ (SPECIFY)	TIMES DAILY a) SNUFF, BY MOUTH b) SNUFF, BY NOSE c) CHEWING TOBACCO d) BETEL QUID WITH TOBACCO e) ANY OTHERS	816
815	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Betel quid with tobacco? e) Any others? _____ (SPECIFY)	TIMES WEEKLY a) SNUFF, BY MOUTH b) SNUFF, BY NOSE c) CHEWING TOBACCO d) BETEL QUID WITH TOBACCO e) ANY OTHERS	
815F	How does tuberculosis spread from one person to another? PROBE: Any other ways? RECORD ALL MENTIONED.	THROUGH THE AIR, WHEN SOMEONE WITH TB COUGH, SNEEZ OR SPEAK A THROUGH SHARING UTENSILS B THROUGH TOUCHING A PERSON WITH TB C THROUGH SHARING FOOD OR DRINK WITH A PERSON WITH TB D THROUGH SEXUAL CONTACT E THROUGH MOSQUITO BITES F OTHER X (SPECIFY) DON'T KNOW Z	
815G	What are the main ways to avoid TB bacilli spread?	SEEK FOR CARE WHEN HAVING SYMPTOMS SUGGESTIVE OF TB A COVER THE MOUTH WHEN SNEEZING B OPEN WINDOWS C OTHER X SPECIFY DON'T KNOW Z	
815H	Who is most at risk of getting Tuberculosis disease ?	EVERY BODY 1 POOREST PEOPLE 2 HEAVY MANUAL LABOR 3 CHILDREN 4 PEOPLE LIVING WITH HIV 5 HEAVY SMOKERS 6 ELDERLY PEOPLE 7 PEOPLE LIVING WITH A TB CASE 8 OTHER (SPECIFY) 9 SPECIFY DON'T KNOW 96	
815I	What are the main symptoms of Tuberculosis diseases ?	COUGH OF MORE THAN 2 WEEKS A FEVER B DRENCHING NIGHT SWEATS C UNEXPECTED LOSS OF WEIGHT D GENERAL FATIGUE/MALAISE E CHEST PAIN F DON'T KNOW Z	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815J	Do you currently have the following symptoms: PROBE FOR TIME		
	k) Cough?	YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3	
	l) Fever?	YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3	
	m) Drenching night sweats?	YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3	
	n) Unexpected weight lost?	YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3	
	o) General fatigue or malaise?	YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3	
	p) Chest pain?	YES, TWO WEEKS OR LONGER 1 YES, LESS THAN TWO WEEKS 2 NO 3	
815Q	CHECK 815J: IF AT LEAST ONE SYMPTOM "YES" ☐ CODE "1" OR "2" CIRCLED	IF "NO" ☐ TO ALL SYMPTOMS	816
815R	Have you ever sought care or help?	YES 1 NO 2	816
815S	(IF "YES") Where did you seek care or help?	PUBLIC SECTOR REFERRAL HOSPITAL 11 PROVINCIAL/DISTRICT HOSPITAL 12 HEALTH CENTER 13 HEALTH POST 14 OUTREACH 15 COMMUNITY HEALTH WORKER 16 OTHER PUBLIC SECTOR 17 (SPECIFY) _____ PRIVATE MEDICAL SECTOR POLYCLINIC 21 CLINIC 22 DISPENSARY 23 PHARMACY 24 OTHER PRIVATE MEDICAL SECTOR 25 (SPECIFY) _____ OTHER SOURCE SHOP 31 TRADITIONAL HEALER 32 FRIEND/RELATIVE 33 YOUTH CENTER 34 OTHER 96 (SPECIFY) _____	
816	Are you covered by any health insurance?	YES 1 NO 2	DV00
817	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUELLE/COMMUNITY HEALTH INSURANCE A RAMA/RSSB B MMI C PRIVATE INSURANCE COMPANY D EMPLOYER E OTHER X (SPECIFY) _____ DON'T KNOW Z	

SECTION DV: DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																								
DV00	CHECK THE OVER PAGE IF THIS MAN SELECTED FOR MALE DV QUESTIONNAIRE WOMAN SELECTED ☐ FOR THIS SECTION ↓ WOMAN ☐ NOT SELECTED →		CLOSE INTERVIEW																								
DV01	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED 1 ↓ PRIVACY NOT POSSIBLE 2 →		DV32																								
DV01A	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a man's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of men in Rwanda. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.																										
DV02	CHECK 401 AND 402: CURRENTLY MARRIED/LIVING WITH A WOMAN ☐ ↓ FORMERLY MARRIED/LIVED WITH A WOMAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/PARTNER') ☐ ↓ NEVER MARRIED/NEVER LIVED WITH A WOMAN ☐ →		DV16																								
DV03	First, I am going to ask you about some situations which happen to some men. Please tell me if these apply to your relationship with your (last) (wife/partner)? a) She (is/was) jealous or angry if you (talk/talked) to other b) She frequently (accuses/accused) you of being unfaithful? c) She (does/did) not permit you to meet your male friends? d) She (tries/tried) to limit your contact with your family? e) She (insists/insisted) on knowing where you (are/were) at all times?	<table> <thead> <tr> <th></th><th>YES</th><th>NO</th><th>DK</th></tr> </thead> <tbody> <tr> <td>JEALOUS</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>ACCUSES</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NOT MEET FRIENDS ..</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>NO FAMILY</td><td>1</td><td>2</td><td>8</td></tr> <tr> <td>WHERE YOU ARE</td><td>1</td><td>2</td><td>8</td></tr> </tbody> </table>		YES	NO	DK	JEALOUS	1	2	8	ACCUSES	1	2	8	NOT MEET FRIENDS ..	1	2	8	NO FAMILY	1	2	8	WHERE YOU ARE	1	2	8	
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NOT MEET FRIENDS ..	1	2	8																								
NO FAMILY	1	2	8																								
WHERE YOU ARE	1	2	8																								
DV04	Now I need to ask some more questions about your relationship with your (last) (wife/partner). A. Did your (last) (wife/ partner) ever: a) say or do something to humiliate you in front of others? b) threaten to hurt or harm you or someone you care about? c) insult you or make you feel bad about yourself?	B. How often did this happen during the last 12 months: often, only sometimes, or not at all? <table> <thead> <tr> <th>EVER</th><th>OFTEN</th><th>SOME-TIMES</th><th>NOT IN LAST 12 MONTHS</th></tr> </thead> <tbody> <tr> <td>a) YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>b) YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> <tr> <td>c) YES 1 NO 2 ↓</td><td>→ 1</td><td>2</td><td>3</td></tr> </tbody> </table>	EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS	a) YES 1 NO 2 ↓	→ 1	2	3	b) YES 1 NO 2 ↓	→ 1	2	3	c) YES 1 NO 2 ↓	→ 1	2	3									
EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS																								
a) YES 1 NO 2 ↓	→ 1	2	3																								
b) YES 1 NO 2 ↓	→ 1	2	3																								
c) YES 1 NO 2 ↓	→ 1	2	3																								

DV05	A. Did your (last) (wife/ partner) ever do any of the following things to you:		B. How often did this happen during the last 12 months: often, only sometimes, or not at all?			
		EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
	a) push you, shake you, or throw something at you?	YES 1 NO 2	→ 1	2	3	
	b) slap you?	YES 1 NO 2	→ 1	2	3	
	c) twist your arm or pull your hair?	YES 1 NO 2	→ 1	2	3	
	d) punch you with his fist or with something that could hurt you?	YES 1 NO 2	→ 1	2	3	
	e) kick you, drag you, or beat you up?	YES 1 NO 2	→ 1	2	3	
	f) try to choke you or burn you on purpose?	YES 1 NO 2	→ 1	2	3	
	g) threaten or attack you with a knife, gun, or other weapon?	YES 1 NO 2	→ 1	2	3	
	h) Physically force you to have sexual intercourse with him when you did not want to?	YES 1 NO 2	→ 1	2	3	
	i) physically force you to perform any other sexual acts you did not want to?	YES 1 NO 2	→ 1	2	3	
	j) force you with threats or in any other way to perform sexual acts you did not want to?	YES 1 NO 2	→ 1	2	3	
DV06	CHECK DV05A (a-j):					
	AT LEAST ONE 'YES' ☐		NOT A SINGLE 'YES' ☐			→ DV09
DV07	How long after you first (got married/started living together) with your (last) (wife/partner) did (this/any of these things) first happen?		NUMBER OF YEARS			
	IF LESS THAN ONE YEAR, RECORD '00'.		BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95			
DV08	Did the following ever happen as a result of what your (last) (wife/partner) did to you:					
	a) You had cuts, bruises, or aches?	YES 1 NO 2				
	b) You had eye injuries, sprains, dislocations, or burns?	YES 1 NO 2				
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES 1 NO 2				

DV09	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (wife/partner) at times when she was not already beating or physically hurting you?	YES 1 NO 2	→ DV11																									
DV10	In the last 12 months, how often have you done this to your (last) (wife/partner): often, only sometimes, or not at all?	OFTEN 1 SOMETIMES 2 NOT AT ALL 3																										
DV11	Does (did) your (last) (wife/partner) drink alcohol?	YES 1 NO 2	→ DV13																									
DV12	How often does (did) she get drunk: often, only sometimes, or never?	OFTEN 1 SOMETIMES 2 NEVER 3																										
DV13	Are (Were) you afraid of your (last) (wife/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID 1 SOMETIMES AFRAID 2 NEVER AFRAID 3																										
DV14	CHECK 409: MARRIED MORE ☐ THAN ONCE ↓ MARRIED ONLY ☐ ONCE			→ DV16																								
DV15	A. So far we have been talking about the behavior of your (current/last) (wife/partner). Now I want to ask you about the behavior of any previous (wife/partner). B. How long ago did this last happen? <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th><th>EVER</th><th></th><th>0 - 11 MONTHS AGO</th><th>12+ MONTHS AGO</th><th>DON'T REMEMBER</th></tr> </thead> <tbody> <tr> <td>a) Did any previous (wife/partner) ever hit, slap, kick, or do anything else to hurt you physically?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>b) Did any previous (wife/partner) physically force you to have intercourse or perform any other sexual acts against your will?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> <tr> <td>c) Did any previous (wife/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?</td><td>YES 1 NO 2 ↓</td><td>→</td><td>1</td><td>2</td><td>3</td></tr> </tbody> </table>				EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER	a) Did any previous (wife/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 NO 2 ↓	→	1	2	3	b) Did any previous (wife/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES 1 NO 2 ↓	→	1	2	3	c) Did any previous (wife/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?	YES 1 NO 2 ↓	→	1	2	3	
	EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER																							
a) Did any previous (wife/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 NO 2 ↓	→	1	2	3																							
b) Did any previous (wife/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES 1 NO 2 ↓	→	1	2	3																							
c) Did any previous (wife/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?	YES 1 NO 2 ↓	→	1	2	3																							
DV16	CHECK 401 AND 402: EVER MARRIED/EVER ☐ LIVED WITH A WOMAN ↓ NEVER MARRIED/NEVER ☐ LIVED WITH A WOMAN ↓ a) From the time you were 15 years old has anyone other than (your/any) (wife/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically? YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3 → DV22																											

DV17	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/FATHER A STEP-MOTHER/STEP-FATHER B SISTER/BROTHER C DAUGHTER/SON D OTHER RELATIVE E CURRENT GIRLFRIEND F FORMER GIRLFRIEND G MOTHER-IN-LAW H FATHER-IN-LAW I OTHER IN-LAW J TEACHER K EMPLOYER/SOMEONE AT WORK L POLICE/SOLDIER M OTHER _____ X (SPECIFY)	
DV18	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN 1 SOMETIMES 2 NOT AT ALL 3	
DV18A	CHECK DV17 MORE THAN ONE RESPONSE SELECTED ☐ ONLY ONE RESPONSE SELECTED ☐		DV22B
DV18B	Who is the main person that has hurt you in this way in the last 12 months?	MOTHER/STEP-MOTHER 1 FATHER/STEP-FATHER 2 SISTER/BROTHER 3 DAUGHTER/SON 4 OTHER RELATIVE 5 CURRENT GIRLFRIEND 6 FORMER GIRLFRIEND 7 MOTHER-IN-LAW 8 FATHER-IN-LAW 9 OTHER IN-LAW 10 TEACHER 11 EMPLOYER/SOMEONE AT WORK 12 POLICE/SOLDIER 13 OTHER _____ 96 (SPECIFY)	
DV22	CHECK 401 AND 402: EVER MARRIED/EVER LIVED WITH A WOMAN ☐ NEVER MARRIED/NEVER LIVED WITH A WOMAN ☐		DV22B
DV22A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (wife/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	→ DV23 → DV24A
DV22B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES 1 NO 2 REFUSED TO ANSWER/ NO ANSWER 3	→ DV26

DV23	Who was the person who was forcing you the very first time this happened?	CURRENT/FORMER GIRLFRIEND . . . 01 FATHER/STEP-FATHER 02 BROTHER/STEP-BROTHER 03 OTHER RELATIVE 04 IN-LAW 05 OWN FRIEND/ACQUAINTANCE 06 FAMILY FRIEND 07 TEACHER 08 EMPLOYER/SOMEONE AT WORK . . . 09 POLICE/SOLDIER 10 PRIEST/RELIGIOUS LEADER 11 STRANGER 12 OTHER _____ 96 (SPECIFY)	
DV24	CHECK 401 AND 402: EVER MARRIED/EVER ☐ LIVED WITH A WOMAN a) In the last 12 months, has anyone other than (your/any) (wife/partner) physically forced you to have sexual intercourse when you did not want to?	NEVER MARRIED/NEVER ☐ LIVED WITH A WOMAN b) In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES 1 NO 2
DV24A	CHECK DV05A (h-j) and DV15A(b) AT LEAST ONE ☐ 'YES'		NOT A ☐ SINGLE 'YES'
DV25	CHECK 401 AND 402: EVER MARRIED/EVER ☐ LIVED WITH A WOMAN a) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) wife/partner?	NEVER MARRIED/NEVER ☐ LIVED WITH A WOMAN b) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS DON'T KNOW 98
DV26	CHECK DV05A (a-j), DV15A (a-c), DV16, DV22A, AND DV22B: AT LEAST ONE ☐ 'YES'		NOT A SINGLE ☐ 'YES'
DV27	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES 1 NO 2	

DV28	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY A HUSBAND'S/PARTNER'S FAMILY B CURRENT/FORMER HUSBAND/PARTNER C CURRENT/FORMER BOYFRIEND D FRIEND E NEIGHBOR F RELIGIOUS LEADER G DOCTOR/MEDICAL PERSONNEL H POLICE I LAWYER J SOCIAL SERVICE ORGANIZATION K OTHER _____ X (SPECIFY)	→ DV30																
DV29	Have you ever told any one about this?	YES 1 NO 2																	
DV30	As far as you know, did your father ever beat your mother?	YES 1 NO 2 DON'T KNOW 8																	
		THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE																	
DV31	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	<table border="1"> <thead> <tr> <th></th> <th>YES, ONCE</th> <th>YES, MORE THAN ONCE</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>WIFE</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>OTHER FEMALE ADULT</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>MALE ADULT</td> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>		YES, ONCE	YES, MORE THAN ONCE	NO	WIFE	1	2	3	OTHER FEMALE ADULT	1	2	3	MALE ADULT	1	2	3	
	YES, ONCE	YES, MORE THAN ONCE	NO																
WIFE	1	2	3																
OTHER FEMALE ADULT	1	2	3																
MALE ADULT	1	2	3																
DV32	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE. _____ _____ _____																		
DV33	RECORD THE TIME.	HOURS <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MINUTES <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																	

CAPILLARY BLOOD

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

IDENTIFICATION					
PLACE NAME _____					
NAME OF HOUSEHOLD HEAD _____					
CLUSTER NUMBER					
HOUSEHOLD NUMBER					
HOUSEHOLD SELECTED FOR MAN'S SURVEY AND BIOMARKERS? (1=YES, 2=NO)					
BIOMARKER VISITS					
	1	2	3	FINAL VISIT	
DATE	_____	_____	_____	DAY	
BIOMARKER'S NAME	_____	_____	_____	MONTH	
				YEAR	2 0
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS	
TIME	_____	_____			
NOTES:				TOTAL ELIGIBLE WOMEN	

_____				TOTAL ELIGIBLE MEN	

_____				TOTAL ELIGIBLE CHILDREN	

LANGUAGE OF QUESTIONNAIRE**		0 1	LANGUAGE OF INTERVIEW**		
LANGUAGE OF QUESTIONNAIRE**		0 1		NATIVE LANGUAGE OF RESPONDENT**	
LANGUAGE OF QUESTIONNAIRE**		0 1		TRANSLATOR (YES = 1, NO = 2)	
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LANGUAGE OF QUESTIONNAIRE**		0 1		TRANSLATOR (YES = 1, NO = 2)	
LANGUAGE OF QUESTIONNAIRE**		0			

WEIGHT, HEIGHT AND HEMOGLOBIN, AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	INTERVIEWER TO COMPLETE Q. 102-103 USING TABLET REPORT USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
103	FROM TABLET'S REPORT: IF MOTHER INTERVIEWED COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
104	CHECK 103: CHILD BORN IN 2014-2019?	YES 1 NO 2 (SKIP TO 133) ←	YES 1 NO 2 (SKIP TO 133) ←	YES 1 NO 2 (SKIP TO 133) ←
104A	MEASURER AND ASSISTANT START FROM HERE			
105	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
106	ASSISTANT TO RECORD HEIGHT/LENGTH IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS 1 (SKIP TO 133) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 133) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 114) ← OLDER 2

		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
110	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2014 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3
113	ASK CONSENT FOR MALARIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking children all over the country to take a test to see if they have malaria. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. This survey will assist the government to develop programs to prevent malaria. We ask that all children born in 2014 or later take part in malaria testing in this survey and give a few drops of blood from a finger or heel. One blood drop will be tested for malaria immediately, and the result will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to take a malaria rapid test and give drops on slide for Laboratory analysis?		
114	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3

		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
114A	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
115	PLACE BAR CODE LABEL FOR MALARIA LAB TEST.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.
116	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996
RESULTS OF MALARIA RDT TEST				
117	CIRCLE THE CODE FOR THE MALARIA RDT.	TESTED 1 NOT PRESENT 2 REFUSED 3 OTHER 6 (SKIP TO 119) ←	TESTED 1 NOT PRESENT 2 REFUSED 3 OTHER 6 (SKIP TO 119) ←	TESTED 1 NOT PRESENT 2 REFUSED 3 OTHER 6 (SKIP TO 119) ←
118	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE PAMPHLET.	POSITIVE 1 (SKIP TO 121) ← NEGATIVE 2 OTHER 6	POSITIVE 1 (SKIP TO 121) ← NEGATIVE 2 OTHER 6	POSITIVE 1 (SKIP TO 121) ← NEGATIVE 2 OTHER 6
119	CHECK 116: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←
120	<u>SEVERE ANEMIA REFERRAL</u> RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL FORM.	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately. (SKIP TO 133)		

		CHILD 1	CHILD 2	CHILD 3																																																																																	
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER																																																																																	
121	Does (NAME) suffer from any of the following illnesses or symptoms:	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a) EXTREME WEAKNESS</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) HEART PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) LOSS OF CONSCIOUS.</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) RAPID BREATHING</td> <td>1</td> <td>2</td> </tr> <tr> <td>e) SEIZURES</td> <td>1</td> <td>2</td> </tr> <tr> <td>f) BLEEDING</td> <td>1</td> <td>2</td> </tr> <tr> <td>g) JAUNDICE</td> <td>1</td> <td>2</td> </tr> <tr> <td>h) DARK URINE</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	a) EXTREME WEAKNESS	1	2	b) HEART PROBLEMS	1	2	c) LOSS OF CONSCIOUS.	1	2	d) RAPID BREATHING	1	2	e) SEIZURES	1	2	f) BLEEDING	1	2	g) JAUNDICE	1	2	h) DARK URINE	1	2	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a) EXTREME WEAKNESS</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) HEART PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) LOSS OF CONSCIOUS.</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) RAPID BREATHING</td> <td>1</td> <td>2</td> </tr> <tr> <td>e) SEIZURES</td> <td>1</td> <td>2</td> </tr> <tr> <td>f) BLEEDING</td> <td>1</td> <td>2</td> </tr> <tr> <td>g) JAUNDICE</td> <td>1</td> <td>2</td> </tr> <tr> <td>h) DARK URINE</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	a) EXTREME WEAKNESS	1	2	b) HEART PROBLEMS	1	2	c) LOSS OF CONSCIOUS.	1	2	d) RAPID BREATHING	1	2	e) SEIZURES	1	2	f) BLEEDING	1	2	g) JAUNDICE	1	2	h) DARK URINE	1	2	<table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>a) EXTREME WEAKNESS</td> <td>1</td> <td>2</td> </tr> <tr> <td>b) HEART PROBLEMS</td> <td>1</td> <td>2</td> </tr> <tr> <td>c) LOSS OF CONSCIOUS.</td> <td>1</td> <td>2</td> </tr> <tr> <td>d) RAPID BREATHING</td> <td>1</td> <td>2</td> </tr> <tr> <td>e) SEIZURES</td> <td>1</td> <td>2</td> </tr> <tr> <td>f) BLEEDING</td> <td>1</td> <td>2</td> </tr> <tr> <td>g) JAUNDICE</td> <td>1</td> <td>2</td> </tr> <tr> <td>h) DARK URINE</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	a) EXTREME WEAKNESS	1	2	b) HEART PROBLEMS	1	2	c) LOSS OF CONSCIOUS.	1	2	d) RAPID BREATHING	1	2	e) SEIZURES	1	2	f) BLEEDING	1	2	g) JAUNDICE	1	2	h) DARK URINE	1	2
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122	CHECK 121: ANY 'YES' CIRCLED?	NO ☐ YES ☐ (SKIP TO 125)	NO ☐ YES ☐ (SKIP TO 125)	NO ☐ YES ☐ (SKIP TO 125)																																																																																	
123	CHECK 116: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 (SKIP TO 125) ← 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 (SKIP TO 125) ← 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 (SKIP TO 125) ← 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6																																																																																	
124	In the past two weeks has (NAME) taken or is taking ACT given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT	YES 1 (SKIP TO 126) ← NO 2 (SKIP TO 127) ←	YES 1 (SKIP TO 126) ← NO 2 (SKIP TO 127) ←	YES 1 (SKIP TO 126) ← NO 2 (SKIP TO 127) ←																																																																																	
125	<u>SEVERE MALARIA REFERRAL</u> RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taken to a health facility right away, if the child has already taken a treatment for malaria please take him to the nearest health facility for a check up, to determine if the malaria is cured. (SKIP TO 131)																																																																																			

		CHILD 1	CHILD 2	CHILD 3															
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER															
126	ALREADY TAKING ACT REFERRAL STATEMENT	You have told me that (NAME OF CHILD) had already received ACT for malaria. Therefore, I cannot give you additional ACT. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ACT, you should take the child to the nearest health facility for further examination. (SKIP TO 133)																	
127	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER ADULT.	The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called ACT. ACT is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.																	
128	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE . 1 _____ (SIGN) REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 _____ (SIGN) REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 _____ (SIGN) REFUSED 2 OTHER 6															
129	CHECK 128: MEDICATION ACCEPTED	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 133) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 133) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 133) ←															
130	TREATMENT FOR CHILDREN WITH POSITIVE MALARIA TESTS	<table border="1"> <thead> <tr> <th colspan="3">TREATMENT WITH ACT</th> </tr> <tr> <th>WEIGHT (in kg)</th> <th>AGE</th> <th>ARTEMETHER-LUMEFANTRINE</th> </tr> </thead> <tbody> <tr> <td>LESS THAN 5 KGS</td> <td>NOTHING</td> <td>NOTHING</td> </tr> <tr> <td>5-14 KGS</td> <td>6 MONTHS - 3 YEARS</td> <td>1 TAB TWICE A DAY FOR 3 DAYS</td> </tr> <tr> <td>15-25 KGS</td> <td>4 - 8 YEARS</td> <td>2 TABS TWICE A DAY FOR 3 DAYS</td> </tr> </tbody> </table> IF CHILD WEIGHS LESS THAN 5 KGS, DO NOT LEAVE DRUGS. TELL PARENTS TO TAKE CHILD TO HEALTH FACILITY. ALSO TELL THE PARENT/OTHER ADULT: If [NAME] has a high fever, fast or difficult breathing, is not able to drink or breastfeed, gets sicker or does not get better in two days, you should take him/her to a health professional for treatment right away. (SKIP TO 133)			TREATMENT WITH ACT			WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE	LESS THAN 5 KGS	NOTHING	NOTHING	5-14 KGS	6 MONTHS - 3 YEARS	1 TAB TWICE A DAY FOR 3 DAYS	15-25 KGS	4 - 8 YEARS	2 TABS TWICE A DAY FOR 3 DAYS
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WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE																	
LESS THAN 5 KGS	NOTHING	NOTHING																	
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15-25 KGS	4 - 8 YEARS	2 TABS TWICE A DAY FOR 3 DAYS																	
131	CHECK 116: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←															
132	<u>SEVERE ANEMIA REFERRAL</u> RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL FORM.	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately.																	
133	GO BACK TO 102 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.																		

WEIGHT, HEIGHT AND HEMOGLOBIN, AND MALARIA TESTING FOR CHILDREN AGE 0-5

101	INTERVIEWER TO COMPLETE Q. 102-103 USING TABLET REPORT USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 4	CHILD 5	CHILD 6
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
103	FROM TABLET'S REPORT: IF MOTHER INTERVIEWED COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
104	CHECK 103: CHILD BORN IN 2014-2019?	YES 1 NO 2 (SKIP TO 133) ←	YES 1 NO 2 (SKIP TO 133) ←	YES 1 NO 2 (SKIP TO 133) ←
104A	MEASURER AND ASSISTANT START FROM HERE			
105	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
106	ASSISTANT TO RECORD HEIGHT/LENGTH IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS 1 (SKIP TO 133) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 133) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 114) ← OLDER 2

		CHILD 4	CHILD 5	CHILD 6
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
110	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2014 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3
113	ASK CONSENT FOR MALARIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking children all over the country to take a test to see if they have malaria. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. This survey will assist the government to develop programs to prevent malaria. We ask that all children born in 2014 or later take part in malaria testing in this survey and give a few drops of blood from a finger or heel. One blood drop will be tested for malaria immediately, and the result will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to take a malaria rapid test and give drops on slide for Laboratory analysis?		
114	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3

		CHILD 4	CHILD 5	CHILD 6
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
114A	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
115	PLACE BAR CODE LABEL FOR MALARIA LAB TEST.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.
116	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL REFUSED 995 OTHER 996	G/DL REFUSED 995 OTHER 996	G/DL REFUSED 995 OTHER 996
RESULTS OF MALARIA RDT TEST				
117	CIRCLE THE CODE FOR THE MALARIA RDT.	TESTED 1 NOT PRESENT 2 REFUSED 3 OTHER 6 (SKIP TO 119) ←	TESTED 1 NOT PRESENT 2 REFUSED 3 OTHER 6 (SKIP TO 119) ←	TESTED 1 NOT PRESENT 2 REFUSED 3 OTHER 6 (SKIP TO 119) ←
118	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE PAMPHLET.	POSITIVE 1 (SKIP TO 121) ← NEGATIVE 2 OTHER 6	POSITIVE 1 (SKIP TO 121) ← NEGATIVE 2 OTHER 6	POSITIVE 1 (SKIP TO 121) ← NEGATIVE 2 OTHER 6
119	CHECK 116: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133) ←
120	<u>SEVERE ANEMIA REFERRAL</u> RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL FORM.	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately. (SKIP TO 133)		

		CHILD 4	CHILD 5	CHILD 6
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
121	Does (NAME) suffer from any of the following illnesses or symptoms: a) Extreme weakness? b) Heart problems? c) Loss of consciousness? d) Rapid or difficult breathing? e) Seizures? f) Abnormal bleeding? g) Jaundice or yellow skin? h) Dark urine?	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2
122	CHECK 121: ANY 'YES' CIRCLED?	NO YES ☐ ☐ (SKIP TO 125) ←	NO YES ☐ ☐ (SKIP TO 125) ←	NO YES ☐ ☐ (SKIP TO 125) ←
123	CHECK 116: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 (SKIP TO 125) ← ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 (SKIP TO 125) ← ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 (SKIP TO 125) ← ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6
124	In the past two weeks has (NAME) taken or is taking ACT given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT	YES 1 (SKIP TO 126) ← ☐ NO 2 (SKIP TO 127) ← ☐	YES 1 (SKIP TO 126) ← ☐ NO 2 (SKIP TO 127) ← ☐	YES 1 (SKIP TO 126) ← ☐ NO 2 (SKIP TO 127) ← ☐
125	<u>SEVERE MALARIA REFERRAL</u> RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taken to a health facility right away, if the child has already taken a treatment for malaria please take him to the nearest health facility for a check up, to determine if the (SKIP TO 131)		

		CHILD 4	CHILD 5	CHILD 6															
102	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER															
126	ALREADY TAKING ACT REFERRAL STATEMENT	You have told me that (NAME OF CHILD) had already received ACT for malaria. Therefore, I cannot give you additional ACT. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ACT, you should take the child to the nearest health facility for further examination. (SKIP TO 133)																	
127	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER ADULT.	The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called ACT. ACT is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.																	
128	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE . 1 _____ (SIGN) _____ REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 _____ (SIGN) _____ REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 _____ (SIGN) _____ REFUSED 2 OTHER 6															
129	CHECK 128: MEDICATION ACCEPTED	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 133)	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 133)	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 133)															
130	TREATMENT FOR CHILDREN WITH POSITIVE MALARIA TESTS	<table border="1"> <thead> <tr> <th colspan="3">TREATMENT WITH ACT</th> </tr> <tr> <th>WEIGHT (in kg)</th> <th>AGE</th> <th>ARTEMETHER-LUMEFANTRINE</th> </tr> </thead> <tbody> <tr> <td>LESS THAN 5 KGS</td> <td>NOTHING</td> <td>NOTHING</td> </tr> <tr> <td>5-14 KGS</td> <td>6 MONTHS - 3 YEARS</td> <td>1 TAB TWICE A DAY FOR 3 DAYS</td> </tr> <tr> <td>15-25 KGS</td> <td>4 - 8 YEARS</td> <td>2 TABS TWICE A DAY FOR 3 DAYS</td> </tr> </tbody> </table> IF CHILD WEIGHS LESS THAN 5 KGS, DO NOT LEAVE DRUGS. TELL PARENTS TO TAKE CHILD TO HEALTH FACILITY. ALSO TELL THE PARENT/OTHER ADULT: If [NAME] has a high fever, fast or difficult breathing, is not able to drink or breastfeed, gets sicker or does not get better in two days, you should take him/her to a health professional for treatment right away. (SKIP TO 133)			TREATMENT WITH ACT			WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE	LESS THAN 5 KGS	NOTHING	NOTHING	5-14 KGS	6 MONTHS - 3 YEARS	1 TAB TWICE A DAY FOR 3 DAYS	15-25 KGS	4 - 8 YEARS	2 TABS TWICE A DAY FOR 3 DAYS
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WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE																	
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15-25 KGS	4 - 8 YEARS	2 TABS TWICE A DAY FOR 3 DAYS																	
131	CHECK 116: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133)	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133)	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 133)															
132	<u>SEVERE ANEMIA REFERRAL</u> RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL FORM.	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately.																	
133	GO BACK TO 102 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.																		

201	INTERVIEWER TO COMPLETE Q. 202-204A USING TABLET REPORT USE THE APPROPRIATE OPTION FROM THE INTERVIEWER'S MENU TO LIST ALL WOMEN AGE 15-49 ELIGIBLE FOR BIOMARKER TESTING. IN EACH COLUMN, WRITE THE COMPLETE NAME, AGE AND LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. ALSO CIRCLE THE APPROPRIATE CODE FOR QUESTION 203. IF THE WOMAN'S AGE IS 15-17, COMPLETE QUESTION 204 USING THE MARITAL STATUS INFORMATION PRINTED IN THE TABLET'S REPORT. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
203	FROM TABLET'S REPORT: CIRCLE CODE FOR AGE GROUP.	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 204A ←	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 204A ←	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 204A ←
204	FROM TABLET'S REPORT: CIRCLE CODE FOR MARITAL STATUS	CODE 6 (NEVER IN UNION) . 1 OTHER 2	CODE 6 (NEVER IN UNION) . 1 OTHER 2	CODE 6 (NEVER IN UNION) . 1 OTHER 2
204A	FROM TABLET'S REPORT: PREGNANCY OR ASK Are you pregnant?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
204B	BIOMARKER START FROM HERE: BEFORE PROCEEDING WITH THE CONSENT STATEMENTS, ASK THE RESPONDENT HER AGE AND MARITAL STATUS TO CONFIRM THE INFORMATION IN Q203/Q204. IF THERE ARE ANY DISCREPANCIES THAT AFFECT THE INFORMED CONSENT PATTERN (MINOR VS. ADULT); GO BACK TO Q203/Q204 AND MAKE CORRECTIONS. PLEASE INFORM THE INTERVIEWER OF NEEDED ADJUSTMENTS IN THE HOUSEHOLD SCHEDULE (QH07/QH08), IF NECESSARY.			
205	WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996
206	HEIGHT IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
207	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER
208	CHECK 203: AGE	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 210) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 210) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 210) ←
209	CHECK 204: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) ← OTHER 2

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

ADULT RESPONDENT CONSENT FOR ANEMIA TEST

A D U L T R E S P O N D E N T C O N S E N T	210	ASK CONSENT FOR ANEMIA TEST.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
	211	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3

ADULT RESPONDENT CONSENT FOR MALARIA TESTING

A D U L T R E S P O N D E N T C O N S E N T	212	ASK CONSENT FOR MALARIA TESTING.	As part of this survey, we are asking women all over the country to take a test to see if they have malaria. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. This survey will assist the government to develop programs to prevent malaria. We ask that all women take part in malaria testing in this survey and give a few drops of blood from a finger. One blood drop will be tested for malaria immediately, and the result will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the malaria rapid test and give drops on slide for Laboratory analysis?		
	213	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

ADULT RESPONDENT CONSENT FOR DBS COLLECTION

A D U L T R E S P O N D E N T C O N S E N T	214	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. I will provide you with a list of [nearby] facilities offering counseling and testing for HIV. I will also give you a voucher for free services for you (and for your partner if you want) that you can use at any of these facilities. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?		
	215	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) NOT PRESENT/OTHER 3

ADULT RESPONDENT CONSENT FOR HIVRDT TESTING

A D U L T R E S P O N D E N T C O N S E N T	216	ASK CONSENT FOR HIV RDT TEST.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Rwanda. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?		
	217	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)	GRANTED 1 RESPONDENT REFUSED ... 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
218	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST					
P A R E N T — R E S P A D U L T C O N S E N T	219	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to take the anemia test?		
	220	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 223) NOT PRESENT/OTHER 3 (SKIP TO 223) ←

MINOR RESPONDENT (15-17yrs) ASSENT FOR ANEMIA TEST					
M I N O R R E S P O N D E N T C O N S E N T	221	ASK ASSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
	222	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 ← _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 ← _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 ← _____ (SIGN) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT:	NAME _____	NAME _____	NAME _____
	WRITE WOMAN'S AGE	AGE	AGE	AGE
	WRITE WOMAN'S LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT FOR MALARIA TESTING

P A R E N T — R E S P A D U L T C O N S E N T	223	ASK CONSENT FOR MALARIA TESTING FROM PARENT/ADULT.	As part of this survey, we are asking women all over the country to take a test to see if they have malaria. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. This survey will assist the government to develop programs to prevent malaria. We ask that all women take part in malaria testing in this survey and give a few drops of blood from a finger. One blood drop will be tested for malaria immediately, and the result will be told to you and (NAME OF MINOR) right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You and (NAME OF MINOR) will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to have a malaria rapid test and give drops on slide for laboratory analysis?		
	224	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 227) NOT PRESENT/OTHER 3 (SKIP TO 227)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 227) NOT PRESENT/OTHER 3 (SKIP TO 227)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN) (IF REFUSED, SKIP TO 227) NOT PRESENT/OTHER 3 (SKIP TO 227)

MINOR RESPONDENT (15-17yrs) ASSENT FOR MALARIA TESTING

M I N O R R E S P O N D E N T C O N S E N T	225	ASK ASSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	As part of this survey, we are asking women all over the country to take a test to see if they have malaria. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. This survey will assist the government to develop programs to prevent malaria. We ask that all women take part in malaria testing in this survey and give a few drops of blood from a finger. One blood drop will be tested for malaria immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you have a malaria rapid test and give drops on slide for laboratory analysis?		
	226	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT FOR DBS COLLECTION

P A R E N T — R E S P A D U L T C O N S E N T	227	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that can lead to AIDS. The HIV test is being done to see how many people have HIV. For the HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know (NAME OF MINOR 15-17yrs)'s test results either. I will provide a list of [nearby] facilities offering counseling and testing for HIV. I will also give her a voucher for free services that can be used at any of these facilities. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR 15-17yrs) to give blood for the HIV testing?		
	228	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)

MINOR RESPONDENT (15-17yrs) ASSENT FOR DBS COLLECTION

M I N O R R E S P O N D E N T C O N S E N T	229	ASK ASSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. I will provide you with a list of [nearby] facilities offering counseling and testing for HIV. I will also give you a voucher for free services for you (and for your partner if you want) that you can use at any of these facilities. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?		
	230	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT FOR HIV RDT TESTING

P A R E N T — R E S P A D U L T C O N S E N T	231	ASK CONSENT FOR RDT TEST FROM PARENT/ADULT.	If you want (NAME OF MINOR) to know her HIV status right now, we can do a rapid diagnostic test and tell you and (NAME OF MINOR) the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Rwanda. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for rapid HIV testing?		
	232	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 235) NOT PRESENT/OTHER 3 (SKIP TO 235)

MINOR RESPONDENT (15-17yrs) ASSENT FOR HIV RDT TEST

M I N O R R E S P O N D E N T C O N S E N T	233	ASK ASSENT FOR RDT TEST FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you and (NAME OF PARENT/RESPONSIBLE ADULT) the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Rwanda. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?		
	234	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
235	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
236	PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON BLOOD SLIDE, THE 3RD ON FILTER PAPER, THE 4TH ON THE TRANSMITTAL FORM BLOOD SLIDE, AND THE 5TH ON THE DBS TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON BLOOD SLIDE, THE 3RD ON FILTER PAPER, THE 4TH ON THE TRANSMITTAL FORM BLOOD SLIDE, AND THE 5TH ON THE DBS TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT 99994 REFUSED 99995 OTHER 99996 PUT THE 2ND BAR CODE LABEL ON BLOOD SLIDE, THE 3RD ON FILTER PAPER, THE 4TH ON THE TRANSMITTAL FORM BLOOD SLIDE, AND THE 5TH ON THE DBS TRANSMITTAL FORM.
237	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET.	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT PRESENT 994 REFUSED 995 OTHER 996
238	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE PAMPHLET.	POSITIVE 1 NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5	POSITIVE 1 NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5	POSITIVE 1 NEGATIVE 2 NOT PRESENT 3 REFUSED 4 OTHER 5
238A	RECORD THE RESULT OF THE MALARIA BLOOD SLIDE COLLECTION	COLLECTED 1 NOT PRESENT 3 REFUSED 4 OTHER 5	COLLECTED 1 NOT PRESENT 3 REFUSED 4 OTHER 5	COLLECTED 1 NOT PRESENT 3 REFUSED 4 OTHER 5
239	RECORD THE RESULT OF THE HIV DBS COLLECTION	COLLECTED 1 NOT PRESENT 3 REFUSED 4 OTHER 5	COLLECTED 1 NOT PRESENT 3 REFUSED 4 OTHER 5	COLLECTED 1 NOT PRESENT 3 REFUSED 4 OTHER 5
240	RECORD THE RESULT OF THE "HIV COMBO SET" HERE.	POSITIVE 1 NEGATIVE 2 (SKIP TO 244) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 244) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 244) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←
241	RECORD THE RESULT OF THE "HIV 1/2 STAT-PAK" HERE.	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←	POSITIVE 1 NEGATIVE 2 (SKIP TO 243) ← NOT PRESENT 3 REFUSED 4 OTHER 5 (SKIP TO 245) ←

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
242	IF 240 AND 241 ARE POSITIVE <u>RESPONDENT IS HIV POSITIVE:</u> INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 245			
243	IF 240 IS POSTIVE AND 241 IS NEGATIVE <u>RESPONDENT RESULTS ARE INCONCLUSIVE:</u> INFORM SURVEY PARTICIPANT RESULTS ARE NOT CONCLUSIVE AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY AFTER 4 WEEKS FOR FURTHER EXAMS. SKIP TO 245			
244	IF 240 IS NEGATIVE <u>RESPONDENT IS HIV NEGATIVE:</u> INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING. PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY FOR FURTHER COUNSELING			
245	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND DID NOT APPEAR?	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 248) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 248) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 248) ←
246	RECORD NUMBER OF INVALID RESULTS USING "HIV COMBO SET"	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
247	RECORD NUMBER OF INVALID RESULTS USING "HIV 1/2 STAT-PAK"	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00

		WOMAN 1	WOMAN 2	WOMAN 3
202	FROM TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
248	CHECK 238:	CODE '1' IS CIRCLED ☐ CODE '2 TO 5' IS CIRCLED ☐ (SKIP TO 257) ←	CODE '1' IS CIRCLED ☐ CODE '2 TO 5' IS CIRCLED ☐ (SKIP TO 257) ←	CODE '1' IS CIRCLED ☐ CODE '2 TO 5' IS CIRCLED ☐ (SKIP TO 257) ←
249	In the past two weeks has you taken or is taking Coartem given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT	YES 1 (SKIP TO 250) ← NO 2 (SKIP TO 251) ←	YES 1 (SKIP TO 250) ← NO 2 (SKIP TO 251) ←	YES 1 (SKIP TO 250) ← NO 2 (SKIP TO 251) ←
250	ALREADY TAKING [FIRST LINE MEDICATION] REFERRAL STATEMENT	You have told me that you had already received Coartem for malaria. Therefore, I cannot give you additional Coartem. However, the test shows that you has malaria. If you has a fever for two days after the last dose of Coartem, you should go to the nearest health facility for further examination. (SKIP TO 257)		
251	CHECK 204a: PREGNANCY STATUS	YES 1 (GO TO 256) ← OTHER 2	YES 1 (GO TO 256) ← OTHER 2	YES 1 (GO TO 256) ← OTHER 2
252	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER ADULT.	The malaria test shows that you has malaria. We can give you free medicine. The medicine is called Coartem is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to take the medicine. This is up to you. Please tell me whether you accept the medicine or not.		
253	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE . 1 (SIGN) _____ ← REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 (SIGN) _____ ← REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 (SIGN) _____ ← REFUSED 2 OTHER 6
254	CHECK 253: MEDICATION ACCEPTED	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 257) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 257) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 257) ←
255	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/ OTHER ADULT.	≥ 35 kg≥ 15 years 20 mg AS + 120 mg AQ 4 tablets twice a day for 3 days ALSO TELL THE ADULT: If you have a high fever, fast or difficult breathing, is not able to drink, gets sicker or does not get better in two days, you should go to see a health professional for treatment right away.		
256	READ INFORMATION FOR MALARIA REFERRAL STATEMENT TO A PREGNANT WOMAN.	The test shows that you has malaria. However, you have told me that you are currently pregnant. Therefore, I cannot give you Coartem. You should go to the nearest health facility for further examination and treatment.		
257	GO BACK TO 202 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE WOMEN, GO TO 301.			

HIV TESTING FOR MEN AGE 15-59

301	INTERVIEWER TO COMPLETE Q. 302-304 USING TABLET REPORT USE THE APPROPRIATE OPTION FROM THE INTERVIEWER'S MENU TO LIST ALL MEN AGE 15-59 ELIGIBLE FOR BIOMARKER TESTING. IN EACH COLUMN, WRITE THE COMPLETE NAME, AGE AND LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. ALSO CIRCLE THE APPROPRIATE CODE FOR QUESTION 303. IF THE MAN'S AGE IS 15-17, COMPLETE QUESTION 304 USING THE MARITAL STATUS INFORMATION PRINTED IN THE TABLET'S REPORT. IF THERE ARE MORE THAN THREE MEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		MAN 1	MAN 2	MAN 3
302	FROM TABLET'S REPORT: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
303	FROM TABLET'S REPORT: CIRCLE CODE FOR AGE GROUP.	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 304A ←	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 304A ←	15-17 YEARS 1 18-49 YEARS 2 SKIP TO 304A ←
304	FROM TABLET'S REPORT: CIRCLE CODE FOR MARITAL STATUS	CODE 6 (NEVER IN UNION) . 1 OTHER 2	CODE 6 (NEVER IN UNION) . 1 OTHER 2	CODE 6 (NEVER IN UNION) . 1 OTHER 2

304A	BIOMARKER START FROM HERE: BEFORE PROCEEDING WITH THE CONSENT STATEMENTS, ASK THE RESPONDENT HIS AGE AND MARITAL STATUS TO CONFIRM THE INFORMATION IN Q303/Q304. IF THERE ARE ANY DISCREPANCIES THAT AFFECT THE INFORMED CONSENT PATTERN (MINOR VS. ADULT); GO BACK TO Q303/Q304 AND MAKE CORRECTIONS. PLEASE INFORM THE INTERVIEWER OF NEEDED ADJUSTMENTS IN THE HOUSEHOLD SCHEDULE (QH07/QH08), IF NECESSARY.			
308	CHECK 303: AGE	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 310) ←	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 310) ←	15-17 YEARS 1 18-59 YEARS 2 (SKIP TO 310) ←
309	CHECK 304: MARITAL STATUS	CODE 6 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2	CODE 6 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2	CODE 6 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2

		MAN 1	MAN 2	MAN 3
302	FROM TABLET'S REPORT:	NAME _____	NAME _____	NAME _____
	WRITE MAN'S AGE	AGE	AGE	AGE
	WRITE MAN'S LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER

ADULT RESPONDENT CONSENT FOR DBS COLLECTION

A D U L T R E S P O N D E N T C O N S E N T	310	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. I will provide you with a list of facilities offering counseling and testing for HIV. I will also give you a voucher for free services for you (and for your partner if you want) that you can use at any of these facilities. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?		
	311	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) NOT PRESENT/OTHER 3	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) NOT PRESENT/OTHER 3

ADULT RESPONDENT CONSENT FOR RDT TESTING

A D U L T R E S P O N D E N T C O N S E N T	314	ASK CONSENT FOR HIV RDT TEST.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Rwanda. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?		
	315	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 RESPONDENT REFUSED ... 2 (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)

		MAN 1	MAN 2	MAN 3
302	FROM TABLET'S REPORT: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

316	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR DBS COLLECTION

P A R E N T — R E S P A D U L T C O N S E N T	317	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that can lead to AIDS. The HIV test is being done to see how many people have HIV. For the HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be attached so we will not be able to tell you the test results. No one else will be able to know (NAME OF MINOR)'s test results either. I will provide a list of [nearby] facilities offering counseling and testing for HIV. I will also give her a voucher for free services that can be used at any of these facilities. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for the HIV testing?		
	318	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 325) NOT PRESENT/OTHER 3 (SKIP TO 325)

MINOR RESPONDENT (15-17yrs) ASSENT FOR DBS COLLECTION

M I N O R R E S P O N D E N T C O N S E N T	319	ASK ASSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be attached so we will not be able to tell you the test results. No one else will be able to know your test results either. I will provide you with a list of [nearby] facilities offering counseling and testing for HIV. I will also give you a voucher for free services for you (and for your partner if you want) that you can use at any of these facilities. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the HIV testing?		
	320	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 _____ (SIGN) NOT PRESENT/OTHER 3

		MAN 1	MAN 2	MAN 3
302	FROM TABLET'S REPORT:	NAME _____	NAME _____	NAME _____
	WRITE MAN'S AGE	AGE	AGE	AGE
	WRITE MAN'S LINE NUMBER	LINE NUMBER	LINE NUMBER	LINE NUMBER

PARENTAL/RESPONSIBLE ADULT CONSENT FOR RDT TESTING

P A R E N T — R E S P A D U L T C O N S E N T	325	ASK CONSENT FOR RDT TEST FROM PARENT/ADULT.	If you want (NAME OF MINOR) to know her HIV status right now, we can do a rapid diagnostic test and tell you and (NAME OF MINOR) the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Rwanda. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for rapid HIV testing?		
	326	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER 3 (SKIP TO 329)

MINOR RESPONDENT (15-17yrs) ASSENT FOR RDT TEST

M I N O R R E S P O N D E N T C O N S E N T	327	ASK ASSENT FOR RDT TEST FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid diagnostic test and tell you and (NAME OF PARENT/RESPONSIBLE ADULT) the result. The testing is free and we will offer counseling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in hospitals in Rwanda. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for rapid HIV testing?		
	328	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED 1 MINOR RESPONDENT REFUSED 2 (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 (SIGN) NOT PRESENT/OTHER 3	GRANTED 1 MINOR RESPONDENT REFUSED 2 (SIGN) NOT PRESENT/OTHER 3

		MAN 1	MAN 2	MAN 3
302	FROM TABLET'S REPORT: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
335	IF 332 AND 333 ARE POSITIVE <u>RESPONDENT IS HIV POSITIVE:</u> INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 337			
335A	IF 332 IS POSITIVE AND 333 IS NEGATIVE RESPONDENT RESULTS ARE INCONCLUSIVE: INFORM SURVEY PARTICIPANT RESULTS ARE NOT CONCLUSIVE AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY AFTER 4 WEEKS FOR FURTHER EXAMS. SKIP TO 337			
336	IF 332 IS NEGATIVE <u>RESPONDENT IS HIV NEGATIVE:</u> INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING. PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY FOR FURTHER COUNSELING.			
337	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND DID NOT APPEAR?	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 340) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 340) ←	RDT CONDUCTED, YES ANY INVALID 1 RDT CONDUCTED, NONE INVALID 2 NO RDT CONDUCTED 3 (SKIP TO 340) ←
338	RECORD NUMBER OF INVALID RESULTS USING "HIV COMBO SET"	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
339	RECORD NUMBER OF INVALID RESULTS USING "HIV 1/2 STAT-PAK"	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00	 RECORD NUMBER OF INVALID RESULTS, IF NONE INVALID, ENTER 00
340	GO BACK TO 302 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE MEN, END INTERVIEW.			

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

BIOMARKER QUESTIONNAIRE

MINECOFIN

MINISTRY OF HEALTH

VENOUS BLOOD

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

IDENTIFICATION					
PROVINCE: _____ DISTRICT: _____ SECTOR: _____					
NAME OF HOUSEHOLD HEAD _____					
CLUSTER NUMBER					
STRUCTURE NUMBER					
HOUSEHOLD NUMBER					
HOUSEHOLD SELECTED FOR MICRONUTRIENT/ ANEMIA / MALARIA TESTING? (1=YES, 2=NO					
BIOMARKER VISITS					
	1	2	3	FINAL VISIT	
DATE BIOMARKER'S NAME	_____ _____	_____ _____	_____ _____	DAY MONTH YEAR	
NEXT VISIT: DATE TIME	_____ _____	_____ _____		TOTAL NUMBER OF VISITS	
NOTES: _____ _____ _____ _____ _____				TOTAL ELIGIBLE WOMEN	
				TOTAL ELIGIBLE CHILDREN	
LANGUAGE OF QUESTIONNAIRE** 0 1		LANGUAGE OF INTERVIEW**		NATIVE LANGUAGE OF RESPONDENT**	
LANGUAGE OF QUESTIONNAIRE** ENGLISH		**LANGUAGE CODES: 01 ENGLISH 02 KINYARWANDA			
TRANSLATOR (YES = 1, NO = 2)					
SUPERVISOR					
_____ NAME			NUMBER		

MICRONUTRIENT, WEIGHT, HEIGHT, HEMOGLOBIN, AND MALARIA TESTING FOR CHILDREN AGE 0-5

401	INTERVIEWER TO COMPLETE Q. 402-403 USING TABLET REPORT USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
403	FROM TABLET'S REPORT: IF MOTHER INTERVIEWED COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
404	CHECK 403: CHILD BORN IN 2014-2019?	YES 1 NO 2 (SKIP TO 434) ←	YES 1 NO 2 (SKIP TO 434) ←	YES 1 NO 2 (SKIP TO 434) ←
404A	In the last week, has (NAME) been given NOOTRITOTO, SHISHA KIBONDO, SOSOMA fortified or CSB+?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
404B	At what time approximately did (NAME) his/her most recent meal or was breastfed? USING 24 HOURS SYSTEM	HOURS MINUTE DID NOT EAT TODAY 99	HOURS MINUTE DID NOT EAT TODAY 99	HOURS MINUTE DID NOT EAT TODAY 99
404C	MEASURER AND ASSISTANT START FROM HERE			
405	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
406	ASSISTANT TO RECORD HEIGHT/LENGTH IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
407	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
408	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER
409	CHECK 403: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS 1 (SKIP TO 434) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 434) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 434) ← OLDER 2

		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
410	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____
411	ASK CONSENT FOR BLOOD BIOLOGICAL TESTING FROM PARENT/OTHER ADULT.	As part of this survey, we are asking children all over the country to take a test for malaria, anemia, and vitamins and mineral levels. Malaria is a serious illness caused by a parasite transmitted from a mosquito bite. Anemia and vitamin and mineral deficiencies are serious health problems that usually result from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat these health problems. We ask that all children born in 2014 or later take part in testing in this survey by providing a small amount of blood. Taking a blood sample may cause some discomfort. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the results will be told to you right away. The results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. The rest of the blood will be sent to a laboratory to be tested for vitamins and minerals. The results from these tests will not be reported back to you as it will take some time to process the blood. The results will be kept strictly confidential. You can say yes or no to each test. It is up to you to decide. Do you have any questions? Will you allow (NAME OF CHILD) to give blood?		
412	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 434) NOT PRESENT/OTHER 3 (SKIP TO 434)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 434) NOT PRESENT/OTHER 3 (SKIP TO 434)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 434) NOT PRESENT/OTHER 3 (SKIP TO 434)
413	Will you allow (NAME OF CHILD) to take the: CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	a) Malaria test? GRANTED 1 REFUSED 2 b) Anemia test? GRANTED 1 REFUSED 2 c) Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER 	a) Malaria test? GRANTED 1 REFUSED 2 b) Anemia test? GRANTED 1 REFUSED 2 c) Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER 	a) Malaria test? GRANTED 1 REFUSED 2 b) Anemia test? GRANTED 1 REFUSED 2 c) Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER

		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
413A	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
414	PURPLE TOP TUBE (EDTA) RECORD THE RESULT OF THE PURPLE TOP (EDTA) TUBE BLOOD SAMPLE COLLECTION	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6
415	RED TOP TUBE RECORD THE RESULT OF THE RED TOP TUBE BLOOD SAMPLE COLLECTION	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6
415a	CHECK Q414 and Q415:	Q414 (4, 5 or 6) AND Q415 (4, 5, or 6) 1 (SKIP TO 434) ← OTHER 2	414 (4, 5 or 6) AND 415 (4, 5, or 6) 1 (SKIP TO 434) ← OTHER 2	414 (4, 5 or 6) AND 415 (4, 5, or 6) 1 (SKIP TO 434) ← OTHER 2
416	PLACE BAR CODE LABEL. CONFIRM BAR CODE PLACED BASED ON THE TUBES AND TRANSMITTAL FORM	PUT THE 1ST BAR CODE LABEL HERE. PURPLE TUBE A RED TUBE B TRANSMITTAL FORM C	PUT THE 1ST BAR CODE LABEL HERE. PURPLE TUBE A RED TUBE B TRANSMITTAL FORM C	PUT THE 1ST BAR CODE LABEL HERE. PURPLE TUBE A RED TUBE B TRANSMITTAL FORM C
417	DATE BLOOD SAMPLE TAKEN	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
418	TIME BLOOD DRAWN USING 24 HOURS SYSTEM	HOURS MINUTE	HOURS MINUTE	HOURS MINUTE
RESULTS OF HEMOGLOBIN TEST				
419	RECORD HEMOGLOBIN LEVEL HERE AND IN THE PAMPHLET.	G/DL INSUFFICIENT SAMPLE 992 NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL INSUFFICIENT SAMPLE 992 NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL INSUFFICIENT SAMPLE 992 NOT PRESENT 994 REFUSED 995 OTHER 996
RESULTS OF MALARIA RDT TEST				
420	CIRCLE THE CODE FOR THE MALARIA RDT.	TESTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 432) ←	TESTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 432) ←	TESTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 432) ←
421	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE PAMPHLET.	POSITIVE 1 NEGATIVE 2 OTHER 6 (SKIP TO 432) ←	POSITIVE 1 NEGATIVE 2 OTHER 6 (SKIP TO 432) ←	POSITIVE 1 NEGATIVE 2 OTHER 6 (SKIP TO 432) ←

		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
422	Does (NAME) suffer from any of the following illnesses or symptoms:	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2
423	CHECK 422: ANY 'YES' CIRCLED?	NO YES ☐ ☐ (SKIP TO 426) ☐	NO YES ☐ ☐ (SKIP TO 426) ☐	NO YES ☐ ☐ (SKIP TO 426) ☐
424	CHECK 419: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 ☐ (SKIP TO 426) ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 ☐ (SKIP TO 426) ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 ☐ (SKIP TO 426) ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6
425	In the past two weeks has (NAME) taken or is taking ACT given by a doctor or health center to treat the malaria?	YES 1 ☐ (SKIP TO 427) ☐ NO 2 ☐ (SKIP TO 428) ☐	YES 1 ☐ (SKIP TO 427) ☐ NO 2 ☐ (SKIP TO 428) ☐	YES 1 ☐ (SKIP TO 427) ☐ NO 2 ☐ (SKIP TO 428) ☐
426	<u>SEVERE MALARIA REFERRAL</u> RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taken to a health facility right away, if the child has already taken a treatment for malaria please take him to the nearest health facility for a checkup, to determine if the malaria is cured. (SKIP TO 432)		
427	ALREADY TAKING ACT REFERRAL STATEMENT	You have told me that (NAME OF CHILD) had already received ACT for malaria. Therefore, I cannot give you additional ACT. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ACT, you should take the child to the nearest health facility for further examination. (SKIP TO 432)		

		CHILD 1	CHILD 2	CHILD 3															
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER															
428	READ INFORMATION FOR MALARIA TREATMENT AND	The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called ACT. ACT is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.																	
429	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE . 1 (SIGN) _____ REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 (SIGN) _____ REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 (SIGN) _____ REFUSED 2 OTHER 6															
430	CHECK 429: MEDICATION ACCEPTED	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 432) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 432) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 432) ←															
431	TREATMENT FOR CHILDREN WITH POSITIVE MALARIA TESTS	<table border="1"> <thead> <tr> <th colspan="3">TREATMENT WITH ACT</th> </tr> <tr> <th>WEIGHT (in kg)</th> <th>AGE</th> <th>ARTEMETHER-LUMEFANTRINE</th> </tr> </thead> <tbody> <tr> <td>LESS THAN 5 KGS</td> <td>NOTHING</td> <td>NOTHING</td> </tr> <tr> <td>5-14 KGS</td> <td>6 MONTHS - 3 YEARS</td> <td>1 TABLET TWICE A DAY FOR 3 DAYS</td> </tr> <tr> <td>15-25 KGS</td> <td>4 - 8 YEARS</td> <td>2 TABLETS TWICE A DAY FOR 3 DAYS</td> </tr> </tbody> </table> IF CHILD WEIGHS LESS THAN 5 KGS, DO NOT LEAVE DRUGS. TELL PARENTS TO TAKE CHILD TO HEALTH FACILITY. ALSO TELL THE PARENT/OTHER ADULT: If [NAME] has a high fever, fast or difficult breathing, is not able to drink or breastfeed, gets sicker or does not get better in two days, you should take him/her to a health professional for treatment right away. (SKIP TO 432)			TREATMENT WITH ACT			WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE	LESS THAN 5 KGS	NOTHING	NOTHING	5-14 KGS	6 MONTHS - 3 YEARS	1 TABLET TWICE A DAY FOR 3 DAYS	15-25 KGS	4 - 8 YEARS	2 TABLETS TWICE A DAY FOR 3 DAYS
TREATMENT WITH ACT																			
WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE																	
LESS THAN 5 KGS	NOTHING	NOTHING																	
5-14 KGS	6 MONTHS - 3 YEARS	1 TABLET TWICE A DAY FOR 3 DAYS																	
15-25 KGS	4 - 8 YEARS	2 TABLETS TWICE A DAY FOR 3 DAYS																	
432	CHECK 419: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 434) ←	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 434) ←	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 434) ←															
433	SEVERE ANEMIA REFERRAL	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately.																	
434	GO BACK TO 402 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 501.																		

MICRONUTRIENT, WEIGHT, HEIGHT, HEMOGLOBIN, AND MALARIA TESTING FOR CHILDREN AGE 0-5

401	INTERVIEWER TO COMPLETE Q. 402-403 USING TABLET REPORT USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
403	FROM TABLET'S REPORT: IF MOTHER INTERVIEWED COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
404	CHECK 403: CHILD BORN IN 2014-2019?	YES 1 NO 2 (SKIP TO 434) ←	YES 1 NO 2 (SKIP TO 434) ←	YES 1 NO 2 (SKIP TO 434) ←
404A	In the last week, has (NAME) been given NOOTRITOTO, SHISHA KIBONDO, SOSOMA fortified or CSB+?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
404B	At what time approximately did (NAME) his/her most recent meal or was breastfed? USING 24 HOURS SYSTEM	HOURS MINUTE DID NOT EAT TODAY 99	HOURS MINUTE DID NOT EAT TODAY 99	HOURS MINUTE DID NOT EAT TODAY 99
404C	MEASURER AND ASSISTANT START FROM HERE			
405	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	KG. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
406	ASSISTANT TO RECORD HEIGHT/LENGTH IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
407	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
408	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER
409	CHECK 403: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS 1 (SKIP TO 434) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 434) ← OLDER 2	0-5 MONTHS 1 (SKIP TO 434) ← OLDER 2

		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
410	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____
411	ASK CONSENT FOR BLOOD BIOLOGICAL TESTING FROM PARENT/OTHER ADULT.	As part of this survey, we are asking children all over the country to take a test for malaria, anemia, and vitamins and mineral levels. Malaria is a serious illness caused by a parasite transmitted from a mosquito bite. Anemia and vitamin and mineral deficiencies are serious health problems that usually result from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat these health problems. We ask that all children born in 2014 or later take part in testing in this survey by providing a small amount of blood. Taking a blood sample may cause some discomfort. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the results will be told to you right away. The results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. The rest of the blood will be sent to a laboratory to be tested for vitamins and minerals. The results from these tests will not be reported back to you as it will take some time to process the blood. The results will be kept strictly confidential. You can say yes or no to each test. It is up to you to decide. Do you have any questions? Will you allow (NAME OF CHILD) to give blood?		
412	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 434) NOT PRESENT/OTHER 3 (SKIP TO 434)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 434) NOT PRESENT/OTHER 3 (SKIP TO 434)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 434) NOT PRESENT/OTHER 3 (SKIP TO 434)
413	Will you allow (NAME OF CHILD) to take the: CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	a) Malaria test? GRANTED 1 REFUSED 2 b) Anemia test? GRANTED 1 REFUSED 2 c) Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER 	a) Malaria test? GRANTED 1 REFUSED 2 b) Anemia test? GRANTED 1 REFUSED 2 c) Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER 	a) Malaria test? GRANTED 1 REFUSED 2 b) Anemia test? GRANTED 1 REFUSED 2 c) Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER

		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
413A	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
414	PURPLE TOP TUBE (EDTA) RECORD THE RESULT OF THE PURPLE TOP (EDTA) TUBE BLOOD SAMPLE COLLECTION	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6
415	RED TOP TUBE RECORD THE RESULT OF THE RED TOP TUBE BLOOD SAMPLE COLLECTION	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6
415a	CHECK Q414 and Q415:	Q414 (4, 5 or 6) AND Q415 (4, 5, or 6) 1 (SKIP TO 434) ← OTHER 2	414 (4, 5 or 6) AND 415 (4, 5, or 6) 1 (SKIP TO 434) ← OTHER 2	414 (4, 5 or 6) AND 415 (4, 5, or 6) 1 (SKIP TO 434) ← OTHER 2
416	PLACE BAR CODE LABEL. CONFIRM BAR CODE PLACED BASED ON THE TUBES AND TRANSMITTAL FORM	PUT THE 1ST BAR CODE LABEL HERE. PURPLE TUBE A RED TUBE B TRANSMITTAL FORM C	PUT THE 1ST BAR CODE LABEL HERE. PURPLE TUBE A RED TUBE B TRANSMITTAL FORM C	PUT THE 1ST BAR CODE LABEL HERE. PURPLE TUBE A RED TUBE B TRANSMITTAL FORM C
417	DATE BLOOD SAMPLE TAKEN	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
418	TIME BLOOD DRAWN USING 24 HOURS SYSTEM	HOURS MINUTE	HOURS MINUTE	HOURS MINUTE
RESULTS OF HEMOGLOBIN TEST				
419	RECORD HEMOGLOBIN LEVEL HERE AND IN THE PAMPHLET.	G/DL INSUFFICIENT SAMPLE 992 NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL INSUFFICIENT SAMPLE 992 NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL INSUFFICIENT SAMPLE 992 NOT PRESENT 994 REFUSED 995 OTHER 996
RESULTS OF MALARIA RDT TEST				
420	CIRCLE THE CODE FOR THE MALARIA RDT.	TESTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 432) ←	TESTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 432) ←	TESTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 432) ←
421	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE PAMPHLET.	POSITIVE 1 NEGATIVE 2 OTHER 6 (SKIP TO 432) ←	POSITIVE 1 NEGATIVE 2 OTHER 6 (SKIP TO 432) ←	POSITIVE 1 NEGATIVE 2 OTHER 6 (SKIP TO 432) ←

		CHILD 1	CHILD 2	CHILD 3
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
422	Does (NAME) suffer from any of the following illnesses or symptoms:	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS 1 2 c) LOSS OF CONSCIOUS. 1 2 d) RAPID BREATHING 1 2 e) SEIZURES 1 2 f) BLEEDING 1 2 g) JAUNDICE 1 2 h) DARK URINE 1 2
423	CHECK 422: ANY 'YES' CIRCLED?	NO YES ☐ ☐ (SKIP TO 426) ☐	NO YES ☐ ☐ (SKIP TO 426) ☐	NO YES ☐ ☐ (SKIP TO 426) ☐
424	CHECK 419: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 ☐ (SKIP TO 426) ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 ☐ (SKIP TO 426) ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6	BELOW 8.0 G/DL, SEVERE ANEMIA ... 1 ☐ (SKIP TO 426) ☐ 8.0 G/DL OR ABOVE ... 2 NOT PRESENT 3 REFUSED 4 OTHER 6
425	In the past two weeks has (NAME) taken or is taking ACT given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT	YES 1 ☐ (SKIP TO 427) ☐ NO 2 ☐ (SKIP TO 428) ☐	YES 1 ☐ (SKIP TO 427) ☐ NO 2 ☐ (SKIP TO 428) ☐	YES 1 ☐ (SKIP TO 427) ☐ NO 2 ☐ (SKIP TO 428) ☐
426	<u>SEVERE MALARIA REFERRAL</u> RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.	The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taken to a health facility right away, if the child has already taken a treatment for malaria please take him to the nearest health facility for a checkup, to determine if the malaria is cured. (SKIP TO 432)		
427	ALREADY TAKING ACT REFERRAL STATEMENT	You have told me that (NAME OF CHILD) had already received ACT for malaria. Therefore, I cannot give you additional ACT. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ACT, you should take the child to the nearest health facility for further examination. (SKIP TO 432)		

		CHILD 1	CHILD 2	CHILD 3															
402	FROM TABLET'S REPORT: WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER															
428	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER ADULT.	The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called ACT. ACT is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.																	
429	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE . 1 (SIGN) _____ REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 (SIGN) _____ REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 (SIGN) _____ REFUSED 2 OTHER 6															
430	CHECK 429: MEDICATION ACCEPTED	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 432) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 432) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (SKIP TO 432) ←															
431	TREATMENT FOR CHILDREN WITH POSITIVE MALARIA TESTS	<table border="1"> <thead> <tr> <th colspan="3">TREATMENT WITH ACT</th> </tr> <tr> <th>WEIGHT (in kg)</th> <th>AGE</th> <th>ARTEMETHER-LUMEFANTRINE</th> </tr> </thead> <tbody> <tr> <td>LESS THAN 5 KGS</td> <td>NOTHING</td> <td>NOTHING</td> </tr> <tr> <td>5-14 KGS</td> <td>6 MONTHS - 3 YEARS</td> <td>1 TABLET TWICE A DAY FOR 3 DAYS</td> </tr> <tr> <td>15-25 KGS</td> <td>4 - 8 YEARS</td> <td>2 TABLETS TWICE A DAY FOR 3 DAYS</td> </tr> </tbody> </table> IF CHILD WEIGHS LESS THAN 5 KGS, DO NOT LEAVE DRUGS. TELL PARENTS TO TAKE CHILD TO HEALTH FACILITY. ALSO TELL THE PARENT/OTHER ADULT: If [NAME] has a high fever, fast or difficult breathing, is not able to drink or breastfeed, gets sicker or does not get better in two days, you should take him/her to a health professional for treatment right away. (SKIP TO 432)			TREATMENT WITH ACT			WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE	LESS THAN 5 KGS	NOTHING	NOTHING	5-14 KGS	6 MONTHS - 3 YEARS	1 TABLET TWICE A DAY FOR 3 DAYS	15-25 KGS	4 - 8 YEARS	2 TABLETS TWICE A DAY FOR 3 DAYS
TREATMENT WITH ACT																			
WEIGHT (in kg)	AGE	ARTEMETHER-LUMEFANTRINE																	
LESS THAN 5 KGS	NOTHING	NOTHING																	
5-14 KGS	6 MONTHS - 3 YEARS	1 TABLET TWICE A DAY FOR 3 DAYS																	
15-25 KGS	4 - 8 YEARS	2 TABLETS TWICE A DAY FOR 3 DAYS																	
432	CHECK 419: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 434) ←	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 434) ←	BELOW 8.0 G/DL, SEVERE ANEMIA 1 8.0 G/DL OR ABOVE 2 NOT PRESENT 3 REFUSED 4 OTHER 6 (SKIP TO 434) ←															
433	<u>SEVERE ANEMIA REFERRAL</u>	The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately.																	
434	GO BACK TO 402 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 501.																		

MICRONUTRIENT, WEIGHT, HEIGHT, HEMOGLOBIN, AND MALARIA TESTING FOR WOMEN AGE 15-49

501	INTERVIEWER TO COMPLETE Q.502-505 USING TABLET REPORT USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL WOMEN AGE 15-49 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE, THE LINE NUMBER, AND MARITAL STATUS AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH WOMAN IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN THREE WOMEN USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE WOMAN ON EACH SUBSEQUENT PAGES.			
		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
503	FROM TABLET'S REPORT: WOMAN'S AGE.	15-17 YEARS 1 18-49 YEARS 2	15-17 YEARS 1 18-49 YEARS 2	15-17 YEARS 1 18-49 YEARS 2
504	FROM TABLET'S REPORT: WOMAN'S MARITAL STATUS.	NEVER IN UNION 1 OTHER 2	NEVER IN UNION 1 OTHER 2	NEVER IN UNION 1 OTHER 2
505	FROM TABLET'S REPORT: PREGNANCY IF NOT AVAILABLE FROM TABLET ASK Are you pregnant?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
505A	In the last 6 months did you receive a deworming treatment?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
505B	In the past week have you consumed Nootrimama, SHISHA KIBONDO, SOSOMA fortified or	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
505C	At what time approximately did you eat your most recent meal? USING 24 HOURS SYSTEM	HOURS MINUTE DID NOT EAT TODAY 99	HOURS MINUTE DID NOT EAT TODAY 99	HOURS MINUTE DID NOT EAT TODAY 99
505D	MEASURER AND ASSISTANT START FROM HERE			
506	ASSISTANT TO RECORD WEIGHT IN KILOGRAMS.	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG. NOT PRESENT 99994 REFUSED 99995 OTHER 99996
507	ASSISTANT TO RECORD HEIGHT IN CENTIMETERS.	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996	CM. NOT PRESENT 9994 REFUSED 9995 OTHER 9996
508	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER	 FIELDWORKER NUMBER
509	CHECK 503: AGE.	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 511) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 511) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 511) ←
510	CHECK 504: MARITAL STATUS.	NEVER IN UNION 1 (SKIP TO 516) ← OTHER 2	NEVER IN UNION 1 (SKIP TO 516) ← OTHER 2	NEVER IN UNION 1 (SKIP TO 516) ← OTHER 2

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
ADULT RESPONDENT CONSENT FOR BLOOD COLLECTION AND TESTING				
511	ASK CONSENT FOR BLOOD COLLECTION FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take a test for malaria, anemia, and vitamins and mineral levels. Malaria is a serious illness caused by a parasite transmitted from a mosquito bite. Anemia and vitamin and mineral deficiencies are serious health problems that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat these health problems. We ask that you provide a sample of your blood. Taking a blood sample may cause some discomfort. For all tests, the equipment used is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the result will be told to you right away. The results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. The rest of the blood will be sent to a laboratory to be tested for vitamins and minerals. The results from these tests will not be reported back to you and will only be used for survey purposes. The results will be kept strictly confidential. You can say yes or no to each test. It is up to you to decide. Do you have any questions? Will you give blood?		
512	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 514) NOT PRESENT/OTHER 3 (SKIP TO 514)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 514) NOT PRESENT/OTHER 3 (SKIP TO 514)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 514) NOT PRESENT/OTHER 3 (SKIP TO 514)
513	Will you take the: CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

ADULT RESPONDENT CONSENT FOR URINE COLLECTION AND TESTING					
ADULT RESPONDENT CONSENT	514	ASK CONSENT FOR URINE COLLECTION AND TESTING FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take a test for iodine deficiency. Iodine deficiency can cause goiter and other health problems. This survey will assist the government to develop programs to prevent and treat these health problems. We ask that you provide a sample of your urine. The equipment used is clean and completely safe. It has never been used before and will be thrown away after each test. The urine will be sent to a laboratory to be tested for iodine deficiency. The results from this test will not be reported back to you and will only be used for survey purposes. The results will be kept strictly confidential. You can say yes or no. It is up to you to decide. Do you have any questions? Will you give urine for the iodine testing?		
	515	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1] REFUSED 2] _____ (SIGN) FIELDWORKER NUMBER (SKIP TO 526) NOT PRESENT/OTHER 3] (SKIP TO 526) ←	GRANTED 1] REFUSED 2] _____ (SIGN) FIELDWORKER NUMBER (SKIP TO 526) NOT PRESENT/OTHER 3] (SKIP TO 526) ←	GRANTED 1] REFUSED 2] _____ (SIGN) FIELDWORKER NUMBER (SKIP TO 526) NOT PRESENT/OTHER 3] (SKIP TO 526) ←

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
515a	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE ADOLESCENT.	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____	NAME OF PARENT/ADULT RESPONSIBLE NAME _____

P A R E N T / R E S P O N S I B L E C O N S E N T					PARENT/RESPONSIBLE ADULT C O N S E N T F O R B L O O D C O L L E C T I O N A N D T E S T I N G				
516	ASK CONSENT FOR BLOOD COLLECTION FROM PARENT/ADULT.	As part of this survey, we are asking people all over the country to take a test for malaria, anemia, and vitamins and mineral levels. Malaria is a serious illness caused by a parasite transmitted from a mosquito bite. Anemia and vitamin and mineral deficiencies are serious health problems that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat these health problems. For the tests we will need a sample of [NAME OF MINOR]'s blood. Taking a blood sample may cause some discomfort. For all tests, the equipment used is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the result will be told to you and [NAME OF MINOR] right away. The results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. The rest of the blood will be sent to a laboratory to be tested for vitamins and minerals. The results from these tests will not be reported back to you and [NAME OF MINOR] and will only be used for survey purposes. The results will be kept strictly confidential. You can say yes or no to each test. It is up to you to decide. Do you have any questions? Will you allow (NAME OF MINOR) to give blood?							
517	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 522) NOT PRESENT/OTHER 3 (SKIP TO 522) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 522) NOT PRESENT/OTHER 3 (SKIP TO 522) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 522) NOT PRESENT/OTHER 3 (SKIP TO 522) ←					
518	Will you allow (MINOR) to take the: CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)					

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

MINOR RESPONDENT CONSENT FOR BLOOD COLLECTION AND TESTING					
MINOR RESPONDENT CONSENT	519	ASK CONSENT FOR BLOOD COLLECTION FROM MINOR RESPONDENT.	As part of this survey, we are asking people all over the country to take a test for malaria, anemia, and vitamins and mineral levels. Malaria is a serious illness caused by a parasite transmitted from a mosquito bite. Anemia and vitamin and mineral deficiencies are serious health problems that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat these health problems. We ask that you provide a sample of your blood. Taking a blood sample may cause some discomfort. For all tests, the equipment used is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the result will be told to you and [PARENT/RESPONSIBLE ADULT] right away. The results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. The rest of the blood will be sent to a laboratory to be tested for vitamins and minerals. The results from these tests will not be reported back to you and [PARENT/RESPONSIBLE ADULT] and will only be used for survey purposes. The results will be kept strictly confidential. You can say yes or no to each test. It is up to you to decide. Do you have any questions? Will you give blood?		
	520	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 522) NOT PRESENT/OTHER 3 (SKIP TO 522)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 522) NOT PRESENT/OTHER 3 (SKIP TO 522)	GRANTED 1 REFUSED 2 _____ (SIGN) FIELDWORKER NUMBER (IF REFUSED SKIP TO 522) NOT PRESENT/OTHER 3 (SKIP TO 522)
	521	Will you take the: CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)	Malaria test? GRANTED 1 REFUSED 2 Anemia test? GRANTED 1 REFUSED 2 Vitamin and mineral test? GRANTED 1 REFUSED 2 _____ (SIGN)

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER

P A R E N T / R E S P O N S I B L E C O N S E N T				
PARENT/RESPONSIBLE ADULT C O N S E N T F O R URINE COLLECTION AND TESTING				
522	ASK CONSENT FOR URINE AND TESTING FROM PARENT/ADULT.	As part of this survey, we are asking people all over the country to take a test for iodine deficiency. Iodine deficiency can cause goiter and other health problems. This survey will assist the government to develop programs to prevent and treat these health problems. For the test we will need a sample of [NAME OF MINOR]'s urine. The equipment used is clean and completely safe. It has never been used before and will be thrown away after each test. The urine will be sent to a laboratory to be tested for iodine deficiency. The results from this test will not be reported back to you and [NAME OF MINOR] and will only be used for survey purposes. The results will be kept strictly confidential. You can say yes or no. Do you have any questions? Will you allow [NAME OF MINOR] to provide urine for the iodine testing?		
523	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 (SIGN) ← FIELDWORKER NUMBER (IF REFUSED SKIP TO 526) NOT PRESENT/OTHER 3 (SKIP TO 526) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 (SIGN) ← FIELDWORKER NUMBER (IF REFUSED SKIP TO 526) NOT PRESENT/OTHER 3 (SKIP TO 526) ←	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ... 2 (SIGN) ← FIELDWORKER NUMBER (IF REFUSED SKIP TO 526) NOT PRESENT/OTHER 3 (SKIP TO 526) ←

M I N O R R E S P O N D E N T C O N S E N T				
MINOR RESPONDENT CONSENT FOR URINE COLLECTION AND TESTING				
524	ASK CONSENT FOR URINE COLLECTION AND TESTING FROM MINOR RESPONDENT.	As part of this survey, we are asking people all over the country to take a test for iodine deficiency. Iodine deficiency can cause goiter and other health problems. This survey will assist the government to develop programs to prevent and treat these health problems. We ask that you provide a sample of your urine. The equipment used is clean and completely safe. It has never been used before and will be thrown away after each test. The urine will be sent to a laboratory to be tested for iodine deficiency. The results from this test will not be reported back to you and [PARENT/RESPONSIBLE ADULT] and will only be used for survey purposes. The results will be kept strictly confidential. You can say yes or no. It is up to you to decide. Do you have any questions? Will you give urine for the iodine testing?		
525	CIRCLE THE CODE, ENTER YOUR FIELDWORKER NUMBER, AND SIGN YOUR NAME.	GRANTED 1 REFUSED 2 (SIGN) ← FIELDWORKER NUMBER NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN) ← FIELDWORKER NUMBER NOT PRESENT/OTHER 3	GRANTED 1 REFUSED 2 (SIGN) ← FIELDWORKER NUMBER NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
526	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
527	PURPLE TOP TUBE (EDTA) RECORD THE RESULT OF THE PURPLE TOP (EDTA) TUBE BLOOD SAMPLE COLLECTION.	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6
528	RED TOP TUBE RECORD THE RESULT OF THE RED TOP TUBE BLOOD SAMPLE COLLECTION.	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE 2 NOT PRESENT 4 REFUSED 5 OTHER 6
528a	CHECK Q527 and Q528:	Q527 (4, 5 or 6) AND Q528 (4, 5, or 6) 1 (SKIP TO 537) ← OTHER 2	Q527 (4, 5 or 6) AND Q528 (4, 5, or 6) 1 (SKIP TO 537) ← OTHER 2	Q527 (4, 5 or 6) AND Q528 (4, 5, or 6) 1 (SKIP TO 537) ← OTHER 2
529	PLACE BAR CODE LABEL. CONFIRM BAR CODE PLACED ON THE CONTAINER, TUBES, AND TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. CONTAINER A PURPLE TUBE B RED TUBE C TRANSMITTAL FORM D	PUT THE 1ST BAR CODE LABEL HERE. CONTAINER A PURPLE TUBE B RED TUBE C TRANSMITTAL FORM D	PUT THE 1ST BAR CODE LABEL HERE. CONTAINER A PURPLE TUBE B RED TUBE C TRANSMITTAL FORM... D
530	DATE BLOOD SAMPLE TAKEN.	DAY MONTH YEAR .	DAY MONTH YEAR .	DAY MONTH YEAR .
531	TIME BLOOD DRAWN. USING 24 HOURS SYSTEM	HOURS MINUTE	HOURS MINUTE	HOURS MINUTE

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
RESULTS OF HEMOGLOBIN TEST				
532	RECORD HEMOGLOBIN LEVEL HERE AND IN THE PAMPHLET.	G/DL NOT ENOUGH BLOOD 992 NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT ENOUGH BLOOD 992 NOT PRESENT 994 REFUSED 995 OTHER 996	G/DL NOT ENOUGH BLOOD 992 NOT PRESENT 994 REFUSED 995 OTHER 996
RESULTS OF MALARIA RDT TEST				
533	CIRCLE THE CODE FOR THE MALARIA RDT	TESTED 1 NOT ENOUGH BLOOD 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 535) ←	TESTED 1 NOT ENOUGH BLOOD 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 535) ←	TESTED 1 NOT ENOUGH BLOOD 2 NOT PRESENT 4 REFUSED 5 OTHER 6 (SKIP TO 535) ←
534	RECORD THE RESULT OF THE MALARIA RDT HERE AND IN THE PAMPHLET.	POSITIVE 1 NEGATIVE 2 OTHER 6	POSITIVE 1 NEGATIVE 2 OTHER 6	POSITIVE 1 NEGATIVE 2 OTHER 6
535	URINE SPECIMEN RECORD THE RESULT OF THE URINE SPECIMEN COLLECTION	COLLECTED 1 INSUFFICIENT SAMPLE. 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE. 2 NOT PRESENT 4 REFUSED 5 OTHER 6	COLLECTED 1 INSUFFICIENT SAMPLE. 2 NOT PRESENT 4 REFUSED 5 OTHER 6
536	DATE URINE SAMPLE TAKEN	DAY MONTH YEAR ...	DAY MONTH YEAR ...	DAY MONTH YEAR ...
537	CHECK 534:	CODE '1' IS CIRCLED ☐ CODE '2 OR 6' IS CIRCLED ☐ (SKIP TO 546) ←	CODE '1' IS CIRCLED ☐ CODE '2 OR 6' IS CIRCLED ☐ (SKIP TO 546) ←	CODE '1' IS CIRCLED ☐ CODE '2 OR 6' IS CIRCLED ☐ (SKIP TO 546) ←
538	In the past two weeks has you taken or is taking Coartem given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT	YES 1 (SKIP TO 539) ← NO 2 (SKIP TO 540) ←	YES 1 (SKIP TO 539) ← NO 2 (SKIP TO 540) ←	YES 1 (SKIP TO 539) ← NO 2 (SKIP TO 540) ←
539	ALREADY TAKING [FIRST LINE MEDICATION] REFERRAL STATEMENT	You have told me that you had already received Coartem for malaria. Therefore, I cannot give you additional Coartem. However, the test shows that you has malaria. If you has a fever for two days after the last dose of Coartem, you should go to the nearest health facility for further examination. (SKIP TO 546)		

		WOMAN 1	WOMAN 2	WOMAN 3
502	FROM TABLET'S REPORT: WRITE WOMAN'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER	NAME _____ AGE LINE NUMBER
540	CHECK 505 FOR PREGNANCY STATUS	YES 1 (GO TO 545) ← OTHER 2	YES 1 (GO TO 545) ← OTHER 2	YES 1 (GO TO 545) ← OTHER 2
541	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PARENT/OTHER ADULT.	The malaria test shows that you has malaria. We can give you free medicine. The medicine is called Coartem is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to take the medicine. This is up to you. Please tell me whether you accept the medicine or not.		
542	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	ACCEPTED MEDICINE . 1 _____ (SIGN) ← REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 _____ (SIGN) ← REFUSED 2 OTHER 6	ACCEPTED MEDICINE . 1 _____ (SIGN) ← REFUSED 2 OTHER 6
543	CHECK542: MEDICATION ACCEPTED	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (GO TO 546) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (GO TO 546) ←	ACCEPTED MEDICINE . 1 REFUSED 2 OTHER 6 (GO TO 546) ←
544	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO ADULT.	[INSERT DOSAGE INSTRUCTIONS] ALSO TELL THE ADULT: If you have a high fever, fast or difficult breathing, is not able to drink, gets sicker or does not get better in two days, you should go to see a health professional for treatment right away.		
545	READ INFORMATION FOR MALARIA TREATMENT AND CONSENT STATEMENT TO PREGNANT WOMAN.	The test shows that you has malaria. However, you have told me that you are currently pregnant. Therefore, I cannot give you Coartem. You should go to the nearest health facility for further examination and treatment.		
546	GO BACK TO 502 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END INTERVIEW.			

ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com		
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com		
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store		
DHS Program User Forum – Post questions about DHS data, and search our archive of FAQs.	userforum.DHSprogram.com		
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and How to Read DHS Tables.	www.youtube.com/DHSProgram		
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data		
Spatial Data Repository – Download geographically linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com		
Learning Hub – Access online courses for independent learning and workshop participation, communities of practice, and other training resources.	Learning.DHSprogram.com		
GitHub – Open access to Stata and SPSS code for DHS indicators for public use.	Github.com/DHSprogram		
Social Media – Follow The DHS Program and join the conversation. Stay up to date through:	 Twitter www.twitter.com/DHSprogram		
 Facebook www.facebook.com/DHSprogram		 LinkedIn www.linkedin.com/company/dhs-program	
 YouTube www.youtube.com/DHSprogram		 Blog Blog.DHSprogram.com	