

Child Health and Nutrition: Rwanda Demographic and Health Survey (RDHS) Key Findings

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INTRODUCTION

The 2019-20 RDHS collected data on a number of child health indicators, including vaccinations of young children, nutritional status assessed through anthropometric measures, infant feeding practices, and treatment practices for sick children.

VACCINATION OF CHILDREN

Universal immunization of children against six common vaccine-preventable diseases, namely tuberculosis, diphtheria, whooping cough (pertussis), tetanus, polio, and measles reduces infant and child mortality. In Rwanda, vaccines against *Haemophilus influenzae* type B and hepatitis B were used in combination with DPT (diphtheria, pertussis, and tetanus) vaccine and called pentavalent. A phased rollout of the pneumococcal conjugate vaccine (PCV) that protects against *Streptococcus pneumoniae* bacteria, which cause severe pneumonia, meningitis, and other illnesses, commenced on December 22, 2014, in Rwanda. On February 20, 2015, Rwanda introduced one dose of inactivated poliomyelitis vaccine (IPV) at 14 weeks of age into its national routine immunization schedule. The country also uses Inactivated Polio Vaccine (IPV) not to replace the oral polio vaccine but to strengthen a child's immune system and protect against polio.

Overall, Rwanda has established a schedule for the administration of all basic childhood vaccines based on the World Health Organization's guidelines. An important measure of vaccination coverage has been the proportion of children age 12-23 months who have received all "basic" vaccinations.

A child is considered to have received all basic vaccinations if he or she has received a bacille Calmette-Guérin (BCG) vaccination against tuberculosis; three doses of DPT vaccine; at least three doses of polio vaccine; and one dose of measles vaccine. These vaccinations have to have been administered in the first year of life; with BCG given shortly after birth or at first clinical contact, polio and the pentavalent vaccines at approximately 6 weeks, 10 weeks, and 14 and finally measles at or soon after 9 months.

A second measure of vaccination coverage is the proportion of children age 12-23 months and 24-35 months who have received all age-appropriate vaccinations. A child age 12-23 months is considered to have received all age-appropriate vaccinations if the child received all basic vaccinations along with a birth dose of hepatitis B and polio vaccine, one dose of inactivated polio vaccine, and three doses of pneumococcal vaccine (also given at age 6, 10, and 14 weeks). Similarly, a child who is age 24-35 months has to have completed all age-appropriate vaccinations if the child has received a second dose of measles given at 18 months in addition to all of the age-appropriate vaccinations relevant for a child aged 12-23 months.

In the 2019-20 RDHS, information on vaccination

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coverage was obtained in two ways—from health cards and from mothers’ verbal reports. Mothers of children born since from January 2017 were asked to present their child (children) vaccination cards where all the vaccination records were noted; the interviewer then recorded from the card the dates of each vaccination received. In cases where the card indicated the child had not received all basic vaccinations, the mother was asked whether the child had received other vaccinations that were

not recorded on the card, and if so, they too were recorded.

In instances where there were no cards available, the child’s vaccination information was solely based on the mother’s recall. The mother was asked to recall all the vaccines administered to their children.

The RDHS survey reported that vaccination cards were seen for 97% of children age 12-23 months

Table 1: Vaccinations by background characteristics

Background characteristic	DPT-HepB-Hib			Polio2			IPV			Pneumococcal			Rotavirus			Children age 24-35 months:						
	1	2	3	0 (birth dose)	1	2	3	1	2	3	1	2	3	1	2	3	All age appropriate vaccinations ¹	Measles & Rubella	Number of children			
Sex																						
Male	99.1	99.6	99.2	98.7	92.8	98.6	99.0	97.6	92.2	98.6	99.0	98.5	99.5	99.1	97.3	94.7	83.2	0.3	835	68.8	851	
Female	99.4	99.6	99.6	99.3	95.1	98.6	99.6	97.8	92.7	98.6	99.6	99.2	99.5	99.5	98.3	96.4	85.7	0.4	797	94.5	780	
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	0.1	439	96.3	425	
2-3	99.5	99.6	99.3	98.8	94.5	98.5	99.3	97.6	93.5	98.6	99.3	98.7	99.6	99.4	98.5	96.7	86.6	0.4	652	94.8	689	
4-5	98.7	99.7	99.7	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	0.3	323	90.5	325	
6+	98.5	99.3	99.3	98.3	90.1	98.3	99.3	96.8	90.6	99.3	99.3	98.2	98.2	98.2	94.9	92.0	78.3	0.7	219	89.7	192	
Vaccination card																						
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	0.1	1,588	94.8	1,516	
Not seen/in card	(83.1)	(80.9)	(87.4)	(82.7)	(68.8)	(91.3)	(83.4)	(46.4)	(84.0)	(91.0)	(84.7)	(81.2)	(83.1)	(91.4)	(91.4)	(44.2)	(38.8)	(6.9)	45	80.4	25.8	115
Residence																						
Urban	99.2	98.9	98.9	98.9	98.8	98.2	98.2	98.3	91.7	98.2	99.2	99.1	99.2	99.2	98.3	97.0	88.1	0.8	269	93.3	319	
Rural	99.2	99.8	99.5	99.0	93.4	98.7	99.3	97.6	92.6	98.7	98.4	98.8	99.6	99.3	97.7	95.2	83.7	0.2	1,364	93.9	68.8	1,312
Province																						
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	1.0	209	92.2	244	
South	99.2	100.0	99.3	99.0	92.1	98.8	99.3	98.6	93.9	100.0	99.3	99.3	100.0	99.5	97.3	85.3	85.3	0.0	348	97.6	311	
West	98.9	99.7	99.7	99.1	95.1	99.7	99.7	97.3	97.2	98.7	99.7	99.1	99.7	99.7	97.3	94.6	89.1	0.3	385	92.6	387	
North	99.7	99.3	99.3	98.1	97.7	99.7	99.2	97.2	78.5	98.3	98.8	97.1	98.8	98.3	96.8	93.8	73.4	0.3	262	98.0	247	
East	99.4	99.7	99.5	99.2	91.3	99.7	99.1	97.1	94.1	98.7	99.5	99.2	99.7	99.5	97.8	95.2	83.1	0.3	431	92.8	442	
Education																						
No education	98.5	99.1	98.5	98.5	90.3	99.1	98.5	98.2	93.4	98.1	98.5	97.7	99.1	98.5	97.8	95.0	83.6	0.9	159	89.2	180	
Primary	99.2	99.7	99.5	98.9	93.1	98.7	99.3	98.1	92.5	98.7	99.4	98.8	99.6	99.3	97.4	95.3	83.3	0.2	1,048	94.1	68.2	1,043
Secondary	99.6	99.6	99.5	99.4	98.6	99.6	99.6	97.6	92.5	99.6	99.6	99.7	99.8	99.6	98.6	96.6	87.6	0.2	351	95.0	70.6	330
More than secondary	99.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	87.1	1.9	75	95.0	73.8	76
Wealth quintile																						
Lowest	99.0	100.0	99.3	98.5	92.5	100.0	98.0	96.2	90.9	98.7	98.7	97.8	100.0	99.3	97.3	93.4	80.2	0.0	357	92.5	65.6	403
Second	98.7	99.3	99.1	98.4	91.6	99.1	98.7	97.3	90.6	98.3	99.1	98.4	99.3	99.0	98.2	95.2	81.2	0.7	351	94.0	280	280
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	0.0	323	92.3	323	323
Fourth	99.4	99.7	99.7	99.4	98.1	98.7	99.7	98.1	95.8	98.7	99.4	99.4	99.4	99.4	98.2	97.5	91.2	0.3	338	95.9	72.3	286
Highest	99.2	98.9	98.9	98.9	98.8	98.2	98.2	97.8	95.0	98.2	99.2	99.2	99.2	99.2	98.7	96.9	85.8	0.8	264	94.5	71.3	339
Total	99.2	99.6	99.4	99.0	93.9	99.6	99.3	97.7	92.4	98.6	99.3	98.8	99.5	99.3	97.8	95.5	84.4	0.3	1,633	93.8	69.4	1,631

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.

BCG = Bacille Calmette-Guérin
 DPT = Diphtheria-pertussis-tetanus
 HepB = Hepatitis B
 Hib = *Haemophilus influenzae* type b

Note: Figures in parentheses are based on 25-49 unweighted cases. Children are considered to have received the vaccine if it was either written on the child’s vaccination card or reported by the 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.

For children whose vaccination information is based on the mother’s report, children reported to have received HepB (birth dose) received the vaccine within 24 hours after birth. For children whose vaccination information is based on the written record of vaccination, children are considered to have received hepatitis B (birth dose) if this vaccine is recorded on their card, regardless of when the dose was administered.

¹Polio 0 is the polio vaccination given at birth.

²BCG, three doses of DPT-HepB-Hib (pentavalent), three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles

³BCG, hepatitis B (birth dose), three doses of DPT-HepB-Hib (pentavalent), four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, and one dose of measles

⁴BCG, hepatitis B (birth dose), three doses of DPT-HepB-Hib (pentavalent), four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, and two doses of measles

and 93% of children age 24-35 months. Table 1 summarizes data for children aged 12-23 months and 24-35 months. Overall, 96% of children received all basic vaccinations, while 84% received all age-appropriate vaccinations. Ninety-nine percent of children received BCG, 99% the three pentavalent doses, and 98% the three doses of oral polio. Coverage of vaccination against measles was reported at 98%. Less than 1% of children in Rwanda did not receive any vaccinations during the reported period.

Basic vaccination coverage differs slightly by residence, mother's education and wealth.

Figure 1 shows the trend of children age 12-23 months who received all basic vaccinations since 2000.

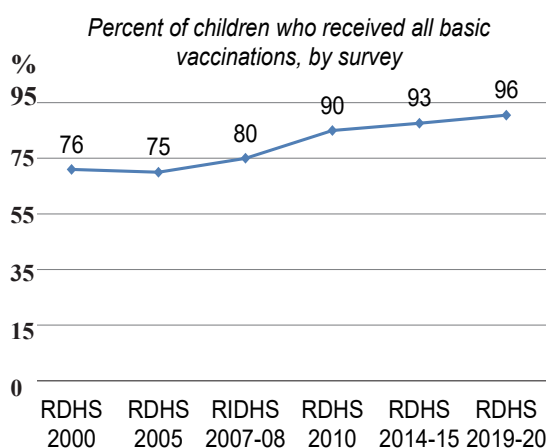


Figure 1: Trends in childhood vaccinations, 2000 to 2019-20 past 12 months

CHILDHOOD ACUTE RESPIRATORY INFECTION, FEVER, AND DIARRHEA

Acute respiratory infection (ARI), fever, and dehydration from diarrhea are important contributing causes of childhood morbidity and mortality in developing countries (WHO 2003). Timely medical attention when a child presents symptoms related to the above illnesses is paramount in reducing child deaths.

In the 2019-20 RDHS, for each child under age 5, mothers were asked if the child had experienced a cough accompanied by short, rapid breathing or difficulty in breathing as a result of a chest-related problem (symptoms of ARI); fever; or an episode of diarrhea in the 2 weeks preceding the survey. Respondents were also asked if treatment was sought when the child was ill. Overall, 2% of

children under age 5 showed symptoms of ARI, 19% had a fever, and 14% experienced diarrhea in the 2 weeks preceding the survey (data not shown). It should be noted that the morbidity data collected are subjective because they were based on a mother's perception of illnesses without validation by a written medical record.

Table 2 below shows that treatment from a health facility or provider was sought for 73% of children with ARI symptoms and 62% of those with a fever. Treatment was sought from a health facility or health provider for 52% of children with diarrhea. Thirty-four percent of children with diarrhea received a rehydration solution from an oral rehydration salt (ORS) packet; 37% of children with diarrhea were given zinc supplements, and 22% received both ORS and zinc supplements.

NUTRITIONAL STATUS OF CHILDREN

Anthropometric measurements (height and weight) for young children were collected in the 2019-20 RDHS to provide outcome measures of nutritional status. Weight measurements were taken using lightweight SECA scales with digital displays (model no. SECA 878U), which were designed and manufactured under the authority of the United Nations Children's Fund (UNICEF). Height/length measurements were taken using a standard measuring board (Shorr Board®). Recumbent length (lying down) was measured for children younger than age 24 months; standing height was measured for older children.

The three indices (height-for-age, weight-for-height, and weight-for-age) are expressed as standard deviation units from the median for the reference group. Children who fall below minus two standard deviations (-2 SD) from the median of the reference population were regarded as moderately malnourished, while those who fall below minus three standard deviations (-3 SD) from the reference population median were considered severely malnourished.

Each of these indices provides information about growth and body composition that is useful in assessing nutritional status. Stunting, or low height-for-age, were signs of chronic undernutrition that reflects failure to receive adequate nutrition over a long period. The most direct causes are usually (1)

Table 2: Treatment for acute respiratory infection, fever, and diarrhea

Background characteristic	Children with symptoms of ARI ¹		Children with fever		Children with diarrhea				
	Percentage for whom advice or treatment was sought ²	Number of children	Percentage for whom advice or treatment was sought ²	Number of children	Percentage for whom advice or treatment was sought ²	Percentage given fluid from ORS packet or pre-packaged	Percentage given zinc	Percentage given ORS and zinc	Number of children
Age in months									
<6	*	19	54.1	111	(42.5)	(16.9)	(16.0)	(5.4)	53
6-11	*	20	64.0	208	46.8	28.4	27.9	14.2	191
12-23	(79.1)	37	65.6	437	58.6	39.5	41.3	26.3	408
24-35	*	23	61.3	304	50.5	35.2	38.3	24.0	238
36-47	*	21	58.8	261	45.1	29.4	38.6	22.6	151
48-59	*	16	64.3	186	52.8	37.2	36.9	25.3	99
Sex									
Male	66.7	74	63.6	770	51.9	34.0	35.5	22.3	600
Female	79.7	62	61.0	736	51.9	34.4	37.7	22.1	541
Residence									
Urban	*	14	68.9	212	46.0	26.0	27.6	16.3	163
Rural	71.1	123	61.2	1,295	52.9	35.5	38.0	23.2	978
Province									
Kigali	*	13	71.8	175	42.8	21.4	20.3	8.8	133
South	*	19	61.6	260	52.4	34.0	34.3	21.5	211
West	67.2	51	63.3	443	53.3	38.1	42.3	26.2	358
North	*	19	53.3	257	50.7	32.3	37.3	21.4	197
East	(82.2)	34	63.4	372	55.3	36.9	38.2	25.1	242
Mother's education									
No education	*	19	57.1	164	44.4	33.1	29.4	20.5	154
Primary	68.7	97	59.0	996	51.3	33.8	36.9	22.0	758
Secondary	*	17	72.2	304	59.7	35.9	42.7	25.7	207
More than secondary	*	3	(89.3)	43	*	*	*	*	22
Wealth quintile									
Lowest	(66.8)	40	52.3	364	46.6	31.1	32.2	19.1	311
Second	(63.8)	38	56.5	333	45.9	33.5	34.6	22.5	255
Middle	*	30	62.3	316	54.2	38.4	41.1	27.0	239
Fourth	*	13	70.5	275	63.0	37.5	43.5	25.2	201
Highest	*	15	77.4	219	55.0	29.9	31.8	16.2	135
Total	72.7	137	62.3	1,507	51.9	34.1	36.5	22.2	1,141

Among children under age 5 who had symptoms of acute respiratory infection (ARI) or had fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, and among children under age 5 who had diarrhea during the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, percentage given a fluid made from oral rehydration salt (ORS) packets or given pre-packaged ORS fluid, percentage given zinc, and percentage given ORS and zinc, according to background characteristics, Rwanda DHS 2019-20.

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.

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

²Excludes advice or treatment from a traditional practitioner

not eating enough or eating foods that lack growth-promoting nutrients and (2) recurrent infections or chronic diseases that cause poor nutrient intake, absorption, or utilization. Wasting, or low weight-for-height, is a measure of acute undernutrition. It represents a 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 causing weight loss. Overweight and obesity, or high weight-for-height, results from an imbalance between energy consumed (too much) and energy expended (too little). Overweight and obesity are now problems in many countries. Weight-for-age is a composite

index of height-for-age and weight-for-height. It includes both acute (wasting) and chronic (stunting) undernutrition and is an indicator of overall undernutrition.

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 scores describe the nutritional status of the entire population of children without the use of a cut-off point. A mean Z-score of less than 0 (that is, 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 undernutrition.

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 at the time of the survey. 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 and weight data were available for nearly all children (99.7%).

Table 3 and Figure 2 show nutritional status for children under age 5 according to the three anthropometric indices. Thirty-three percent of children in Rwanda were stunted (below -2 SD), with 9% being severely stunted (below -3 SD). Stunting generally increases with age, peaking at 40% among children age 24-35 months. A higher proportion of children in rural areas (36%) than urban areas (20%) were stunted. Similarly, children

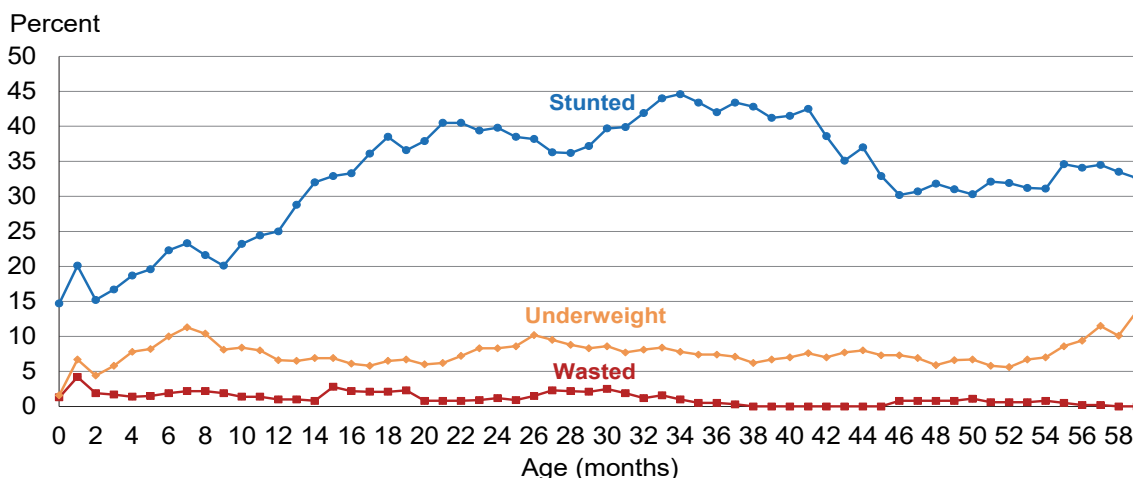


Figure 2: Nutritional status of children by age

Note: Stunting reflects chronic malnutrition; wasting reflects acute malnutrition; underweight reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a 5-month moving average.

in North province (41%) and West province (40%) were more likely to be stunted than other children. In this survey, stunting was strongly correlated with mother's education level. Children of women with no education were more likely to be stunted than those whose mothers have been to school. Stunting was inversely related to wealth quintile; 49% of children in the lowest wealth quintile were stunted compared with 11% of children in the highest quintile.

About 1% of children in Rwanda were wasted, with less than 1% severely wasted.

Overall, 6% of children under age 5 were overweight. The results also showed that 8% of all children under age 5 were underweight and 1% severely underweight. The proportion of children who were underweight is greater in rural areas (9%) than urban areas (4%). Underweight was strongly associated with mother's education; 11% of children whose mothers had no education compared to less than 1% of children whose

mothers had a secondary education. Underweight was related to wealth; 12% of children in the lowest wealth quintile were underweight, as compared with 2% of children in the highest quintile.

INFANT AND YOUNG CHILD FEEDING PRACTICES

Breastfeeding is sufficient and beneficial for infant nutrition in the first 6 months of life. Breastfeeding immediately after birth also helps the uterus contract, hence reducing the mother's postpartum blood loss. Giving any other foods and water (in addition to breast milk) before the child is age 6 months is generally discouraged because it may inhibit breastfeeding and expose the infant to illness. Infants older than age 6 months need other food and drink while they continue to breastfeed until age 2 or older; breast milk remains an important source of energy, protein, and other nutrients such as vitamin A and iron. The food

given should include a variety of options such as peeled, cooked, and mashed vegetables; grains; fruit; some oil; and also, meat, eggs, chicken, and dairy products to provide adequate nourishment (Pan American Health Organization 2002).

The 2019-20 RDHS collected data on infant and young child feeding (IYCF) practices for all children born in the 2 years preceding the survey.

Table 4 shows breastfeeding practices by child's age. The results show that 81% of children under age 6 months were exclusively breastfed, this is slightly decreased from the 87% figure reported in 2014-15. In addition to breast milk, 2% of these young children consumed plain water, 8% consumed non-milk liquids, 4% consumed other milk, and 5% consumed complementary foods. Four percent of infants under age 6 months were

Table 3: Vaccinations by background characteristics

Background characteristic	Height-for-age ¹			Weight-for-height			Weight-for-age		
	Percentage below -3 SD	Percentage below -2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD	Mean Z-score (SD)
Age in months									
<6	4.5	16.2	-0.9	0.6	1.5	11.4	2.4	5.1	1.8
6-8	5.7	22.7	-1.1	0.3	2.7	9.2	2.9	10.2	2.9
9-11	5.2	19.8	-1.2	0.9	1.3	5.5	2.7	8.3	1.4
12-17	7.3	32.8	-1.5	0.5	2.2	4.0	1.2	7.2	0.2
18-23	10.9	39.0	-1.7	0.0	0.7	5.4	0.2	5.8	0.4
24-35	11.8	40.4	-1.7	0.1	1.7	6.2	1.2	9.3	0.4
36-47	9.5	37.9	-1.7	0.0	0.0	4.7	0.8	6.7	0.3
48-59	10.7	32.5	-1.6	0.0	0.7	3.2	1.2	8.5	0.3
Sex									
Male	11.0	37.0	-1.6	0.0	0.9	5.8	1.6	9.0	0.7
Female	7.5	29.2	-1.4	0.3	1.4	5.4	1.1	6.3	0.6
Mother's interview status									
Interviewed	9.0	33.1	-1.5	0.2	1.2	5.7	1.3	7.5	0.7
Not interviewed, but in household	*	*	*	*	*	*	*	*	*
Not interviewed, not in household ²	13.2	33.2	-1.6	0.0	0.5	4.5	1.7	10.3	0.0
Residence									
Urban	4.9	19.8	-1.0	0.4	1.6	6.7	0.3	3.7	1.1
Rural	10.1	35.8	-1.6	0.2	1.0	5.4	1.5	8.5	0.6
Province									
Kigali	5.9	21.3	-1.1	0.4	1.8	6.3	1.0	4.8	1.6
South	9.1	32.7	-1.6	0.1	2.2	3.1	2.1	10.4	0.1
West	13.2	40.2	-1.7	0.3	0.6	6.2	1.2	8.1	0.7
North	11.7	40.5	-1.8	0.0	0.5	7.7	1.7	6.9	0.2
East	6.0	28.8	-1.4	0.2	0.8	5.5	0.8	6.9	0.8
Mother's education									
No education	14.5	45.1	-1.9	0.2	0.8	5.6	2.8	10.5	0.6
Primary	10.0	35.6	-1.6	0.2	1.3	5.3	1.3	8.3	0.6
Secondary	3.8	23.3	-1.2	0.0	0.7	5.8	0.7	4.6	-0.3
More than secondary	1.9	5.6	-0.3	1.2	3.2	11.5	0.0	0.2	3.1
Wealth quintile									
Lowest	15.9	48.5	-1.9	0.2	1.4	5.5	2.0	12.2	0.3
Second	11.8	40.5	-1.8	0.2	1.1	3.6	1.3	10.1	0.0
Middle	8.4	32.8	-1.5	0.3	1.2	5.5	2.0	6.7	0.2
Fourth	6.6	28.6	-1.4	0.0	0.8	6.3	0.6	6.1	1.2
Highest	1.7	10.7	-0.8	0.3	1.1	7.4	0.5	1.9	1.7
Total	9.2	33.1	-1.5	0.2	1.1	5.6	1.3	7.7	0.6

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 BCG = Bacille Calmette-Guérin

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.

¹Recumbent length is measured for children under age 2; standing height is measured for all other children

²Includes children who are below -3 standard deviations (SD) from the WHO Growth Standards population median

³Includes children whose mothers are deceased

⁴For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 4: Breastfeeding status by age

Age in months	Breastfeeding status						Total	Percentage currently breastfeeding	Number of youngest children under age 2 living with the mother	Percentage using a bottle with a nipple	Number of all children under age 2
	Not breast-feeding	Exclusively breast-feeding	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

Percent distribution of youngest children under age 2 who are living with their mother, by breastfeeding status and the 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.

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 breastfeeding, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) 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.

¹Non-milk liquids include juice, juice drinks or other liquids

fed using a bottle with a nipple, a practice that is discouraged because of the risk of illness to the child. Seventy-nine percent of children age 6-8 months receive timely complementary foods.

The minimum acceptable diet indicator is used to assess the proportion of children age 6-23 months who meet minimum standards with respect to IYCF practices. Specifically, children age 6-23 months who have a minimum acceptable diet meet all three IYCF criteria below:

□ Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, or powdered animal milk; or yogurt.

□ Fed with foods from five or more of the following groups: (a) breast milk; (b) grains, roots, and tubers, including porridge and fortified baby food from grains; (c) legumes and nuts; (d) dairy products (milk, yogurt, cheese); (e) eggs; (f) meat, poultry, fish, and shellfish (and organ meats); (g) vitamin A-rich fruits and vegetables (and red palm oil); and (h) other fruits and vegetables.

□ Fed the minimum recommended number of times per day, according to their age and breastfeeding status:

- For breastfed children, minimum meal frequency

is receiving solid, semisolid, or soft food at least twice a day (for infants age 6-8 months) or at least three times a day (for children age 9-23 months).

- For non-breastfed 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 food.

Figure 3 shows the percentage of children being fed the minimum acceptable diet, by age. Among children age 6-23 months, only 22% are fed in accordance with the criteria for a minimum acceptable diet.

Percent of children fed a minimum acceptable diet, by age in months

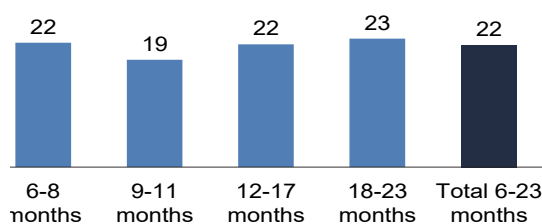


Figure 3: Minimum acceptable diet by age, in months

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