

This chapter presents findings from several areas of importance to maternal and child health, including information on antenatal, delivery and postnatal care, characteristics of the neonate, vaccinations, and common childhood illnesses and their treatment. Information on other factors important to the welfare of both women and children, including information on the provision of vitamin A to women and children, is presented in subsequent chapters.

The information provided by the 2004-05 TDHS is important as it provides a critical look into the performance of maternal and child health service provision in Tanzania. These services support a key health policy objective, namely, the reduction of infant and maternal morbidity and mortality. Therefore, the survey results provide an opportunity to identify critical issues affecting the situation of women and children in Tanzania. The information will assist policymakers, planners, and other collaborators in the health sector to formulate appropriate strategies and intervention to improve reproductive and child health care.

9.1 ANTENATAL CARE

Early and regular checkups by trained medical providers are very important in assessing the physical status of women during pregnancy and intervening in a timely manner if any problems are detected. The 2004-05 TDHS obtained information from women on both coverage of antenatal care (ANC) and coverage of key elements of the care received for the last birth during the five-year period before the survey.

Coverage of Antenatal Care

Table 9.1 shows the percentage of women who had a live birth in the five years preceding the survey by the source of antenatal care. To obtain the information on source of ANC, interviewers recorded all persons a woman had consulted for antenatal care. However, for cases where more than one person was seen, only the provider with the highest qualifications is considered in the table.

The results show that 94 percent of women who gave birth in five years preceding the survey received antenatal care from a health professional at least once. As expected, nurses and midwives are more likely than other health professionals to provide ANC (72 percent). Women also go to MCH aides (16 percent), doctors (2 percent), and clinical officers (4 percent) for ANC services. Three percent of women receive some kind of antenatal care from people who are not medical professionals, such as trained and traditional birth attendants, relatives, and village health workers. Three percent of women received no antenatal care at all.

The 2004-05 TDHS findings show no great variation in antenatal care from medically qualified professionals between rural and urban areas. With the exception of a few regions (Mbeya and Arusha), nine out of ten women reported that they received care from a health care professional at least once, regardless of background characteristics.

Educated mothers are more likely to receive antenatal care from medical professionals than mothers with less education. There is also a positive relationship between increasing wealth quintile and receiving antenatal care from a health professional.

Table 9.1 Antenatal care

Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Tanzania 2004-05

Background characteristic	Doctor/ AMO	Clinical officer/ Assist. clinical officer	Nurse/ midwife	MCH aide	Traditional birth attendant	Relative/ village health worker/ other	No one	Missing	Total	Number of women
Age at birth										
<20	2.3	4.8	68.9	17.9	0.0	2.9	3.1	0.1	100.0	906
20-34	2.1	3.5	73.3	15.7	0.0	2.4	2.9	0.1	100.0	4,013
35-49	2.1	4.8	70.6	16.1	0.7	2.4	3.4	0.0	100.0	853
Birth order										
1	2.9	3.9	71.5	17.5	0.0	2.1	2.1	0.1	100.0	1,178
2-3	2.0	3.9	74.5	14.9	0.2	2.3	2.1	0.0	100.0	2,097
4-5	2.5	4.0	71.0	15.4	0.0	2.4	4.5	0.1	100.0	1,204
6+	1.3	3.6	70.2	17.3	0.2	3.2	3.9	0.2	100.0	1,293
Residence										
Urban	4.4	2.1	77.3	12.9	0.1	0.3	2.7	0.1	100.0	1,277
Rural	1.5	4.4	70.7	17.0	0.1	3.1	3.1	0.1	100.0	4,496
Mainland/Zanzibar										
Mainland	2.1	4.0	72.9	15.2	0.1	2.5	3.1	0.1	100.0	5,628
Total urban	4.4	2.9	77.5	12.0	0.1	0.3	2.7	0.1	100.0	1,269
Dar es Salaam city	6.4	5.5	68.9	19.2	0.0	0.0	0.0	0.0	100.0	369
Other urban	3.5	1.8	81.1	9.0	0.2	0.5	3.8	0.1	100.0	900
Total rural	1.5	4.3	71.5	16.2	0.1	3.2	3.2	0.1	100.0	4,359
Zanzibar	2.7	0.5	45.6	50.0	0.2	0.3	0.7	0.0	100.0	144
Unguja	4.1	0.8	62.1	33.0	0.0	0.0	0.0	0.0	100.0	93
Pemba	0.3	0.0	15.4	81.0	0.4	0.9	2.1	0.0	100.0	51
Zone										
Western	0.6	7.1	60.6	22.1	0.0	7.5	2.0	0.1	100.0	1,143
Northern	1.6	2.0	79.1	9.8	0.0	0.9	6.6	0.0	100.0	774
Central	2.3	3.4	84.0	8.4	0.0	1.2	0.7	0.0	100.0	473
Southern highlands	4.5	3.4	60.4	21.4	0.3	3.3	6.6	0.0	100.0	844
Lake	1.4	1.2	85.2	8.3	0.0	0.5	3.2	0.2	100.0	1,126
Eastern	3.5	4.6	74.8	14.8	0.7	1.2	0.4	0.1	100.0	766
Southern	1.7	6.5	71.3	20.2	0.0	0.3	0.1	0.0	100.0	503
Region										
Dodoma	2.6	4.3	86.3	4.5	0.0	1.7	0.6	0.0	100.0	277
Arusha	2.0	1.4	67.9	13.2	0.0	1.9	13.6	0.0	100.0	205
Kilimanjaro	2.3	4.4	89.0	3.5	0.0	0.0	0.8	0.0	100.0	145
Tanga	1.6	0.9	87.2	8.0	0.0	0.0	2.3	0.0	100.0	250
Morogoro	1.4	3.3	79.6	9.7	2.0	2.8	1.2	0.0	100.0	253
Pwani	0.0	4.2	81.3	12.5	0.0	1.3	0.0	0.6	100.0	144
Dar es Salaam	6.4	5.5	68.9	19.2	0.0	0.0	0.0	0.0	100.0	369
Lindi	1.7	9.5	60.3	26.7	0.0	1.2	0.6	0.0	100.0	117
Mtwara	0.5	2.2	62.4	34.9	0.0	0.0	0.0	0.0	100.0	201
Ruvuma	3.0	9.2	87.8	0.0	0.0	0.0	0.0	0.0	100.0	185
Iringa	7.6	6.3	83.5	2.6	0.0	0.0	0.0	0.0	100.0	216
Mbeya	4.6	3.2	50.8	26.3	0.4	2.6	12.2	0.0	100.0	425
Singida	1.7	2.1	80.8	14.0	0.0	0.6	0.8	0.0	100.0	196
Tabora	1.0	9.3	45.5	36.9	0.0	5.9	1.5	0.0	100.0	311
Rukwa	1.1	0.8	56.1	31.3	0.4	8.4	1.9	0.0	100.0	203
Kigoma	1.2	10.8	72.7	8.0	0.0	6.9	0.4	0.0	100.0	282
Shinyanga	0.0	3.9	62.9	21.0	0.0	8.7	3.2	0.3	100.0	550
Kagera	0.0	0.4	96.8	1.2	0.0	0.4	1.2	0.0	100.0	351
Mwanza	1.6	0.3	91.0	1.6	0.0	0.0	4.9	0.5	100.0	546
Mara	3.2	4.7	53.4	34.9	0.0	1.8	2.0	0.0	100.0	229
Manyara	0.4	2.3	72.3	13.6	0.0	1.8	9.6	0.0	100.0	173
Zanzibar North	0.9	0.9	44.7	53.5	0.0	0.0	0.0	0.0	100.0	21
Zanzibar South	10.1	0.4	60.0	29.5	0.0	0.0	0.0	0.0	100.0	13
Town West	3.9	0.9	68.8	26.4	0.0	0.0	0.0	0.0	100.0	59
Pemba North	0.0	0.0	9.6	90.0	0.4	0.0	0.0	0.0	100.0	27
Pemba South	0.5	0.0	21.9	70.8	0.5	1.8	4.5	0.0	100.0	24

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Table 9.1—Continued

Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Tanzania 2004-05

Background characteristic	Doctor/ AMO	Clinical officer/ Assist. clinical officer	Nurse/ midwife	MCH aide	Traditional birth attendant	Relative/ village health worker/ other	No one	Missing	Total	Number of women
Education										
No education	0.5	3.3	65.7	21.1	0.3	3.7	5.4	0.1	100.0	1,466
Primary incomplete	1.6	5.7	68.8	18.8	0.0	1.7	3.3	0.1	100.0	910
Primary complete	2.8	3.6	76.3	12.7	0.1	2.3	2.1	0.1	100.0	3,094
Secondary +	5.2	3.8	71.7	18.5	0.0	0.8	0.0	0.0	100.0	302
Wealth quintile										
Lowest	1.1	4.2	63.0	22.3	0.1	3.9	5.3	0.0	100.0	1,226
Second	1.3	3.6	72.7	16.3	0.1	3.6	2.3	0.1	100.0	1,187
Middle	1.3	4.6	77.1	12.4	0.4	2.5	1.7	0.0	100.0	1,166
Fourth	2.1	3.8	73.4	16.0	0.0	1.3	3.3	0.1	100.0	1,129
Highest	5.2	3.1	75.6	12.8	0.0	0.7	2.3	0.2	100.0	1,065
Total	2.1	3.9	72.2	16.1	0.1	2.5	3.0	0.1	100.0	5,772

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

Number and Timing of Antenatal Visits

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues through to delivery. In Tanzania, pregnant women are advised to start attending antenatal clinics before the 16th week of gestation so that their general baseline health can be assessed and monitored regularly. Under normal circumstances, WHO recommends that a pregnant woman without complications have at least four ANC visits to provide sufficient care. It is possible during these visits to detect reproductive health risk factors. In the event of any complication, more frequent visits are advisable and admission to a hospital may become necessary. Table 9.2 presents data on the number of antenatal visits made by pregnant mothers and the stage of pregnancy at the first visit.

Sixty-two percent of women whose last birth occurred in the five years before the survey made four or more ANC visits. The number of pregnant mothers in Tanzania making four or more ANC visits appears to have declined slightly from 70 percent, according to the 1999 TRCHS (Figure 9.1). There is marked variation between urban and rural areas. Women in Mainland urban areas are more likely to make at least four visits (71 percent) than their counterpart Mainland rural women (59 percent).

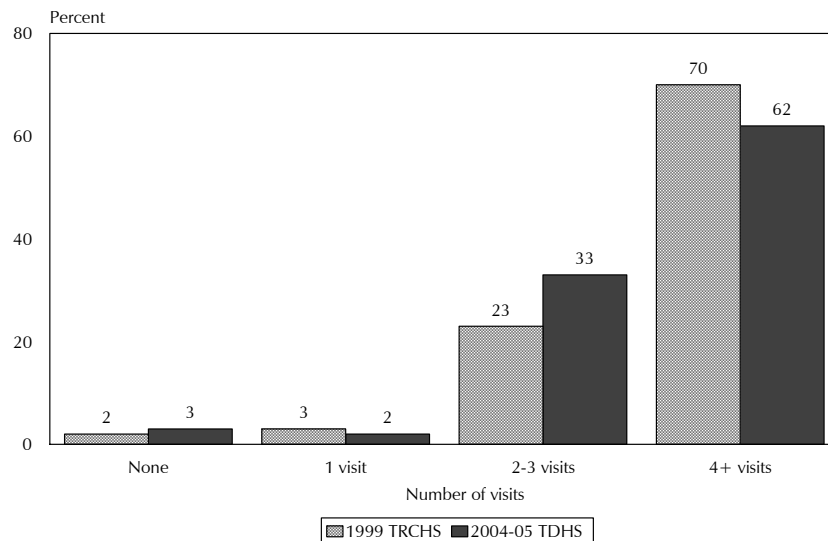
Although the majority of Tanzanian women are making the recommended number of ANC visits, more than eight in ten women are making their first visit later than recommended. The median number of months that women are pregnant at their first visit is 5.4. One-third of women do not seek ANC until their sixth month or later. There is little urban-rural variation in terms of number of months pregnant at the time of the first visit.

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

Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, according to Mainland/Zanzibar residence, Tanzania 2004-05

Number and timing of ANC visits	Mainland			Zanzibar	Total
	Urban	Rural	Total		
Number of ANC visits					
None	2.8	3.2	3.1	0.7	3.0
1	0.6	2.1	1.8	1.0	1.7
2-3	25.1	35.9	33.5	28.8	33.4
4+	71.4	58.5	61.3	68.0	61.5
Don't know/missing	0.1	0.4	0.4	1.4	0.4
Total	100.0	100.0	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit					
No antenatal care	2.8	3.2	3.1	0.7	3.0
<4	17.2	13.2	14.1	12.4	14.1
4-5	49.0	50.4	50.1	45.3	50.0
6-7	29.4	31.2	30.8	40.2	31.1
8+	1.6	1.8	1.8	1.3	1.7
Don't know/missing	0.0	0.2	0.1	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	5.3	5.5	5.4	5.6	5.4
Number of women	1,233	4,395	5,628	144	5,772

Figure 9.1 Trends in Number of Antenatal Care Visits



Components of Antenatal Care

The content of antenatal care is important in judging its quality. Certain items of care have been selected and included in the questionnaire to indicate the level of the care received. Pregnancy complications are an important source of maternal and child mortality and morbidity. Thus, information on the signs of complications and tests for complications should be routinely included in all antenatal care. In the 2004-05 TDHS, respondents were asked whether they had received each of the following services at least once during antenatal care: information on pregnancy complications, weight measurement, blood pressure measurement, and urine and blood sample collection.

Some caution should be exercised in considering the information on the content of ANC care. First, the information is dependent on the woman's understanding of the questions (e.g., her understanding of what blood pressure measurement involves). It is also dependent on her recall of events during antenatal visits that may have taken place several years before the interview. Nonetheless, the results are useful in providing insights into the content of the care Tanzanian women receive during pregnancy.

Table 9.3 shows the findings on various components of antenatal care. Measuring weight was the most common component of ANC reported. Almost all women with a live birth in the five years preceding the survey had their weight measured (94 percent). However, weight is also likely to be the least important aspect of ANC, because there is unlikely to be a baseline (pre-pregnancy) weight on record for comparison purposes. Other components of ANC are much less likely to be reported. Two-thirds of women report their blood pressure was measured and 54 percent say a blood sample was taken. Less than half, however, reported being informed about pregnancy complications or having given a urine sample.

There are substantial variations by background characteristics. For example, the proportion of women told about pregnancy complications varies greatly from a low of 15 percent in Rukwa to a high of 68 in Dar es Salaam. Little more than one-third of women in the Northern and Central zones of Tanzania reported that they had been provided information about signs of pregnancy complications, compared with two-thirds of women in the Eastern zone. Women living in urban areas, in wealthier households, and women with higher levels of educational attainment are more likely than others to have received each component of ANC.

Information on iron supplements and antimalarial drugs was collected and reported for the most recent birth in the five years preceding the survey, regardless of whether the respondent received ANC. Six in ten women who gave birth during the five years preceding the survey received iron supplementation and half of women received an antimalarial drug. Antimalarial drugs will be discussed further in Chapter 10.

Table 9.3 Components of antenatal care

Among women with a live birth in the five years preceding the survey who received ANC for the most recent birth, percentage who received specific services during ANC and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup or anti-malarial drugs for the most recent birth, according to background characteristics, Tanzania 2004-05

Background characteristic	Among women who received antenatal care								
	Informed of signs of pregnancy complications	Weight measured	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women	Received iron tablets or syrup	Received anti-malarial drugs	Number of women
Age at birth									
<20	44.5	94.0	66.4	44.4	58.3	878	66.2	49.0	906
20-34	47.1	94.5	65.8	41.8	54.2	3,892	60.7	51.5	4,013
35-49	50.8	93.7	66.5	39.6	50.1	823	57.4	44.1	853
Birth order									
1	48.2	94.9	69.6	49.8	63.0	1,153	66.2	52.0	1,178
2-3	47.9	94.9	69.5	45.4	57.7	2,052	61.6	52.7	2,097
4-5	44.7	94.0	62.3	37.2	50.3	1,148	60.5	49.3	1,204
6+	47.6	92.9	60.1	33.1	44.1	1,240	56.3	44.4	1,293
Residence									
Urban	60.7	97.6	91.2	77.7	87.3	1,242	63.4	57.7	1,277
Rural	43.4	93.3	58.8	31.7	44.8	4,351	60.4	47.8	4,496
Mainland/Zanzibar									
Mainland	47.4	94.3	65.5	41.2	54.0	5,450	61.2	50.7	5,628
Total urban	61.9	97.7	91.4	77.4	87.9	1,234	64.0	58.7	1,269
Dar es Salaam city	67.7	100.0	97.8	89.8	97.6	369	73.0	55.0	369
Other urban	59.4	96.7	88.7	72.1	83.8	865	60.3	60.2	900
Total rural	43.2	93.3	58.0	30.6	44.1	4,216	60.4	48.4	4,359
Zanzibar	40.7	92.7	82.2	69.5	62.2	143	56.2	23.0	144
Unguja	51.4	95.4	94.8	93.1	78.8	93	60.2	28.8	93
Pemba	20.9	87.7	58.6	25.4	31.2	50	48.8	12.3	51
Zone									
Western	41.9	93.7	56.7	34.2	40.9	1,118	59.1	50.1	1,143
Northern	34.5	94.3	71.3	48.4	58.8	722	56.6	53.2	774
Central	36.9	86.4	57.1	28.6	35.9	469	67.4	50.9	473
Southern highlands	39.3	91.3	57.1	28.8	52.8	788	61.7	36.2	844
Lake	59.7	96.6	57.6	34.5	50.9	1,088	58.0	60.3	1,126
Eastern	65.4	98.5	87.9	68.1	82.5	763	56.7	46.6	766
Southern	46.9	96.6	81.4	51.2	58.8	502	80.8	57.0	503
Region									
Dodoma	35.3	81.3	46.3	23.2	33.3	275	59.7	55.2	277
Arusha	52.1	93.9	79.2	59.0	63.5	177	38.5	50.6	205
Kilimanjaro	35.0	100.0	81.8	55.4	62.4	144	63.1	55.5	145
Tanga	26.3	95.7	70.8	54.5	70.3	244	67.1	61.5	250
Morogoro	62.5	99.1	81.9	52.5	68.3	251	40.0	37.7	253
Pwani	64.8	93.7	73.2	39.5	68.7	143	44.2	40.8	144
Dar es Salaam	67.7	100.0	97.8	89.8	97.6	369	73.0	55.0	369
Lindi	49.2	96.1	76.6	54.7	56.4	116	88.6	58.1	117
Mtwara	50.2	94.8	76.1	36.8	47.6	201	88.7	58.5	201
Ruvuma	42.0	99.0	90.1	64.7	72.5	185	67.3	54.7	185
Iringa	49.6	92.8	72.1	32.6	55.9	216	54.5	48.3	216
Mbeya	46.4	92.7	56.9	33.8	66.8	373	67.3	32.4	425
Singida	39.3	93.5	72.4	36.3	39.5	194	78.2	44.7	196
Tabora	34.8	94.0	55.9	38.2	41.3	307	62.3	47.3	311
Rukwa	14.9	87.0	41.1	15.3	23.4	199	58.0	31.2	203
Kigoma	38.2	92.3	63.2	34.7	39.0	280	54.8	58.7	282
Shinyanga	48.0	94.2	53.8	31.6	41.5	531	59.4	47.3	550
Kagera	66.1	96.7	52.1	20.8	34.6	347	57.7	66.1	351
Mwanza	60.1	97.8	64.7	44.8	64.6	517	55.7	62.5	546
Mara	48.7	94.0	49.6	31.9	44.5	224	63.8	46.5	229
Manyara	27.1	87.2	53.4	20.5	32.0	157	57.3	42.5	173
Zanzibar North	40.0	89.3	86.8	84.3	71.8	21	72.7	29.7	21
Zanzibar South	47.1	97.0	96.5	94.6	79.7	13	75.3	26.4	13
Town West	56.4	97.3	97.2	95.9	81.1	59	52.4	29.0	59
Pemba North	16.7	88.9	63.7	25.5	31.7	27	41.7	13.2	27
Pemba South	25.9	86.2	52.6	25.3	30.7	23	56.9	11.2	24

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Table 9.3—Continued

Among women with a live birth in the five years preceding the survey who received ANC for the most recent birth, percentage who received specific services during ANC and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup or anti-malarial drugs for the most recent birth, according to background characteristics, Tanzania 2004-05

Background characteristic	Among women who received antenatal care								
	Informed of signs of pregnancy complications	Weight measured	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women	Received iron tablets or syrup	Received anti-malarial drugs	Number of women
Education									
No education	36.4	91.0	53.1	26.0	39.7	1,385	57.4	39.7	1,466
Primary incomplete	41.9	93.6	61.4	39.0	52.0	879	65.1	45.3	910
Primary complete	52.0	95.7	70.5	45.8	58.2	3,027	61.9	55.4	3,094
Secondary+	65.7	97.1	92.9	84.1	87.9	302	58.9	58.2	302
Wealth quintile									
Lowest	41.9	91.9	54.9	28.2	39.7	1,161	59.3	45.5	1,226
Second	40.1	92.7	59.6	29.6	44.2	1,158	64.3	45.7	1,187
Middle	44.0	95.2	56.5	28.4	42.9	1,146	58.5	47.0	1,166
Fourth	48.4	93.6	69.2	46.0	60.5	1,090	59.5	54.8	1,129
Highest	63.6	98.4	92.6	81.6	87.7	1,038	64.1	58.3	1,065
Total	47.3	94.3	66.0	41.9	54.2	5,593	61.1	50.0	5,772

Tetanus Toxoid Vaccination

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, a cause of deaths among infants around the world. To address this problem, the Ministry of Health requires all women of reproductive age to be vaccinated with tetanus toxoid when they become pregnant. A baby is considered protected if the mother receives two doses of tetanus toxoid during pregnancy, with the second at least two weeks before delivery. However, if a woman was vaccinated during a previous pregnancy, she only requires one dose for the current pregnancy. Five doses are considered adequate to provide lifetime protection. To assess the status of tetanus vaccination coverage, women who gave birth during the five years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth, and if so how many. The results are presented in Table 9.4.

Eight in ten women who had a live birth in the five years preceding the survey received at least one tetanus toxoid injection during pregnancy for the most recent birth: 24 percent received one dose and 56 percent of women received two or more doses of vaccine. This is approximately the same as the results from the 1999 TRCHS, which found that 83 percent received at least one dose, although a slightly higher proportion received 2 doses in 1999 (61 percent).

Younger mothers and women pregnant with their first birth are more likely than other women to receive two or more doses of tetanus toxoid. Urban women are also more likely than rural women to receive two or more doses of tetanus toxoid during pregnancy. The data imply that a substantial proportion of births in rural areas (47 percent) may not be protected against tetanus.

Pregnant women on the Mainland are substantially more likely than those on Zanzibar to receive two or more doses of tetanus toxoid (56 and 41 percent, respectively). Pregnant women in Dar es Salaam and Tanga are more likely than those in other regions to receive two or more doses. As expected, the proportion of pregnant women with two or more doses of tetanus toxoid increases with education.

Table 9.4 Tetanus toxoid injections

Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Tanzania 2004-05

Background characteristic	None	One injection	Two or more injections	Don't know/missing	Total	Number of women
Age at birth						
<20	8.3	18.5	72.9	0.3	100.0	906
20-34	20.5	24.8	54.3	0.4	100.0	4,013
35-49	29.1	24.5	45.7	0.7	100.0	853
Birth order						
1	6.8	17.8	75.1	0.3	100.0	1,178
2-3	15.1	25.4	59.1	0.4	100.0	2,097
4-5	26.8	25.9	46.9	0.4	100.0	1,204
6+	32.9	24.6	41.7	0.7	100.0	1,293
Residence						
Urban	13.5	19.9	66.2	0.4	100.0	1,277
Rural	21.6	24.9	53.0	0.5	100.0	4,496
Mainland/Zanzibar						
Mainland	19.7	23.6	56.3	0.4	100.0	5,628
Total urban	13.1	19.2	67.4	0.3	100.0	1,269
Dar es Salaam city	9.4	11.4	79.3	0.0	100.0	369
Other urban	14.6	22.4	62.6	0.4	100.0	900
Total rural	21.6	24.8	53.1	0.5	100.0	4,359
Zanzibar	26.0	32.4	40.8	0.8	100.0	144
Unguja	27.3	28.4	43.4	0.9	100.0	93
Pemba	23.7	39.5	36.1	0.7	100.0	51
Zone						
Western	26.7	32.6	40.4	0.4	100.0	1,143
Northern	17.2	20.7	61.4	0.6	100.0	774
Central	19.7	30.7	49.0	0.6	100.0	473
Southern highlands	20.3	24.4	55.0	0.2	100.0	844
Lake	19.6	19.0	60.7	0.7	100.0	1,126
Eastern	14.1	13.6	72.1	0.2	100.0	766
Southern	15.3	24.8	59.8	0.2	100.0	503
Region						
Dodoma	19.4	30.2	49.9	0.5	100.0	277
Arusha	18.4	21.7	59.4	0.4	100.0	205
Kilimanjaro	19.0	24.3	56.1	0.7	100.0	145
Tanga	9.5	12.6	77.1	0.8	100.0	250
Morogoro	16.9	13.6	68.9	0.6	100.0	253
Pwani	21.1	19.5	59.3	0.0	100.0	144
Dar es Salaam	9.4	11.4	79.3	0.0	100.0	369
Lindi	19.3	21.9	58.7	0.0	100.0	117
Mtwara	12.9	21.1	66.0	0.0	100.0	201
Ruvuma	15.4	30.5	53.7	0.4	100.0	185
Iringa	13.4	19.2	66.9	0.5	100.0	216
Mbeya	23.5	27.1	49.4	0.0	100.0	425
Singida	20.0	31.5	47.6	0.9	100.0	196
Tabora	17.3	34.6	48.2	0.0	100.0	311
Rukwa	20.9	24.5	54.2	0.4	100.0	203
Kigoma	38.0	25.9	36.1	0.0	100.0	282
Shinyanga	26.2	34.8	38.1	0.8	100.0	550
Kagera	23.6	15.0	61.4	0.0	100.0	351
Mwanza	17.7	19.8	61.7	0.8	100.0	546
Mara	17.9	23.1	57.4	1.7	100.0	229
Manyara	25.5	28.2	45.8	0.5	100.0	173
Zanzibar North	39.0	33.7	27.4	0.0	100.0	21
Zanzibar South	37.9	15.7	46.4	0.0	100.0	13
Town West	20.8	29.3	48.5	1.4	100.0	59
Pemba North	21.2	39.7	39.0	0.0	100.0	27
Pemba South	26.5	39.3	32.7	1.5	100.0	24
Education						
No education	21.7	25.5	52.4	0.4	100.0	1,466
Primary incomplete	19.1	22.8	57.5	0.6	100.0	910
Primary complete	19.6	23.8	56.2	0.4	100.0	3,094
Secondary+	15.4	18.3	65.7	0.6	100.0	302
Wealth quintile						
Lowest	21.8	23.7	54.3	0.2	100.0	1,226
Second	21.0	26.0	52.5	0.5	100.0	1,187
Middle	24.4	24.5	50.7	0.4	100.0	1,166
Fourth	18.1	25.9	55.6	0.4	100.0	1,129
Highest	13.1	18.4	67.6	0.8	100.0	1,065
Total	19.8	23.8	55.9	0.4	100.0	5,772

9.2 DELIVERY CARE

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the newborn baby. Thus, another important component of efforts to reduce health risks to mothers and children is increasing the proportion of babies that are delivered in facilities. The 2004-05 TDHS obtained information on both the place of delivery and person assisting with the delivery. Tables 9.5 and 9.6 present this information for all live births in the five years preceding the survey.

Place of Delivery

Forty-seven percent of births in Tanzania are delivered at a health facility, while 53 percent are delivered at home. This is approximately the same proportion of facility deliveries as observed in the 1999 TRCHS (44 percent).

The proportion of births that take place at health facilities differs according to characteristics of mother and child. Births to younger women and urban women as well as first births are much more likely than others to take place in a health facility. About half of births both on the Mainland and on Zanzibar are delivered in health facilities. There are marked variations among regions. In Zanzibar North, less than one-fourth of children are delivered in health facilities, whereas children born to women in Dar es Salaam and those living in Town West are the most likely to have been delivered at a health facility (90 and 73 percent, respectively). As expected, births to mothers with at least some secondary education are more likely than others to take place in health facilities, as are births to wealthier women, compared with their less advantaged counterparts.

Table 9.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Tanzania 2004-05

Background characteristic	Health facility			Home	Other/missing	Total	Number of births
	Public sector	Voluntary/religious	Private sector				
Mother's age at birth							
<20	40.8	3.7	6.4	48.7	0.3	100.0	1,502
20-34	38.5	2.8	6.4	52.1	0.1	100.0	6,153
35-49	29.5	2.8	5.6	61.8	0.2	100.0	1,070
Birth order							
1	49.7	4.4	8.7	36.9	0.3	100.0	1,922
2-3	39.5	3.4	6.2	50.8	0.1	100.0	3,145
4-5	31.5	2.4	6.2	59.7	0.2	100.0	1,820
6+	28.6	1.5	4.0	65.5	0.4	100.0	1,838
Residence							
Urban	71.5	4.0	5.5	18.9	0.1	100.0	1,691
Rural	29.7	2.8	6.5	60.9	0.2	100.0	7,034
Mainland/Zanzibar							
Mainland	37.5	3.1	6.4	52.8	0.2	100.0	8,506
Total urban	71.0	4.1	5.7	19.1	0.1	100.0	1,670
Dar es Salaam city	82.4	5.1	2.9	9.1	0.5	100.0	428
Other urban	67.0	3.8	6.7	22.5	0.0	100.0	1,241
Total rural	29.4	2.8	6.6	61.0	0.2	100.0	6,836
Zanzibar	48.2	0.2	0.3	51.1	0.2	100.0	219
Unguja	57.7	0.2	0.3	41.8	0.0	100.0	133
Pemba	33.6	0.2	0.2	65.4	0.5	100.0	86
Zone							
Western	37.5	5.2	2.8	54.2	0.2	100.0	1,912
Northern	36.7	3.3	7.4	52.5	0.1	100.0	1,122
Central	33.4	1.1	3.6	61.4	0.5	100.0	716
Southern highlands	32.9	1.1	13.3	52.6	0.2	100.0	1,283
Lake	33.2	2.2	3.9	60.4	0.2	100.0	1,868
Eastern	55.8	4.7	4.6	34.7	0.2	100.0	969
Southern	37.8	2.5	15.4	44.3	0.0	100.0	637
Region							
Dodoma	32.2	1.2	3.1	63.5	0.0	100.0	413
Arusha	41.0	3.9	5.8	49.2	0.0	100.0	288
Kilimanjaro	49.2	8.4	12.5	29.3	0.5	100.0	210
Tanga	38.4	0.7	2.1	58.9	0.0	100.0	355
Morogoro	32.5	5.0	8.5	54.0	0.0	100.0	349
Pwani	38.7	3.0	1.3	57.0	0.0	100.0	191
Dar es Salaam	82.4	5.1	2.9	9.1	0.5	100.0	428
Lindi	42.0	3.5	1.6	52.9	0.0	100.0	147
Mtwara	32.0	3.6	1.7	62.8	0.0	100.0	247
Ruvuma	41.2	0.8	37.5	20.4	0.0	100.0	244
Iringa	39.1	0.9	31.8	27.3	0.9	100.0	294
Mbeya	29.7	1.1	10.3	58.9	0.0	100.0	662
Singida	35.0	0.8	4.3	58.6	1.3	100.0	303
Tabora	47.3	2.7	3.8	46.3	0.0	100.0	508
Rukwa	33.6	1.2	2.6	62.5	0.0	100.0	326
Kigoma	32.4	2.7	3.9	61.1	0.0	100.0	484
Shinyanga	34.9	8.0	1.8	55.0	0.3	100.0	919
Kagera	25.0	2.5	4.8	67.5	0.2	100.0	574
Mwanza	42.3	2.1	3.0	52.4	0.3	100.0	899
Mara	24.5	2.3	4.7	68.5	0.0	100.0	395
Manyara	20.2	2.1	12.0	65.7	0.0	100.0	269
Zanzibar North	23.2	0.0	0.0	76.8	0.0	100.0	33
Zanzibar South	53.9	0.0	0.7	45.4	0.0	100.0	19
Town West	72.8	0.3	0.3	26.6	0.0	100.0	81
Pemba North	28.6	0.0	0.3	70.9	0.3	100.0	44
Pemba South	38.8	0.5	0.2	59.7	0.8	100.0	42

Continued...

Table 9.5—Continued

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Tanzania 2004-05

Background characteristic	Health facility			Home	Other/missing	Total	Number of births
	Public sector	Voluntary/religious	Private sector				
Mother's education							
No education	26.6	1.7	3.8	67.5	0.4	100.0	2,318
Primary incomplete	35.2	1.9	4.9	57.8	0.2	100.0	1,378
Primary complete	41.4	3.7	7.8	47.0	0.1	100.0	4,642
Secondary+	71.3	6.3	7.3	14.9	0.3	100.0	387
Antenatal care visits¹							
None	17.1	2.4	1.0	79.5	0.0	100.0	174
1-3	34.7	2.2	6.5	56.4	0.1	100.0	2,028
4+	45.0	4.0	6.6	44.3	0.1	100.0	3,548
Wealth quintile							
Lowest	25.6	2.1	4.4	67.5	0.4	100.0	1,974
Second	30.1	2.2	4.5	63.1	0.2	100.0	1,857
Middle	28.7	3.2	7.0	61.1	0.0	100.0	1,866
Fourth	42.6	1.9	9.4	46.1	0.1	100.0	1,681
Highest	73.0	6.6	6.8	13.3	0.4	100.0	1,347
Total	37.8	3.0	6.3	52.7	0.2	100.0	8,725

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

Assistance during Delivery

The type of assistance a woman receives during childbirth has important health consequences for both mother and child. Therefore, besides collecting information on the place of delivery, the 2004-05 TDHS collected data on the type of personnel who assisted during delivery. Table 9.6 shows the percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to background characteristics. It should be noted that interviewers were instructed to record all persons attending the delivery. However, if more than one person was in attendance, only the provider with the highest qualifications is considered.

Almost half (46 percent) of births are assisted by health professionals (doctors, clinical officers, nurses, midwives, and MCH aides). Trained and traditional birth attendants assist one-fifth (19 percent) of deliveries, and relatives or other untrained people assist 31 percent of births. Three percent of births are delivered without assistance.

Births in urban areas are more likely to be assisted by health professionals than rural births. Children born to women living in the Eastern zone are more likely than women in other zones to receive professional assistance during delivery. Regional differences in delivery assistance are also prominent. Regions with least professional assistance during delivery are Zanzibar North and Pemba North (25 and 30 percent, respectively).

As expected, a mother's education is associated with the type of delivery assistance. The percentage of births assisted by health professionals increases from 31 percent of births to women with no education to 84 percent of births to women with some secondary education. Similarly, births to women in the highest wealth quintile are more likely to be assisted by medically-trained caregivers (87 percent) than births to women in the lowest quintile (31 percent).

Table 9.6 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, according to background characteristics, Tanzania 2004-05

Background characteristic	Doctor/AMO	Clinical officer/assist. clinical officer	Nurse/midwife	MCH aide	Trained birth attendant	Traditional birth attendant	Village health worker	Relative	Other	No one	Don't know/missing	Total	Number of births
Mother's age at birth													
<20	4.5	2.6	39.5	3.3	7.8	11.0	1.6	24.4	4.1	1.0	0.3	100.0	1,502
20-34	3.8	2.0	38.2	2.8	8.1	10.2	1.4	25.7	4.3	3.2	0.2	100.0	6,153
35-49	3.5	2.3	29.5	3.1	8.2	13.5	0.8	27.0	5.1	6.8	0.0	100.0	1,070
Birth order													
1	6.3	2.8	49.8	3.0	6.4	9.1	1.6	17.5	3.1	0.4	0.2	100.0	1,922
2-3	4.3	2.0	39.0	2.7	7.9	10.9	1.3	25.3	4.5	2.0	0.1	100.0	3,145
4-5	2.5	1.8	31.9	2.8	9.4	12.1	1.3	29.6	4.3	3.9	0.4	100.0	1,820
6+	2.1	2.0	27.1	3.2	8.7	11.0	1.4	30.8	5.6	7.8	0.3	100.0	1,838
Residence													
Urban	9.9	2.2	67.2	1.6	2.4	3.9	0.2	8.5	2.7	1.2	0.2	100.0	1,691
Rural	2.5	2.1	30.2	3.2	9.4	12.4	1.7	29.7	4.8	3.8	0.2	100.0	7,034
Mainland/Zanzibar													
Mainland	4.0	2.2	37.1	2.9	7.7	10.5	1.4	26.2	4.5	3.4	0.2	100.0	8,506
Total urban	10.1	2.3	66.6	1.6	2.4	3.7	0.2	8.9	2.7	1.2	0.2	100.0	1,670
Dar es Salaam city	13.3	1.9	74.9	0.5	1.8	2.0	0.0	4.8	0.0	0.0	0.8	100.0	428
Other urban	9.0	2.5	63.7	2.0	2.7	4.3	0.2	10.4	3.6	1.6	0.0	100.0	1,241
Total rural	2.5	2.1	29.9	3.3	9.0	12.2	1.7	30.4	4.9	3.9	0.2	100.0	6,836
Zanzibar	1.3	0.2	48.4	0.9	22.0	21.3	1.5	3.5	0.6	0.1	0.2	100.0	219
Unguja	1.7	0.3	58.3	1.0	10.7	20.5	1.1	5.4	0.8	0.2	0.0	100.0	133
Pemba	0.8	0.0	33.1	0.8	39.5	22.4	2.1	0.5	0.2	0.0	0.5	100.0	86
Zone													
Western	1.5	3.5	30.4	5.8	5.8	6.7	3.1	28.5	8.8	5.7	0.1	100.0	1,912
Northern	5.0	1.8	40.6	1.4	6.3	14.5	0.3	23.1	5.0	1.9	0.1	100.0	1,122
Central	3.0	2.5	32.5	2.3	18.1	19.1	0.2	18.9	1.2	2.0	0.0	100.0	716
Southern highlands	4.1	1.5	36.6	3.6	5.8	14.6	1.5	20.9	7.1	3.8	0.5	100.0	1,283
Lake	3.0	1.4	33.6	1.0	5.0	4.2	1.4	44.1	1.8	4.2	0.3	100.0	1,868
Eastern	8.8	2.1	52.1	2.3	10.1	13.3	0.5	9.4	0.5	0.4	0.4	100.0	969
Southern	5.8	2.3	44.5	3.0	12.1	11.3	0.4	16.1	3.1	1.3	0.2	100.0	637
Region													
Dodoma	1.9	1.9	32.9	1.9	24.2	25.0	0.0	10.4	1.0	0.7	0.0	100.0	413
Arusha	5.3	0.9	45.2	1.3	9.7	13.5	0.3	15.5	5.6	2.7	0.0	100.0	288
Kilimanjaro	8.4	4.7	57.1	0.9	1.9	5.5	1.0	17.9	0.0	2.1	0.5	100.0	210
Tanga	3.9	0.8	35.8	1.8	6.3	23.0	0.0	27.4	1.0	0.0	0.0	100.0	355
Morogoro	7.5	2.2	32.5	3.4	19.6	22.6	1.3	9.2	1.3	0.3	0.0	100.0	349
Pwani	1.2	2.7	37.0	4.1	11.4	21.5	0.3	20.3	0.0	1.4	0.0	100.0	191
Dar es Salaam	13.3	1.9	74.9	0.5	1.8	2.0	0.0	4.8	0.0	0.0	0.8	100.0	428
Lindi	4.4	1.5	34.8	5.6	2.9	13.3	0.8	28.1	7.1	1.5	0.0	100.0	147
Mtwara	1.6	0.4	32.4	3.2	23.4	16.6	0.0	17.3	3.0	2.0	0.0	100.0	247
Ruvuma	11.0	4.8	62.5	1.1	6.1	4.8	0.6	7.6	0.7	0.4	0.5	100.0	244
Iringa	9.3	4.6	56.2	1.3	7.0	11.9	0.4	7.3	1.2	0.0	0.9	100.0	294
Mbeya	3.6	0.3	31.7	4.1	2.0	10.0	1.7	28.3	11.2	6.6	0.5	100.0	662
Singida	4.4	3.3	32.1	2.9	9.7	11.0	0.6	30.6	1.5	3.9	0.0	100.0	303
Tabora	2.0	5.1	34.9	10.3	3.5	4.0	5.3	24.7	7.1	3.0	0.0	100.0	508
Rukwa	0.5	1.2	28.8	4.8	12.4	26.4	2.1	18.5	4.0	1.4	0.0	100.0	326
Kigoma	1.7	1.1	33.0	0.9	15.8	11.9	1.9	22.7	7.0	3.8	0.2	100.0	484
Shinyanga	1.1	3.9	26.6	5.9	1.8	5.5	2.5	33.7	10.6	8.3	0.0	100.0	919
Kagera	2.2	0.2	29.8	0.0	8.5	5.1	1.5	48.5	1.3	2.6	0.3	100.0	574
Mwanza	4.1	2.0	40.4	0.4	2.1	2.1	1.9	41.2	2.0	3.5	0.3	100.0	899
Mara	1.6	1.7	23.7	4.0	6.4	7.6	0.0	44.4	2.1	8.2	0.2	100.0	395
Manyara	3.6	1.8	29.3	1.3	6.1	11.3	0.0	29.8	13.4	3.4	0.0	100.0	269
Zanzibar North	0.6	0.0	24.2	0.6	16.0	43.0	0.6	12.9	1.5	0.6	0.0	100.0	33
Zanzibar South	3.6	0.8	56.4	0.9	15.6	15.0	2.2	4.4	0.8	0.4	0.0	100.0	19
Town West	1.7	0.3	72.7	1.2	7.4	12.6	1.0	2.5	0.6	0.0	0.0	100.0	81
Pemba North	1.1	0.0	28.1	0.8	48.0	19.2	2.5	0.0	0.0	0.0	0.3	100.0	44
Pemba South	0.5	0.0	38.3	0.8	30.6	25.6	1.8	1.1	0.5	0.0	0.8	100.0	42
Mother's education													
No education	1.6	1.4	24.3	3.4	9.2	13.2	2.0	35.1	5.2	4.3	0.2	100.0	2,318
Primary incomplete	2.9	1.6	32.5	3.8	9.0	11.2	1.1	28.1	6.0	3.7	0.2	100.0	1,378
Primary complete	4.4	2.7	43.0	2.5	7.5	9.9	1.2	22.0	3.8	2.8	0.2	100.0	4,642
Secondary+	15.5	2.1	65.4	1.3	4.3	4.7	0.6	3.9	1.0	0.8	0.3	100.0	387
Wealth quintile													
Lowest	1.4	1.6	23.2	4.8	7.6	12.5	2.5	36.5	6.1	3.7	0.2	100.0	1,974
Second	2.3	1.7	28.5	3.3	11.8	14.0	1.4	28.5	4.3	4.1	0.3	100.0	1,857
Middle	2.9	2.3	30.6	1.8	8.3	12.2	1.3	32.3	5.2	2.9	0.1	100.0	1,866
Fourth	3.9	2.7	44.1	2.7	8.5	9.7	1.0	18.5	4.4	4.5	0.1	100.0	1,681
Highest	11.3	2.6	71.5	1.4	2.7	3.2	0.1	5.3	1.0	0.5	0.5	100.0	1,347
Total	3.9	2.1	37.4	2.9	8.0	10.8	1.4	25.6	4.4	3.3	0.2	100.0	8,725

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

Delivery Characteristics

The 2004-05 TDHS obtained information on a number of delivery characteristics including caesarean sections and birth weight. In countries where the proportion of facility deliveries is comparatively low, such as Tanzania, the caesarean section rate provides a proxy for women's access to care for complicated deliveries. The Safe Motherhood Interagency Working Group, composed of agencies including UNICEF, UNFPA, the World Bank, the World Health Organisation, the International Planned Parenthood Foundation, and the Population Council, established an indicator for sufficient and appropriate availability and use of caesarean section: the national coverage of use of caesarean section techniques should not be less than 5 percent, nor in excess of 15 percent (FCI, 1998).

Table 9.7 shows that only 3 percent of babies born in Tanzania are delivered by caesarean section, the same proportion estimated by the 1999 TRCHS. This indicates that Tanzanian mothers have insufficient access to essential maternal health services, because the C-section rate is below the 5 percent threshold. Moreover, access to such services is not uniform. Women living in urban areas, the Eastern zone, those women with at least secondary education, and those in the wealthiest households are more likely than others to have had a C-section.

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. It is not surprising that with more than half of deliveries occurring at home, 50 percent of newborns were not weighed at birth. Among births for which the birth weight was known, only 7 percent were classified as low birth weight (i.e., the infant weighed less than 2.5 kg at birth).

According to the respondent's own assessment of her infant's size, the majority of births (89 percent) are classified as average or large. Just one in ten births were reported to be either smaller than average (9 percent) or very small (2 percent).

Table 9.7 Delivery characteristics

Percentage of live births in the five years preceding the survey delivered by caesarean section, and percent distribution by birth weight and by mother's estimate of baby's size at birth, according to background characteristics, Tanzania 2004-05

Background characteristic	Birth weight					Total	Sex of child at birth					Number of births
	Delivery by C-section	Not weighed	Less than 2.5 kg	2.5 kg or more	Don't know/missing		Very small	Smaller than average	Average or larger	Don't know/missing	Total	
Age												
<20	4.0	46.9	6.3	45.7	1.1	100.0	2.9	10.8	86.0	0.3	100.0	1,502
20-34	3.1	48.5	3.2	47.5	0.8	100.0	2.2	7.6	89.8	0.3	100.0	6,153
35-49	2.7	58.7	3.2	37.5	0.6	100.0	2.6	10.5	86.8	0.0	100.0	1,070
Birth order												
1	5.1	35.3	6.8	56.7	1.2	100.0	2.8	11.3	85.4	0.5	100.0	1,922
2-3	3.8	47.7	3.5	48.0	0.8	100.0	2.4	7.5	90.0	0.1	100.0	3,145
4-5	1.7	55.5	2.3	41.9	0.4	100.0	1.6	7.2	90.9	0.3	100.0	1,820
6+	1.7	61.5	2.4	35.2	0.9	100.0	2.8	8.7	88.2	0.3	100.0	1,838
Residence												
Urban	7.8	15.8	6.8	76.6	0.8	100.0	2.8	8.1	88.7	0.3	100.0	1,691
Rural	2.1	57.6	3.0	38.6	0.8	100.0	2.3	8.6	88.8	0.3	100.0	7,034
Mainland/Zanzibar												
Mainland	3.3	49.5	3.7	46.0	0.8	100.0	2.3	8.4	89.0	0.3	100.0	8,506
Total urban	7.9	15.9	6.7	76.7	0.7	100.0	2.7	7.8	89.2	0.3	100.0	1,670
Dar es Salaam city	7.7	5.3	8.1	86.2	0.5	100.0	3.8	5.6	90.1	0.5	100.0	428
Other urban	8.0	19.5	6.2	73.5	0.8	100.0	2.4	8.5	88.8	0.3	100.0	1,241
Total rural	2.1	57.8	3.0	38.4	0.8	100.0	2.2	8.6	89.0	0.3	100.0	6,836
Zanzibar	1.9	48.6	5.0	44.5	1.9	100.0	6.9	11.8	80.9	0.4	100.0	219
Unguja	2.3	37.9	5.3	55.7	1.0	100.0	3.0	13.1	83.6	0.2	100.0	133
Pemba	1.3	65.0	4.5	27.2	3.3	100.0	12.9	9.7	76.6	0.8	100.0	86
Zone												
Western	1.8	47.9	3.0	48.6	0.6	100.0	2.9	11.6	85.4	0.2	100.0	1,912
Northern	3.7	45.5	4.2	48.9	1.4	100.0	3.4	7.4	89.1	0.1	100.0	1,122
Central	1.7	63.3	2.5	33.5	0.7	100.0	2.7	6.3	91.0	0.0	100.0	716
Southern highlands	2.4	54.2	2.9	42.4	0.5	100.0	1.3	5.0	93.2	0.5	100.0	1,283
Lake	3.5	59.4	2.7	37.1	0.9	100.0	1.2	9.6	88.7	0.5	100.0	1,868
Eastern	7.0	29.4	6.1	63.7	0.8	100.0	2.5	6.3	90.9	0.2	100.0	969
Southern	4.0	38.7	7.5	53.2	0.5	100.0	2.6	9.8	87.5	0.1	100.0	637
Region												
Dodoma	0.6	65.7	2.6	31.4	0.4	100.0	3.7	7.0	89.2	0.0	100.0	413
Arusha	3.7	40.8	5.6	53.2	0.4	100.0	3.7	12.4	83.9	0.0	100.0	288
Kilimanjaro	7.2	26.0	5.6	66.7	1.8	100.0	6.2	2.6	90.7	0.5	100.0	210
Tanga	2.7	50.7	2.7	44.3	2.3	100.0	1.2	5.6	93.2	0.0	100.0	355
Morogoro	8.9	45.8	4.2	48.9	1.1	100.0	1.7	5.7	92.6	0.0	100.0	349
Pwani	1.6	53.4	5.1	40.6	0.9	100.0	1.3	9.2	89.6	0.0	100.0	191
Dar es Salaam	7.7	5.3	8.1	86.2	0.5	100.0	3.8	5.6	90.1	0.5	100.0	428
Lindi	4.7	50.8	4.3	44.8	0.0	100.0	5.0	9.6	85.0	0.5	100.0	147
Mtwaru	2.4	54.9	4.3	40.0	0.8	100.0	0.0	8.2	91.8	0.0	100.0	247
Ruvuma	5.0	15.0	12.7	71.7	0.6	100.0	3.9	11.6	84.6	0.0	100.0	244
Iringa	6.6	26.0	4.5	67.8	1.7	100.0	4.1	7.7	87.3	0.9	100.0	294
Mbeya	1.5	59.6	2.4	37.7	0.3	100.0	0.7	4.4	94.3	0.5	100.0	662
Singida	3.1	60.1	2.5	36.3	1.1	100.0	1.3	5.2	93.5	0.0	100.0	303
Tabora	2.3	40.1	3.0	56.0	0.8	100.0	2.0	12.4	85.5	0.0	100.0	508
Rukwa	0.5	68.6	2.3	29.1	0.0	100.0	0.0	3.6	96.1	0.3	100.0	326
Kigoma	1.9	39.2	4.2	56.1	0.4	100.0	3.6	12.3	83.8	0.3	100.0	484
Shinyanga	1.5	56.7	2.3	40.5	0.5	100.0	3.0	10.8	86.1	0.2	100.0	919
Kagera	3.8	67.7	1.0	30.7	0.5	100.0	0.5	9.5	90.0	0.0	100.0	574
Mwanza	4.6	50.6	4.0	44.5	0.9	100.0	1.3	11.0	87.0	0.7	100.0	899
Mara	0.6	67.1	2.1	29.2	1.6	100.0	1.9	6.6	90.4	1.0	100.0	395
Manyara	2.4	58.9	3.6	36.5	1.1	100.0	3.7	8.2	88.0	0.0	100.0	269
Zanzibar North	0.5	75.1	2.1	22.2	0.6	100.0	6.4	16.2	77.4	0.0	100.0	33
Zanzibar South	1.8	30.6	8.6	58.6	2.2	100.0	6.2	12.4	81.4	0.0	100.0	19
Town West	3.1	24.3	5.8	68.9	1.0	100.0	0.9	12.1	86.7	0.3	100.0	81
Pemba North	1.4	71.4	3.3	22.0	3.2	100.0	15.2	7.2	76.8	0.8	100.0	44
Pemba South	1.3	58.2	5.8	32.5	3.4	100.0	10.5	12.3	76.4	0.8	100.0	42
Mother's education												
No education	1.1	65.9	2.7	30.5	0.9	100.0	2.9	9.7	86.9	0.5	100.0	2,318
Primary incomplete	3.6	54.8	3.2	41.1	0.9	100.0	2.3	8.1	89.4	0.2	100.0	1,378
Primary complete	3.4	42.8	4.3	52.2	0.7	100.0	2.2	8.0	89.6	0.2	100.0	4,642
Secondary +	12.6	13.1	5.3	80.7	0.9	100.0	1.6	8.9	89.2	0.4	100.0	387
Wealth quintile												
Lowest	1.0	65.2	2.4	31.4	1.0	100.0	2.4	9.0	88.2	0.4	100.0	1,974
Second	2.3	59.4	3.4	36.5	0.7	100.0	2.4	8.5	89.0	0.1	100.0	1,857
Middle	3.0	57.9	3.7	37.8	0.6	100.0	2.4	9.0	88.4	0.2	100.0	1,866
Fourth	2.8	42.2	3.5	53.3	1.1	100.0	2.3	7.5	89.8	0.3	100.0	1,681
Highest	8.7	10.4	6.6	82.2	0.8	100.0	2.5	8.4	88.8	0.4	100.0	1,347
Total	3.2	49.5	3.7	45.9	0.8	100.0	2.4	8.5	88.8	0.3	100.0	8,725

9.3 POSTNATAL CARE

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (6 weeks) following the delivery. The timing of postnatal care is important. The first two days after delivery are critical, because most maternal and neonatal deaths occur during this period. Table 9.8 measures postnatal care for births that occurred outside a health facility in the five years preceding the survey. If a woman had more than one live birth in the preceding five years, only the most recent birth is considered.

The data show that in Tanzania, a large proportion of women whose last live birth occurred outside a health facility did not receive a postnatal checkup (83 percent). Just 13 percent were examined within two days of delivering, as recommended.

There is great variation by zone and region. For example, women in the Southern zone were more than three times as likely as those in the Central zone to receive timely postnatal care. The wealthiest women are considerably more likely to receive timely postnatal care than women in the lowest through fourth quintiles.

Table 9.8 Postnatal care by background characteristics

Percent distribution of women whose last live birth in the five years preceding the survey occurred outside a health facility by timing of postnatal care, according to background characteristics, Tanzania 2004-05

Background characteristic	Timing of first postnatal checkup				Did not receive postnatal checkup ¹	Total	Number of women
	0-2 days after delivery	3-6 days after delivery	7-41 days after delivery	Don't know/missing			
Age at birth							
<20	14.7	2.0	2.2	0.0	81.1	100.0	407
20-34	13.7	1.9	2.1	0.1	82.2	100.0	1,964
35-49	11.5	0.3	2.9	0.0	85.3	100.0	503
Birth order							
1	15.5	2.0	2.7	0.2	79.6	100.0	385
2-3	15.8	2.0	2.9	0.1	79.2	100.0	969
4-5	11.7	1.7	2.1	0.0	84.5	100.0	694
6+	11.2	0.9	1.4	0.0	86.5	100.0	825
Residence							
Urban	21.9	3.8	3.0	0.0	71.3	100.0	219
Rural	12.7	1.5	2.2	0.1	83.6	100.0	2,654
Mainland/Zanzibar							
Mainland	13.6	1.7	2.3	0.1	82.4	100.0	2,805
Total urban	23.4	3.7	4.5	0.0	68.4	100.0	223
Dar es Salaam city	*	*	*	*	*	*	30
Other urban	21.6	1.1	3.3	0.0	74.0	100.0	193
Total rural	12.8	1.5	2.1	0.1	83.6	100.0	2,583
Zanzibar	5.8	0.7	1.0	0.2	92.3	100.0	68
Unguja	8.4	1.3	2.0	0.0	88.3	100.0	35
Pemba	3.2	0.0	0.0	0.4	96.5	100.0	33
Zone							
Western	13.5	2.5	1.8	0.0	82.2	100.0	597
Northern	12.6	1.3	1.8	0.0	84.3	100.0	397
Central	7.8	0.5	0.3	0.3	91.2	100.0	284
Southern highlands	12.3	1.2	4.9	0.0	81.6	100.0	439
Lake	9.3	0.3	0.8	0.0	89.6	100.0	636
Eastern	24.5	3.4	5.4	0.0	66.7	100.0	230
Southern	27.2	4.4	2.7	0.3	65.4	100.0	223
Region							
Dodoma	8.3	0.8	0.0	0.0	90.9	100.0	172
Arusha	23.0	2.5	4.8	0.0	69.7	100.0	102
Kilimanjaro	(3.3)	(0.0)	(0.0)	(0.0)	(96.7)	100.0	43
Tanga	6.5	1.8	0.0	0.0	91.7	100.0	138
Morogoro	25.3	1.1	5.7	0.0	68.0	100.0	121
Pwani	19.2	0.7	2.5	0.0	77.6	100.0	79
Dar es Salaam	*	*	*	*	*	*	30
Lindi	13.7	3.4	6.7	0.0	76.2	100.0	60
Mtwara	29.8	4.9	0.9	0.0	64.4	100.0	126
Ruvuma	(40.1)	(4.4)	(2.3)	(1.9)	(51.3)	(100.0)	37
Iringa	(33.0)	(6.4)	(2.2)	(0.0)	(58.3)	(100.0)	57
Mbeya	12.1	0.0	7.2	0.0	80.8	100.0	260
Singida	7.1	0.0	0.7	0.7	91.6	100.0	112
Tabora	18.1	6.0	3.9	0.0	72.0	100.0	140
Rukwa	3.1	1.3	1.4	0.0	94.2	100.0	122
Kigoma	30.1	4.1	3.3	0.0	62.5	100.0	165
Shinyanga	1.9	0.0	0.0	0.0	98.1	100.0	292
Kagera	12.8	0.0	0.0	0.0	87.2	100.0	213
Mwanza	9.6	0.0	1.0	0.0	89.5	100.0	271
Mara	3.7	1.2	1.7	0.0	93.3	100.0	152
Manyara	14.3	0.0	1.8	0.0	83.8	100.0	113
Zanzibar North	5.7	0.8	2.2	0.0	91.3	100.0	16
Zanzibar South	10.8	1.4	1.4	0.0	86.4	100.0	6
Town West	10.4	2.0	2.0	0.0	85.7	100.0	14
Pemba North	1.7	0.0	0.0	0.0	98.3	100.0	19
Pemba South	5.2	0.0	0.0	0.9	93.9	100.0	14
Education							
No education	10.0	1.5	1.7	0.0	86.7	100.0	985
Primary incomplete	12.1	1.2	2.0	0.0	84.7	100.0	506
Primary complete	16.5	1.9	2.8	0.1	78.7	100.0	1,339
Secondary+	12.3	0.0	0.3	0.0	87.4	100.0	42
Wealth quintile							
Lowest	10.9	1.7	1.1	0.0	86.2	100.0	838
Second	12.1	1.2	2.3	0.1	84.3	100.0	731
Middle	12.6	1.5	2.0	0.0	84.0	100.0	672
Fourth	16.6	1.4	3.8	0.0	78.2	100.0	496
Highest	29.2	4.7	4.3	0.5	61.2	100.0	137
Total	13.4	1.6	2.2	0.1	82.6	100.0	2,873

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 women who received the first postnatal checkup after 41 days

9.4 REPRODUCTIVE HEALTH CARE BY WOMEN'S STATUS

Table 9.9 shows women's use of antenatal, delivery, and postnatal care services by three indicators of women's status defined in Chapter 3. In societies where health care is widespread, women's status may not affect their access to reproductive health care services. In other societies, however, increased empowerment of women is likely to be associated with increased ability to seek out and use health services to better meet their reproductive health needs.

The first women's status indicator in Table 9.9 is positively related to women's empowerment and reflects the degree of decisionmaking control women are able to exercise in areas that affect their lives and environments. The second indicator reflects women's perception of sexual roles and women's rights over their bodies, and relates positively to women's sense of self and empowerment. The final indicator, which reflects women's perception of gender roles, is negatively related to women's level of empowerment. A higher value for this indicator (the number of reasons a woman believes wife beating is justified) is interpreted as indicating lower empowerment.

Table 9.9 indicates that women's status is correlated with reproductive health care. The more empowered a woman, the more likely she is to receive ANC and delivery care from a medical professional. The pattern is less clear regarding the relationship between women's status and postnatal care, although those women who think that wife beating is not justified under any circumstances or those who agree with just one or two justifications are more likely to have received postnatal care than women agreeing with more justifications.

Table 9.9 Reproductive health care by women's status					
Percentage of women with a live birth in the five years preceding the survey who received antenatal and postnatal care from a health professional for the most recent birth, and percentage of births in the five years preceding the survey for which mothers received professional delivery care, by women's status indicators, Tanzania 2004-05					
Women's status indicator	Percentage with antenatal care from a health professional ¹	Percentage who received postnatal care within first two days of delivery ²	Number of women	Percentage delivered by a health professional ¹	Number of births
Number of decisions in which woman has final say³					
0	89.7	55.4	666	42.2	985
1-2	93.4	53.0	2,107	42.7	3,316
3-4	95.4	60.6	1,444	50.1	2,173
5	96.4	59.5	1,555	49.8	2,251
Number of reasons to refuse sex with husband					
0	91.1	53.6	273	40.3	415
1-2	92.5	48.7	640	37.7	990
3-4	94.7	58.2	4,860	47.8	7,319
Number of reasons wife beating is justified					
0	96.3	59.2	2,193	50.4	3,278
1-2	93.7	60.0	1,168	48.5	1,762
3-4	92.5	54.8	1,706	42.8	2,614
5	93.2	50.0	706	39.0	1,071
Total	94.3	56.9	5,772	46.3	8,725

¹ Doctor/AMO, clinical officer, assistant clinical officer, nurse/midwife, or MCH aide
² Includes mothers who delivered in a health facility
³ Either by herself or jointly with others

9.5 BIRTH REGISTRATION

Tanzania is a signatory to the Convention of the Rights of the Child and has an Act of Parliament on the Rights of the Child, both of which firmly establish birth registration as a fundamental right of children. To assess the extent of birth registration, in the 2004-05 TDHS the mothers of children born in the five-year period before the survey were asked if they had received a birth notification form for the baby. Those who were not given a form at the facility where the birth took place and those who did not deliver in a facility were asked if they obtained a birth notification form from another source. All mothers were asked if their children had a birth certificate.

Table 9.10 shows that a notification form was received for 19 percent of births and almost all notification forms were received from health facilities. In Tanzania, less than one in ten children born in the preceding five years had a birth certificate. Zanzibari mothers were more likely than mothers on the Mainland to report receiving a notification form or birth certificate. There is considerable variation in birth certificate ownership by region, ranging from a low of less than 1 percent in Dodoma and Kagera to a high of more than seven in ten in Zanzibar South and Town West. Household wealth has a strong association with birth registration. Women in the wealthiest households (highest quintile) are three times as likely as those in the fourth quintile and ten times as likely as those in the lowest quintile to have a birth certificate for their child.

Table 9.10 Registration and birth certificate

Percentage of births in the five years preceding the survey with a birth notification on form from a health facility or elsewhere and percentage with a birth certificate, according to background characteristics, Tanzania 2004-05

Background characteristic	Notification form		Has birth certificate	Number of children
	From a health facility	From any other place		
Age at birth				
< 20	16.6	1.1	5.8	1,502
20-34	17.4	2.2	7.5	6,153
35-49	14.1	2.9	6.5	1,070
Birth order				
1	23.7	1.3	9.3	1,922
2-3	19.5	2.2	7.7	3,145
4-5	13.1	2.2	6.1	1,820
6+	9.1	2.7	4.8	1,838
Residence				
Urban	47.0	3.3	20.0	1,691
Rural	9.6	1.8	4.0	7,034
Mainland/Zanzibar				
Mainland	16.1	1.5	5.7	8,506
Total urban	46.0	2.8	17.8	1,670
Dar es Salaam city	72.5	5.0	24.8	428
Other urban	36.8	2.0	15.4	1,241
Total rural	8.9	1.2	2.7	6,836
Zanzibar	45.1	24.3	63.2	219
Unguja	54.7	24.2	68.2	133
Pemba	30.2	24.6	55.4	86
Zone				
Western	8.7	0.8	1.9	1,912
Northern	19.4	2.4	7.8	1,122
Central	9.1	1.4	1.6	716
Southern highlands	10.7	1.1	3.2	1,283
Lake	16.3	1.0	4.2	1,868
Eastern	43.1	4.5	14.3	969
Southern	10.2	0.4	14.1	637
Region				
Dodoma	7.1	1.6	0.7	413
Arusha	19.7	2.4	11.7	288
Kilimanjaro	35.7	5.2	8.8	210
Tanga	16.4	1.5	6.5	355
Morogoro	17.8	5.5	6.0	349
Pwani	23.8	1.6	5.9	191
Dar es Salaam	72.5	5.0	24.8	428
Lindi	9.9	0.5	19.9	147
Mtwara	6.6	0.4	23.0	247
Ruvuma	14.0	0.3	1.6	244
Iringa	26.5	1.3	3.9	294
Mbeya	5.1	1.5	3.7	662
Singida	11.8	1.2	2.7	303
Tabora	8.3	1.6	2.5	508
Rukwa	8.1	0.2	1.6	326
Kigoma	13.8	1.0	2.3	484
Shinyanga	6.2	0.2	1.4	919
Kagera	8.8	0.3	0.3	574
Mwanza	22.2	1.6	6.1	899
Mara	13.6	0.7	5.6	395
Manyara	10.2	1.4	4.5	269
Zanzibar North	21.1	38.0	53.8	33
Zanzibar South	49.5	21.8	71.5	19
Town West	69.7	19.0	73.4	81
Pemba North	25.4	23.9	54.4	44
Pemba South	35.2	25.3	56.4	42
Wealth quintile				
Lowest	5.5	0.9	2.7	1,974
Second	8.9	1.4	2.3	1,857
Middle	8.6	1.6	2.9	1,866
Fourth	17.3	2.5	7.1	1,681
Highest	55.4	5.0	26.0	1,347
Total	16.9	2.1	7.1	8,725

9.6 WOMEN'S PERCEPTIONS OF PROBLEMS IN OBTAINING HEALTH CARE

The 2004-05 TDHS included a series of questions designed to obtain information on the problems women perceive that they face in obtaining health care for themselves. This information is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and, particularly, at delivery. To obtain this information, women age 15-49 were asked whether each of the following factors would be a big problem or not a big problem for them in obtaining health services: knowing where to go, getting permission to go, getting money for treatment, the distance to the health facility, having to take transportation, not wanting to go alone, and concern that there may not be a female provider or that the provider will be unfriendly. Table 9.11 shows the percentages of respondents who consider the individual factors to be a big problem, and the percentage reporting at least one of the specified items to be a big problem, according to background characteristics.

A majority of women (62 percent) reported at least one issue or circumstance as a big problem. The major perceived barriers to women's access to health services are lack of money (40 percent), the distance to a health facility (38 percent), and having to take transport (37 percent).

Women also report barriers to obtaining health care that are associated with quality of care: 14 percent of women report that unfriendly providers are a big problem and 8 percent cite the concern that there may not be a female provider. Personal reasons can also affect women's access to health care. Nearly a quarter of women cite not wanting to go alone to the health facility as a big problem for them in getting the health care they need, while 6 percent of all women cite obtaining permission and knowing where to go as big problems.

Problems in accessing health care are felt most acutely by rural women; older women; women with larger families; divorced, separated, or widowed women; and women not working for cash. Women in Singida are the most likely to think that any of the specified issues are big problems in terms of accessing health care (83 percent) and women in Lindi and Mwanza are the least likely (41 percent).

Table 9.11 Problems in accessing health care

Percentage of women who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Tanzania 2004-05

Background characteristic	Problems in accessing health care								Any of the specified problems	Number of women
	Knowing where to go for treatment	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern there may not be a female provider	Unfriendly provider		
Age										
15-19	10.0	9.1	38.6	36.3	35.0	29.5	9.5	14.2	62.4	2,245
20-29	6.5	5.6	35.6	35.0	34.7	22.2	7.3	14.9	59.4	3,892
30-39	4.5	3.7	42.3	39.1	39.4	22.8	7.0	13.4	63.4	2,595
40-49	3.8	2.9	48.1	43.0	43.1	25.4	7.4	14.5	66.2	1,597
Number of living children										
0	9.3	8.3	36.5	32.7	32.7	28.3	10.0	16.8	61.1	2,705
1-2	6.5	4.8	37.1	35.8	35.3	22.4	7.3	14.2	59.6	3,348
3-4	4.8	4.3	41.6	38.2	39.8	23.7	7.3	13.8	62.9	2,269
5+	3.8	3.9	47.1	46.2	43.5	23.6	5.8	11.5	66.6	2,007
Marital status										
Never married	9.3	8.0	38.4	31.1	32.5	27.8	10.3	16.8	60.6	2,371
Married or living together	5.6	5.0	38.5	39.9	38.5	23.5	6.8	13.2	62.0	6,950
Divorced/separated/widowed	4.5	2.4	52.9	36.5	39.0	23.0	8.0	15.8	66.0	1,007
Residence										
Urban	5.6	4.0	28.3	15.9	18.8	15.2	9.5	18.1	48.7	2,935
Rural	6.6	6.0	44.4	46.2	44.5	28.1	7.0	12.8	67.4	7,394
Mainland/Zanzibar										
Mainland	6.4	5.5	40.0	38.0	37.7	24.6	7.4	13.9	62.1	10,016
Total urban	5.7	4.0	28.5	16.3	19.2	15.3	9.5	18.1	48.5	2,885
Dar es Salaam city	9.0	5.1	20.2	17.5	20.4	19.3	18.9	27.7	48.5	969
Other urban	4.1	3.4	32.8	15.6	18.6	13.3	4.8	13.2	48.5	1,916
Total rural	6.6	6.0	44.6	46.8	45.1	28.3	6.5	12.1	67.5	7,131
Zanzibar	5.9	5.5	35.6	23.9	22.8	20.7	17.7	28.6	63.2	313
Unguja	3.2	1.7	27.7	21.5	19.3	20.0	19.9	27.0	60.6	216
Pemba	11.9	13.9	53.0	29.2	30.5	22.4	12.7	32.1	69.0	97
Zone										
Western	6.1	7.1	39.7	39.6	37.9	25.0	6.5	12.0	65.9	1,880
Northern	5.8	4.8	46.1	43.8	45.3	33.9	3.6	16.9	69.9	1,496
Central	10.3	8.1	59.8	48.9	48.8	39.4	22.5	30.6	80.7	799
Southern highlands	4.6	2.8	39.4	45.2	44.1	25.8	5.4	8.8	67.6	1,440
Lake	6.2	8.9	35.3	30.7	28.2	11.2	2.0	6.0	46.7	1,865
Eastern	9.2	3.9	31.6	29.7	30.5	23.0	12.6	19.3	57.2	1,670
Southern	2.0	0.6	39.2	34.2	37.1	23.4	6.5	12.2	56.3	866
Region										
Dodoma	13.0	8.0	56.5	44.0	44.4	37.2	26.3	32.3	78.9	468
Arusha	9.1	10.1	34.7	35.0	35.5	29.8	3.6	6.3	53.8	391
Kilimanjaro	1.1	0.9	59.0	50.5	52.0	36.2	1.6	25.9	77.8	380
Tanga	4.2	2.2	46.4	40.7	45.3	24.3	5.6	25.5	71.6	431
Morogoro	6.0	1.8	46.2	42.5	41.6	29.3	3.2	4.9	67.1	449
Pwani	15.5	3.0	49.5	53.6	49.4	26.0	5.1	12.2	72.9	253
Dar es Salaam	9.0	5.1	20.2	17.5	20.4	19.3	18.9	27.7	48.5	969
Lindi	0.0	0.0	26.0	26.8	26.9	10.7	1.6	5.0	40.5	221
Mtwara	0.6	0.9	39.8	25.3	28.0	14.2	2.1	9.4	51.7	346
Ruvuma	5.0	0.6	48.3	50.1	55.2	43.4	15.3	20.8	73.2	299
Iringa	11.8	7.9	45.6	47.9	51.9	43.2	14.0	19.0	72.9	412
Mbeya	2.0	1.0	35.7	54.0	49.4	20.5	2.7	5.4	72.0	712
Singida	6.5	8.1	64.3	55.9	55.1	42.5	17.2	28.2	83.2	331
Tabora	12.0	17.0	41.4	46.1	42.8	41.3	7.3	15.4	73.6	520
Rukwa	1.0	0.3	39.5	22.1	21.9	15.3	0.3	3.2	50.8	316
Kigoma	8.4	6.6	51.6	37.1	45.0	34.8	13.8	20.0	76.0	499
Shinyanga	1.2	1.3	31.7	37.0	30.9	9.5	1.8	5.3	55.3	861
Kagera	5.4	7.4	34.8	32.9	32.4	16.9	1.9	6.4	45.1	545
Mwanza	7.1	11.3	33.1	24.6	22.9	8.6	1.8	4.1	40.7	939
Mara	5.3	5.3	41.5	42.5	35.2	9.5	2.8	9.9	63.6	381
Manyara	9.7	6.4	44.0	51.5	49.7	50.2	3.5	6.8	78.7	293
Zanzibar North	4.1	1.8	41.5	24.4	25.3	24.9	25.2	30.2	68.4	48
Zanzibar South	3.8	4.7	31.7	25.9	23.5	21.5	20.7	35.0	70.7	26
Town West	2.8	1.2	22.4	19.7	16.5	18.1	18.0	24.4	56.1	143
Pemba North	6.5	7.1	43.7	20.0	22.1	17.7	13.1	35.8	61.3	52
Pemba South	18.2	21.7	63.7	39.8	40.1	27.8	12.3	27.9	77.8	45
Education										
No education	7.0	7.8	47.2	49.6	45.9	29.2	6.5	10.3	69.1	2,503
Primary incomplete	7.4	7.0	45.1	41.0	41.7	28.0	9.6	14.7	67.2	1,855
Primary complete	6.0	4.0	37.5	33.8	34.1	22.3	7.4	14.9	59.0	5,086
Secondary+	4.6	3.8	22.0	17.8	21.0	15.7	8.8	21.1	49.2	885
Employment										
Not employed	9.0	8.4	35.5	29.4	29.2	27.5	12.5	18.7	58.9	1,779
Working for cash	7.6	6.9	33.6	27.8	29.7	19.7	7.5	16.2	55.9	2,609
Not working for cash	5.0	3.9	43.9	44.3	42.9	25.6	6.3	12.2	65.8	5,941
Wealth quintile										
Lowest	8.8	8.5	50.9	51.9	50.4	32.9	6.8	9.8	72.6	1,840
Second	7.6	6.6	48.9	48.9	46.0	27.3	7.4	13.4	70.2	1,944
Middle	5.2	5.0	43.6	43.5	42.1	25.0	5.7	11.4	65.2	1,943
Fourth	5.0	4.3	40.0	34.8	36.7	24.8	7.2	15.3	62.6	2,004
Highest	5.6	3.7	22.5	16.6	18.0	15.6	10.5	19.6	45.8	2,597
Total	6.3	5.5	39.9	37.6	37.2	24.4	7.7	14.3	62.1	10,329

9.7 CHILD IMMUNISATION

The 2004-05 TDHS collected information on immunisation coverage for all children born in the five years before the survey. The Government of Tanzania has adopted the World Health Organisation (WHO) guidelines for vaccinating children. The immunisation programme in Tanzania is implemented by Ministry of Health through the Expanded Programme on Immunisation (EPI), which started in 1975 and was established throughout the country in 1996. According to those guidelines, to be considered fully vaccinated a child should receive the following vaccinations: one dose of BCG, three doses each of DPT-HB and polio vaccine, and one dose of measles vaccine. BCG, which protects against tuberculosis, should be given at birth or at first clinic contact. DPT-HB protects against diphtheria, pertussis (whooping cough), tetanus, and hepatitis B. DPT-HB and polio vaccine guidelines require three vaccinations at approximately 4, 8, and 12 weeks of age. More recently, a dose of polio vaccine at birth has been added to the schedule. The measles vaccine should be given at nine months of age. It is recommended that children receive the complete schedule of vaccinations before 12 months of age and that the vaccinations be recorded on a health card given to the parents or caretaker.

Vaccinations by Background Characteristics

Information on vaccination coverage was obtained in two ways—from health cards and from mothers' verbal reports. All mothers were asked to show the interviewer the health cards on which the child's immunisation record was recorded. If the card was available, the interviewer copied the dates on which each vaccination was received. If a vaccination was not recorded on the card, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present a card for a child at all, she was asked to recall whether the child had received BCG, polio, DPT-HB, and measles. If she indicated that the child had received the polio or DPT-HB vaccines, she was asked about the number of doses that the child received. The information collected covered all children under age five, although most data presented here are restricted to children age 12-23 months to better reflect children who have reached the age by which they should be fully vaccinated.

Information on vaccination coverage among children age 12-23 months is shown in Table 9.12 by source of information used to determine coverage (i.e., vaccination record or mother's report). The third row of the table shows the proportion of children who were immunised at any age up to the time of the survey, while the last row shows the proportion who were vaccinated by age 12 months, the age at which vaccination coverage should be complete.

At the time of interview, 71 percent of children age 12-23 months were fully immunised, approximately the same proportion as estimated in the 1999 TRCHS (68 percent). At least nine out of ten received BCG, DPT-HB 1 and 2, and Polio 1 and 2. However, the proportion of children receiving the third dose of DPT-HB and polio is lower (86 and 84 percent, respectively), as is the proportion receiving measles (80 percent). The decrease in vaccination coverage between the first and third doses of DPT-HB and polio are 7 and 11 percentage points, respectively. Only 4 percent of children have not received any vaccination at all. With the exception of measles, virtually all the reported vaccinations were received by 12 months of age, as recommended.

Table 9.12 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Tanzania 2004-05

Source of information	BCG	DPT-HB			Polio ¹			Measles	All ²	No vaccinations	Number of children	
		1	2	3	0	1	2					3
Vaccinated at any time before survey												
Vaccination card	75.3	77.3	74.7	72.6	38.3	77.5	74.8	71.9	65.8	61.0	0.0	1,307
Mother's report	16.1	16.1	14.9	13.3	5.9	16.7	15.6	11.7	14.1	10.1	4.3	352
Either source	91.4	93.3	89.7	85.9	44.2	94.2	90.3	83.6	79.9	71.1	4.3	1,658
Vaccinated by 12 months of age³												
	91.1	92.6	89.2	83.7	44.2	93.5	89.6	82.0	70.2	61.9	4.6	1,658

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles, and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth)

³ For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Table 9.13 presents information on vaccinations by background characteristics (according to information from both health cards and mothers' reports) among children age 12-23 months by selected background characteristics. Vaccination status does not differ significantly by sex of the child. The proportion fully vaccinated is lower for children of birth order 6 or higher than for children at lower parities. There is significant variation by residence: 82 percent of urban children are fully immunised compared with 69 percent of rural children; coverage is higher on Zanzibar than on the Mainland.

As expected, full vaccination coverage varies significantly by mother's education, from 56 percent among children of mothers with no education to 79 percent among children of mothers with primary complete or secondary education. Children born to mothers in the lowest wealth quintile are considerably less likely to have been fully vaccinated than children born to mothers in the highest wealth quintile.

Table 9.13 Vaccinations by background characteristics

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), and percentage with a vaccination card, by background characteristics, Tanzania 2004-05

Background characteristic	BCG	DPT-HB			Polio ¹				Measles	All ²	No vaccinations	Percentage with a vaccination card seen	Number of children
		1	2	3	0	1	2	3					
Sex													
Male	92.0	93.3	90.0	86.0	45.3	93.7	90.2	83.0	79.8	70.1	4.5	78.1	842
Female	90.8	93.3	89.4	85.9	43.1	94.8	90.5	84.2	80.0	72.1	4.2	79.5	817
Birth order													
1	92.0	95.1	91.5	87.9	51.9	94.9	90.8	83.1	82.5	72.2	4.1	80.9	378
2-3	92.8	93.3	91.1	88.3	49.9	94.6	92.0	86.8	83.6	76.5	4.1	79.4	602
4-5	91.8	94.9	91.1	87.3	36.7	94.9	91.5	84.5	79.0	70.0	3.4	76.5	328
6+	87.9	90.0	84.0	78.4	33.3	92.4	86.0	77.7	71.7	61.7	6.0	77.5	351
Residence													
Urban	96.0	96.9	96.9	94.3	72.6	94.6	94.6	88.4	89.7	81.5	3.1	79.4	303
Rural	90.3	92.5	88.1	84.0	37.9	94.2	89.4	82.5	77.7	68.8	4.6	78.7	1,355
Mainland/Zanzibar													
Mainland	91.3	93.3	89.6	85.8	44.4	94.3	90.3	83.6	79.9	71.0	4.4	78.7	1,620
Total urban	96.0	96.9	96.9	94.4	73.5	94.0	94.0	87.8	89.8	81.0	3.1	79.4	294
Dar es Salaam city	(92.5)	(92.5)	(92.5)	(89.6)	(81.4)	(81.2)	(81.2)	(74.5)	(88.3)	(70.4)	(7.5)	(67.4)	219
Other urban	97.3	98.5	98.5	96.1	70.8	98.5	98.5	92.5	90.3	84.7	1.5	83.5	29
Total rural	90.2	92.5	87.9	83.9	37.9	94.3	89.5	82.6	77.6	68.8	4.6	78.5	1,326
Zanzibar	94.9	95.5	94.0	88.6	36.1	93.3	91.6	84.3	82.0	74.7	3.9	83.4	38
Unguja	97.9	98.8	98.8	94.1	50.2	97.4	96.1	92.9	91.1	85.8	1.2	86.8	22
Pemba	91.1	91.2	87.7	81.3	17.4	87.8	85.7	72.7	69.8	59.9	7.5	78.8	17
Zone													
Western	87.5	87.5	80.3	73.6	34.1	90.5	83.0	74.2	63.4	56.6	8.1	78.3	381
Northern	89.9	92.8	91.1	86.6	49.4	95.6	91.8	84.5	85.5	72.5	4.4	75.3	208
Central	94.4	96.3	93.4	91.9	47.1	96.3	93.4	90.0	86.4	81.1	2.1	85.8	141
Southern highlands	86.4	94.2	87.8	84.3	35.4	95.4	87.9	78.0	77.9	61.8	3.1	77.6	232
Lake	94.1	94.6	92.0	89.6	39.4	95.8	94.2	89.5	84.8	79.8	3.7	76.3	380
Eastern	95.1	95.6	95.6	93.7	68.1	89.9	89.9	85.5	87.8	77.1	3.8	78.5	150
Southern	97.4	99.4	99.4	96.5	67.2	99.4	99.4	92.6	91.9	83.6	0.6	86.9	128
Region													
Dodoma	95.6	100.0	100.0	98.2	48.9	100.0	100.0	96.6	93.4	85.6	0.0	85.9	76
Arusha	88.2	88.2	88.2	86.2	55.6	90.2	86.2	84.7	82.1	80.1	9.8	66.6	53
Kilimanjaro	(100.0)	(100.0)	(100.0)	(100.0)	(89.5)	(100.0)	(100.0)	(89.4)	(100.0)	(89.4)	(0.0)	(74.1)	30
Tanga	84.5	89.2	84.2	74.8	37.9	96.3	89.7	78.9	84.1	57.7	3.7	79.3	69
Morogoro	(96.5)	(100.0)	(100.0)	(100.0)	(51.6)	(100.0)	(100.0)	(100.0)	(93.4)	(89.9)	(0.0)	(97.1)	47
Pwani	(100.0)	(96.9)	(96.9)	(94.5)	(59.3)	(96.9)	(96.9)	(91.2)	(77.2)	(73.9)	(0.0)	(77.5)	28
Dar es Salaam	(92.5)	(92.5)	(92.5)	(89.6)	(81.4)	(81.2)	(81.2)	(74.5)	(88.3)	(70.4)	(7.5)	(67.4)	76
Lindi	(94.9)	(97.4)	(97.4)	(92.1)	(66.6)	(97.4)	(97.4)	(89.7)	(86.3)	(73.4)	(2.6)	(82.2)	28
Mtwara	(96.1)	(100.0)	(100.0)	(100.0)	(69.6)	(100.0)	(100.0)	(95.6)	(92.4)	(84.1)	(0.0)	(85.9)	50
Ruvuma	100.0	100.0	100.0	95.4	65.2	100.0	100.0	91.3	94.6	88.6	0.0	90.3	51
Iringa	(97.8)	(100.0)	(100.0)	(98.3)	(67.3)	(100.0)	(100.0)	(88.5)	(96.7)	(83.1)	(0.0)	(92.6)	51
Mbeya	80.7	90.5	83.5	80.6	31.8	92.0	82.2	73.7	70.0	50.4	5.2	69.2	124
Singida	92.9	92.1	85.9	84.6	45.0	92.1	85.9	82.3	78.4	76.0	4.6	85.7	65
Tabora	81.1	79.7	66.4	58.7	38.7	86.5	71.0	58.4	46.5	36.7	9.0	75.2	116
Rukwa	88.6	96.8	86.4	80.0	15.4	98.5	89.4	78.1	78.6	67.9	1.5	82.7	58
Kigoma	96.2	98.1	96.2	96.2	69.4	98.1	98.1	94.5	90.0	86.4	1.9	89.5	85
Shinyanga	87.6	87.5	81.7	72.4	14.3	89.5	83.7	74.8	61.7	55.3	10.5	74.9	179
Kagera	95.0	94.4	90.0	87.7	40.7	96.7	92.2	88.7	86.6	79.2	2.2	77.4	120
Mwanza	97.2	98.2	98.2	96.7	39.5	98.2	98.2	95.7	91.5	88.0	1.8	75.6	183
Mara	85.4	86.6	80.4	76.1	37.4	88.8	87.7	76.2	66.2	61.6	10.2	76.2	78
Manyara	92.8	97.6	97.6	94.3	36.4	97.6	95.2	88.7	82.6	74.6	2.4	79.3	57
Zanzibar North	96.6	100.0	100.0	100.0	25.5	94.9	93.1	93.1	98.4	88.2	0.0	90.1	6
Zanzibar South	(100.0)	(100.0)	(100.0)	(98.1)	(63.5)	(100.0)	(100.0)	(95.8)	(88.0)	(85.7)	(0.0)	(94.1)	3
Town West	97.9	97.9	97.9	90.5	58.1	97.9	96.5	92.2	88.5	84.7	2.1	83.6	13
Pemba North	96.8	94.1	88.2	82.0	7.5	89.7	85.2	65.3	73.0	54.9	3.2	72.3	8
Pemba South	85.8	88.5	87.2	80.5	26.4	86.1	86.1	79.4	67.0	64.3	11.5	84.7	9
Education													
No education	84.3	85.9	77.5	73.8	32.0	89.5	80.6	72.0	64.6	55.6	8.1	73.2	426
Primary incomplete	89.1	93.8	90.2	86.7	39.6	94.7	90.0	82.0	78.4	67.9	4.5	79.5	261
Primary complete	95.1	96.6	94.8	91.0	49.2	96.5	94.9	89.6	86.8	78.7	2.5	81.3	898
Secondary+	95.1	95.0	94.8	90.7	70.7	92.1	91.8	82.9	89.8	79.2	4.9	78.4	74
Wealth quintile													
Lowest	87.0	87.6	78.6	75.2	31.4	91.0	82.3	74.3	65.2	58.3	7.3	75.2	409
Second	90.5	91.8	88.9	82.7	36.4	93.1	88.7	80.9	79.0	70.8	5.1	76.8	352
Middle	91.3	95.8	92.5	88.1	40.2	96.2	93.2	87.7	81.4	70.8	3.5	80.3	328
Fourth	93.8	96.5	95.6	93.4	50.2	97.7	96.5	91.0	89.7	80.6	2.2	84.8	327
Highest	96.9	97.6	97.6	95.6	74.5	94.0	94.0	87.5	90.9	80.7	2.4	77.6	243
Total	91.4	93.3	89.7	85.9	44.2	94.2	90.3	83.6	79.9	71.1	4.3	78.8	1,658

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

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles, and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth)

Vaccination in the First Year of Life

Table 9.14 shows the percentage of children age 12-59 months who received specific vaccinations during the first year of life, according to age cohort. The data indicate that the proportion of children fully vaccinated by 12 months of age has increased over the last several years from 53 percent of children ages 36-47 and 48-59 months to more than six in ten children age 12-23 and 24-35 months.

Table 9.14 Vaccinations in first year of life

Percentage of children under five years of age at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Tanzania 2004-05

Current age of child in months	BCG	DPT-HB			Polio ¹				Measles	All ²	No vaccinations	Percentage with a vaccination card seen	Number of children
		1	2	3	0	1	2	3					
12-23	91.1	92.6	89.2	83.7	44.2	93.5	89.6	82.0	70.2	61.9	4.6	78.8	1,658
24-35	91.0	91.6	87.9	81.5	47.0	92.1	88.1	78.7	70.1	60.2	5.9	72.0	1,611
36-47	92.6	91.8	87.1	79.9	36.5	92.8	87.0	72.6	67.2	52.9	5.1	63.0	1,510
48-59	91.1	90.5	87.1	77.5	37.1	89.7	85.5	68.4	68.1	52.9	6.6	56.3	1,434
Total	91.5	91.8	88.0	81.0	41.4	92.2	87.8	76.1	69.4	57.6	5.4	68.0	6,214

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth)

9.8 ACUTE RESPIRATORY INFECTION AND FEVER

Acute respiratory infection (ARI) is among the leading causes of morbidity and mortality in Tanzania. Of acute respiratory diseases, pneumonia is the most serious for young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths resulting from pneumonia. The prevalence of ARI was estimated by asking mothers whether their children under age five had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. It should be borne in mind that these data are subjective (i.e., mother's perception of illness) and not validated by a medical examination.

Table 9.15 shows that in the two weeks preceding the survey, 8 percent of children experienced symptoms of ARI and one-fourth had a fever. Prevalence of respiratory illness varies by age of the child, rising to a peak at 6-11 months of age (13 percent) then falling slowly to a low at 48-59 months of age (5 percent). Prevalence of fever peaks at the same age, with more than one-third of children age 6-11 months sick with fever.

Fifty-seven percent of children who had symptoms of ARI and/or fever were taken to a health facility. Children from urban areas were more likely to be taken to a health facility than those in rural areas, as were the children of more educated mothers and mothers who live in households that are in the higher wealth quintiles. There is significant variation by region.

Table 9.15 Prevalence and treatment of symptoms of ARI and fever

Percentage of children under five years who had a cough accompanied by short, rapid breathing (symptoms of ARI) and percentage of children who had fever in the two weeks preceding the survey, and percentage of children with symptoms of ARI and/or fever for whom treatment was sought from a health facility or provider, by background characteristics, Tanzania 2004-05

Background characteristic	Percentage of children with symptoms of ARI	Percentage of children with fever	Number of children	Among children with symptoms of ARI and/or fever, percentage for whom treatment was sought from a health facility/provider ¹	Number of children
Age in months					
<6	6.1	16.8	845	51.5	167
6-11	13.1	36.2	916	65.1	354
12-23	10.5	34.2	1,658	62.1	600
24-35	7.7	25.2	1,611	54.1	445
36-47	7.0	19.2	1,510	51.1	325
48-59	5.0	14.8	1,434	45.8	239
Sex					
Male	8.5	25.3	3,983	58.5	1,098
Female	7.7	23.6	3,993	54.6	1,031
Residence					
Urban	6.9	22.5	1,558	70.4	392
Rural	8.4	24.9	6,417	53.5	1,737
Mainland/Zanzibar					
Mainland	8.1	24.2	7,771	56.3	2,057
Total urban	7.1	22.3	1,539	69.5	386
Dar es Salaam city	11.9	25.6	400	64.9	120
Other urban	5.4	21.1	1,140	71.5	266
Total rural	8.4	24.7	6,232	53.2	1,671
Zanzibar	8.4	32.7	204	66.2	72
Unguja	9.6	29.4	126	68.0	41
Pemba	6.6	38.1	79	63.7	31
Zone					
Western	10.6	34.1	1,749	46.1	644
Northern	6.4	17.0	1,042	69.8	203
Central	9.6	25.6	663	64.4	182
Southern highlands	9.7	17.4	1,175	53.3	246
Lake	3.4	16.8	1,680	50.5	294
Eastern	9.7	28.6	890	67.5	277
Southern	9.8	34.9	572	64.0	211
Region					
Dodoma	10.7	27.9	380	68.2	113
Arusha	5.2	17.4	276	53.4	51
Kilimanjaro	4.0	14.2	198	(89.3)	33
Tanga	9.1	20.4	317	83.9	75
Morogoro	6.2	25.9	313	67.2	84
Pwani	11.2	40.3	177	72.2	73
Dar es Salaam	11.9	25.6	400	64.9	120
Lindi	11.6	32.9	133	71.6	50
Mtwara	8.3	37.5	229	66.5	88
Ruvuma	10.4	33.3	210	55.8	73
Iringa	17.0	26.4	265	44.0	84
Mbeya	10.1	15.3	608	60.8	115
Singida	8.1	22.5	284	58.2	69
Tabora	10.9	22.9	466	47.1	127
Rukwa	2.6	13.5	302	51.7	47
Kigoma	23.2	51.6	435	47.0	247
Shinyanga	3.9	31.2	847	44.8	271
Kagera	3.4	14.2	512	62.2	76
Mwanza	1.5	9.8	816	(61.0)	86
Mara	7.9	36.8	352	37.0	132
Manyara	6.3	14.4	251	49.9	44
Zanzibar North	13.4	29.3	30	85.8	10
Zanzibar South	13.4	27.0	17	86.4	5
Town West	7.2	29.9	78	56.8	25
Pemba North	5.5	44.3	40	69.2	18
Pemba South	7.9	31.8	39	56.3	13
Education					
No education	7.5	23.4	2,085	51.3	538
Primary incomplete	7.6	24.5	1,262	58.2	337
Primary complete	8.6	24.8	4,264	57.0	1,145
Secondary+	8.2	25.5	364	73.6	109
Wealth quintile					
Lowest	8.9	25.8	1,812	50.0	513
Second	7.5	25.7	1,664	59.6	452
Middle	8.3	23.5	1,688	53.5	438
Fourth	8.3	24.1	1,561	53.1	410
Highest	7.3	22.5	1,252	71.8	317
Total	8.1	24.4	7,976	56.6	2,129

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

ARI = Acute respiratory infection

¹ Excludes pharmacy, shop, and traditional practitioner

9.9 DIARRHOEAL DISEASE

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children in Tanzania. Exposure to diarrhoeal disease-causing agents is frequently a result of the use of contaminated water and unhygienic practices related to food preparation and excreta disposal.

Disposal of Children's Stools

The proper disposal of children's faeces is extremely important in preventing the spread of disease. If faeces are left uncontained, disease may be spread by direct contact or through animal contact. Table 9.16 presents information on the disposal of faecal matter of children under age five, by background characteristics. Three-fourths of children's stools are usually contained. Children's stools are more likely to be contained in urban than rural areas (90 and 71 percent, respectively). There is a positive relationship between containment of children's stools and both mothers' education and household wealth quintile.

Table 9.16 Disposal of children's stools

Percent distribution of mothers whose youngest child under five years is living with her, by way in which child's faecal matter is disposed of, according to background characteristics and type of toilet facilities in household, Tanzania 2004-05

Background characteristic	Stools contained			Stools uncontained			Use diapers		Other/missing	Total	Number of mothers
	Child always uses toilet/latrine	Thrown into toilet/latrine	Buried in yard	Thrown outside dwelling	Thrown outside yard	Rinsed away	Dispos-able	Wash-able			
Residence											
Urban	13.4	74.3	2.2	1.2	2.6	1.7	0.3	4.0	0.3	100.0	1,155
Rural	7.4	56.6	6.5	4.1	19.9	2.7	0.0	2.1	0.6	100.0	4,253
Mainland/Zanzibar											
Mainland	8.7	60.8	5.3	3.4	16.1	2.6	0.1	2.5	0.6	100.0	5,272
Total urban	14.1	73.6	1.9	1.2	2.7	1.9	0.2	4.0	0.3	100.0	1,146
Dar es Salaam city	25.1	70.8	0.0	0.0	0.6	0.6	0.6	1.7	0.7	100.0	318
Other urban	9.9	74.7	2.7	1.6	3.5	2.3	0.1	4.9	0.2	100.0	828
Total rural	7.1	57.2	6.2	4.1	19.8	2.8	0.0	2.1	0.6	100.0	4,125
Zanzibar	8.0	45.3	16.1	5.1	23.5	0.7	0.9	0.0	0.4	100.0	136
Unguja	9.7	60.9	12.3	2.4	12.4	1.1	1.4	0.0	0.0	100.0	87
Pemba	5.0	17.8	22.8	9.9	43.2	0.2	0.0	0.0	1.2	100.0	49
Zone											
Western	4.3	53.7	7.5	4.1	27.1	1.8	0.0	1.2	0.3	100.0	1,094
Northern	2.3	74.0	2.2	3.8	13.0	0.2	0.1	4.1	0.3	100.0	729
Central	3.2	70.0	1.6	9.0	12.4	0.7	0.0	1.2	1.9	100.0	450
Southern highlands	11.4	67.6	2.2	3.2	11.3	1.3	0.0	2.3	0.6	100.0	800
Lake	7.7	35.3	13.0	3.1	25.4	8.9	0.0	5.9	0.4	100.0	1,045
Eastern	18.3	75.1	0.6	0.5	3.9	0.3	0.3	0.8	0.3	100.0	696
Southern	17.3	71.7	3.6	1.3	3.7	1.1	0.0	0.2	1.2	100.0	457
Region											
Dodoma	2.0	74.1	1.5	7.4	12.7	0.5	0.0	0.7	1.0	100.0	266
Arusha	4.8	52.5	0.6	7.7	23.4	0.0	0.4	9.3	1.3	100.0	194
Kilimanjaro	1.4	97.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	100.0	144
Tanga	1.7	85.4	4.6	2.7	4.5	0.0	0.0	1.1	0.0	100.0	226
Morogoro	12.1	80.3	1.0	0.5	6.0	0.0	0.0	0.0	0.0	100.0	241
Pwani	13.4	75.8	1.5	1.5	7.9	0.0	0.0	0.0	0.0	100.0	138
Dar es Salaam	25.1	70.8	0.0	0.0	0.6	0.6	0.6	1.7	0.7	100.0	318
Lindi	11.1	79.3	6.5	0.7	1.8	0.7	0.0	0.0	0.0	100.0	107
Mtwara	24.9	66.4	4.1	1.8	2.3	0.5	0.0	0.0	0.0	100.0	179
Ruvuma	13.1	72.4	1.2	1.2	6.5	2.0	0.0	0.4	3.2	100.0	171
Iringa	7.1	79.6	1.3	3.7	6.3	0.0	0.0	1.4	0.6	100.0	200
Mbeya	12.7	62.9	1.3	3.8	15.2	1.8	0.0	1.6	0.7	100.0	403
Singida	4.9	64.2	1.7	11.4	11.9	0.8	0.0	1.9	3.1	100.0	184
Tabora	5.3	42.5	5.4	1.4	42.7	0.7	0.0	1.7	0.3	100.0	292
Rukwa	12.9	65.1	5.1	1.7	8.4	1.8	0.0	4.7	0.4	100.0	197
Kigoma	5.1	70.0	8.6	2.5	7.1	4.4	0.0	2.3	0.0	100.0	278
Shinyanga	3.4	51.3	8.1	6.4	29.0	1.1	0.0	0.3	0.5	100.0	524
Kagera	3.9	33.6	20.2	0.4	22.2	12.6	0.0	7.1	0.0	100.0	332
Mwanza	13.1	33.6	9.2	3.7	21.8	10.2	0.0	7.5	0.5	100.0	498
Mara	1.3	42.0	10.7	6.1	38.6	0.4	0.0	0.0	1.0	100.0	215
Manyara	0.9	63.6	2.1	3.3	23.6	0.9	0.0	5.6	0.0	100.0	165
Zanzibar North	6.4	27.4	17.7	6.8	38.1	3.1	0.5	0.0	0.0	100.0	19
Zanzibar South	7.7	55.3	13.5	6.4	16.0	1.1	0.0	0.0	0.0	100.0	11
Town West	11.2	73.6	10.2	0.0	2.7	0.3	1.9	0.0	0.0	100.0	56
Pemba North	4.2	17.2	23.9	7.9	45.5	0.0	0.0	0.0	1.4	100.0	26
Pemba South	5.9	18.5	21.6	12.2	40.6	0.4	0.0	0.0	1.0	100.0	23
Education											
No education	6.9	46.1	7.1	5.2	29.5	2.9	0.0	1.6	0.8	100.0	1,372
Primary incomplete	9.5	57.6	5.2	4.3	18.9	2.2	0.0	2.2	0.1	100.0	839
Primary complete	8.8	66.7	5.3	2.6	10.6	2.6	0.0	2.8	0.6	100.0	2,912
Secondary+	13.1	72.9	2.2	1.8	3.1	0.7	1.2	4.0	0.8	100.0	284
Toilet facilities											
None	2.9	11.4	15.6	8.7	55.2	3.9	0.0	1.0	1.1	100.0	876
Pit latrine	9.1	70.0	3.8	2.6	9.1	2.2	0.0	2.7	0.5	100.0	4,249
Improved latrine	17.9	64.0	1.8	1.4	2.3	5.2	1.6	4.5	1.4	100.0	169
Flush toilet	21.5	72.8	0.3	0.0	3.4	0.0	1.0	1.0	0.0	100.0	110
Wealth quintile											
Lowest	7.8	40.0	9.0	7.5	31.1	2.7	0.0	1.2	0.7	100.0	1,171
Second	6.8	58.0	6.0	3.8	21.0	2.1	0.0	1.5	0.8	100.0	1,102
Middle	6.2	59.8	6.1	3.3	17.4	3.4	0.0	3.4	0.5	100.0	1,111
Fourth	8.1	72.1	4.7	1.4	7.0	2.6	0.0	3.7	0.4	100.0	1,065
Highest	15.2	75.6	1.2	0.8	1.7	1.6	0.4	2.8	0.6	100.0	959
Total	8.6	60.4	5.6	3.5	16.2	2.5	0.1	2.5	0.6	100.0	5,408

Note: There are 115 unweighted cases where the mother reported disposing of the child's faeces in a toilet/latrine but there is not a toilet facility in the house. Totals include 4 cases with missing information on toilet facilities.

Prevalence of Diarrhoea

In the 2004-05 TDHS, mothers were asked whether any of their children under five years of age had had diarrhoea at any time during the two-week period preceding the survey. If the child had had diarrhoea, the mother was asked about feeding practices during the diarrhoeal episode and about what actions were taken to treat the diarrhoea.

Table 9.17 shows the proportion of children reported by their mothers to have suffered from diarrhoea during the two-week period before the survey. Thirteen percent of children under five were reported to have had diarrhoea. As with ARI and fever, children age 6-11 months were more likely than other age groups to suffer from diarrhoea. Prevalence is 3 to 4 times higher among these children than among the youngest children or oldest children (age 48-59 months). There is no significant difference among children of mothers with varying levels of education and little difference by household wealth. There is, however, significant difference by region, with Kigoma showing the highest prevalence (27 percent).

Table 9.17 Prevalence of diarrhoea

Percentage of children under five years with diarrhoea in the two weeks preceding the survey, by background characteristics, Tanzania 2004-05

Background characteristic	Diarrhoea in the two weeks preceding the survey	Number of children
Age in months		
<6	7.4	845
6-11	25.4	916
12-23	22.3	1,658
24-35	10.4	1,611
36-47	6.9	1,510
48-59	4.8	1,434
Sex		
Male	13.5	3,983
Female	11.7	3,993
Residence		
Urban	10.0	1,558
Rural	13.2	6,417
Mainland/Zanzibar		
Mainland	12.6	7,771
Total urban	9.6	1,539
Dar es Salaam city	7.4	400
Other urban	10.3	1,140
Total rural	13.3	6,232
Zanzibar	13.6	204
Unguja	13.7	126
Pemba	13.6	79
Zone		
Western	15.6	1,749
Northern	10.3	1,042
Central	17.6	663
Southern highlands	13.0	1,175
Lake	8.9	1,680
Eastern	9.3	890
Southern	16.6	572
Region		
Dodoma	19.1	380
Arusha	10.8	276
Kilimanjaro	7.7	198
Tanga	11.0	317
Morogoro	12.1	313
Pwani	8.8	177
Dar es Salaam	7.4	400
Lindi	16.3	133
Mtwara	16.1	229
Ruvuma	17.4	210
Iringa	18.3	265
Mbeya	12.3	608
Singida	15.6	284
Tabora	12.9	466
Rukwa	9.9	302
Kigoma	26.9	435
Shinyanga	11.2	847
Kagera	7.4	512
Mwanza	7.3	816
Mara	14.7	352
Manyara	11.0	251
Zanzibar North	10.5	30
Zanzibar South	10.8	17
Town West	15.5	78
Pemba North	12.8	40
Pemba South	14.4	39
Mother's education		
No education	13.1	2,085
Primary incomplete	13.9	1,262
Primary complete	11.9	4,264
Secondary+	12.8	364
Source of drinking water		
Piped	11.5	2,241
Protected well	13.7	1,085
Open well	12.1	2,276
Surface	14.1	2,032
Other/missing	10.6	342
Wealth quintile		
Lowest	13.3	1,812
Second	14.2	1,664
Middle	12.1	1,688
Fourth	13.2	1,561
Highest	9.4	1,252
Total	12.6	7,976

Knowledge of ORS Packets

A simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy (ORT). ORT may include the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS); a homemade mixture usually prepared from sugar, salt, and water; any kind of thin, nutritious fluids such as rice water, coconut milk, or watery soup; or simply increased fluids. Table 9.18 shows that almost all women with children under five years of age know about ORS packets (96 percent). There are only small variations by background characteristics.

Treatment of Diarrhoea

Mothers of children who had diarrhoea were asked about what was done to treat the illness. Table 9.19 shows what the mothers reported. The 2004-05 TDHS findings indicate that almost half of sick children (47 percent) were taken to see a health care provider. The data indicate, however, that treatment at home is also common. Seventy percent of sick children were given some form of ORT, and 54 percent were given a solution prepared from an ORS packet. Forty percent of children received pills or syrup.

Children of mothers with no education are less likely to have been given some form of ORT than children of mothers with at least some secondary education (66 and 85 percent, respectively). Similarly, children living in the wealthiest households are more likely than poorer children to receive ORT.

There are significant regional differentials in treatment practice. Children living in the Northern zone and Zanzibar are the least likely to have received any treatment.

Table 9.18 Knowledge of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about ORS packets for treatment of diarrhoea, by background characteristics, Tanzania 2004-05

Background characteristic	Percentage of mothers who know about ORS packets	Number of mothers
Age		
15-19	93.0	437
20-24	93.8	1,505
25-29	96.2	1,498
30-34	97.2	1,145
35-49	96.1	1,188
Residence		
Urban	97.8	1,277
Rural	94.9	4,496
Mainland/Zanzibar		
Mainland	95.5	5,628
Total urban	97.7	1,269
Dar es Salaam city	97.3	369
Other urban	97.8	900
Total rural	94.9	4,359
Zanzibar	96.0	144
Unguja	97.6	93
Pemba	93.0	51
Zone		
Western	96.1	1,143
Northern	93.2	774
Central	93.7	473
Southern highlands	91.7	844
Lake	98.5	1,126
Eastern	95.8	766
Southern	98.7	503
Region		
Dodoma	93.8	277
Arusha	87.8	205
Kilimanjaro	99.3	145
Tanga	95.5	250
Morogoro	94.0	253
Pwani	95.3	144
Dar es Salaam	97.3	369
Lindi	98.2	117
Mtwara	100.0	201
Ruvuma	97.7	185
Iringa	94.8	216
Mbeya	91.6	425
Singida	93.6	196
Tabora	93.9	311
Rukwa	88.5	203
Kigoma	95.7	282
Shinyanga	97.4	550
Kagera	98.0	351
Mwanza	99.7	546
Mara	96.3	229
Manyara	91.2	173
Zanzibar North	96.7	21
Zanzibar South	97.9	13
Town West	97.8	59
Pemba North	94.5	27
Pemba South	91.3	24
Education		
No education	89.7	1,466
Primary incomplete	96.2	910
Primary complete	97.8	3,094
Secondary+	98.5	302
Wealth quintile		
Lowest	91.4	1,226
Second	94.3	1,187
Middle	97.4	1,166
Fourth	97.0	1,129
Highest	98.1	1,065
Total	95.5	5,772

ORS = Oral rehydration salts

Table 9.19 Diarrhoea treatment

Percentage of children under five years who had diarrhoea in the two weeks preceding the survey taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, according to background characteristics, Tanzania 2004-05

Background characteristic	Percentage taken to a health provider ¹	Oral rehydration therapy (ORT)					Other treatments					No treatment	Number of children
		ORS packets	RHF	Either ORS or RHF	In-creased fluids	ORS, RHF, or increased fluids	Pill/syrup	Injection	Intra-venous solution	Home remedy/other			
Age in months													
<6	44.3	43.6	17.4	51.7	27.5	53.5	39.2	1.1	0.0	9.2	25.5	62	
6-11	47.4	51.5	16.4	57.1	32.2	61.6	33.0	0.9	1.5	10.1	24.2	232	
12-23	50.1	58.5	23.9	66.6	38.7	74.9	43.6	0.0	1.3	8.9	11.4	370	
24-35	38.8	55.2	14.9	64.4	40.4	74.7	43.3	0.6	0.0	6.4	14.2	168	
36-47	53.8	49.0	21.9	60.2	38.9	72.1	42.3	0.0	0.0	12.2	12.6	103	
48-59	41.5	50.2	20.0	62.8	31.9	72.8	33.7	0.0	0.0	6.9	18.0	68	
Sex													
Male	49.0	54.1	19.7	62.4	37.4	71.2	43.5	0.1	1.4	8.2	14.0	538	
Female	44.7	53.6	19.8	62.0	35.2	68.7	36.0	0.7	0.2	10.0	19.0	466	
Residence													
Urban	46.6	51.2	29.4	65.4	48.8	78.0	47.7	0.4	0.6	3.2	11.7	156	
Rural	47.1	54.3	18.0	61.6	34.1	68.6	38.6	0.4	0.9	10.1	17.1	848	
Mainland/Zanzibar													
Mainland	47.1	54.4	20.1	62.9	36.2	70.3	40.3	0.4	0.8	8.9	16.0	977	
Total urban	46.7	52.2	30.6	66.6	48.5	78.1	48.0	0.5	0.6	2.9	11.1	148	
Dar es Salaam city	*	*	*	*	*	*	*	*	*	*	*	30	
Other urban	44.8	52.0	31.8	65.6	47.2	75.3	51.7	0.6	0.8	3.6	11.3	118	
Total rural	47.1	54.9	18.3	62.2	34.0	69.0	38.9	0.4	0.9	10.0	16.9	829	
Zanzibar	45.7	33.3	6.7	39.1	41.6	59.7	30.4	0.4	0.0	12.4	26.9	28	
Unguja	53.2	38.5	8.4	45.9	43.9	65.5	37.7	0.7	0.0	11.7	23.4	17	
Pemba	33.7	24.9	4.0	28.2	37.8	50.4	18.6	0.0	0.0	13.4	32.6	11	
Zone													
Western	37.7	46.4	10.9	52.2	27.1	59.0	53.3	0.0	0.0	11.7	14.3	272	
Northern	43.3	43.8	18.8	53.1	29.4	61.5	22.5	1.0	0.0	8.3	26.9	108	
Central	52.9	60.9	17.4	65.5	29.0	70.7	30.3	0.5	0.0	1.8	21.0	117	
Southern highlands	45.7	53.8	22.7	61.3	39.6	71.2	30.9	0.0	0.0	6.5	16.9	153	
Lake	52.0	60.1	41.0	76.2	44.1	81.7	53.8	1.0	1.3	19.1	10.2	149	
Eastern	64.3	70.4	18.1	79.1	58.6	90.2	42.8	0.0	2.8	0.0	8.6	83	
Southern	50.3	60.0	16.5	68.5	41.5	75.8	27.1	0.7	4.2	6.2	16.3	95	
Mother's education													
No education	49.0	55.9	10.8	60.1	29.3	66.0	36.5	0.3	0.4	9.1	19.7	273	
Primary incomplete	44.9	58.3	21.1	64.4	41.9	73.0	38.3	0.0	0.6	13.4	15.5	175	
Primary complete	46.3	51.6	23.7	61.9	35.5	69.8	42.3	0.6	1.2	7.5	15.1	509	
Secondary+	51.4	49.6	24.8	69.3	66.4	85.1	41.8	0.0	0.0	8.5	12.5	47	
Wealth quintile													
Lowest	45.3	53.9	15.0	59.9	27.5	65.6	40.4	0.0	0.5	10.5	18.6	241	
Second	52.8	58.3	16.8	63.8	37.1	70.6	40.1	0.2	0.9	8.6	15.9	236	
Middle	47.8	56.2	25.3	66.1	32.7	71.4	36.8	1.0	0.4	7.4	16.5	204	
Fourth	37.1	45.4	13.8	54.2	40.5	67.5	40.2	0.5	1.2	12.6	16.3	206	
Highest	54.9	55.6	36.3	70.9	52.2	80.1	44.4	0.0	1.5	3.1	11.9	118	
Total	47.0	53.9	19.8	62.2	36.4	70.0	40.0	0.4	0.8	9.0	16.3	1,004	

Note: ORT includes solution prepared from oral rehydration salt (ORS) packets, recommended home fluids (RHF), and increased fluids. Totals may not add to 100 percent because of a small number of missing cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Excludes pharmacy, shop, and traditional practitioner

Feeding Practices during Diarrhoea

Mothers are encouraged to continue feeding children normally when they suffer from diarrhoeal illnesses and to increase the fluids children are given. These practices help to reduce the likelihood the child will become dehydrated and also minimise the adverse consequences of diarrhoea on the child's nutritional status. Mothers were specifically asked whether they gave the child more or less fluids and food than usual when their child had diarrhoea.

Table 9.20 presents data on feeding practices when a child has diarrhoea. Just 36 percent of children are given more fluids than usual, as recommended. Three in ten children are given the same amount of fluids as usual. However, a significant proportion of children are offered less fluid than usual: 16 percent are offered somewhat less and 8 percent are offered much less. Nine percent of children were offered no fluid at all. These findings suggest that one-third of mothers still engage in the dangerous practice of curtailing fluid intake when their children have diarrhoea. Figure 9.2 shows that there has been little change since the 1999 TRCHS.

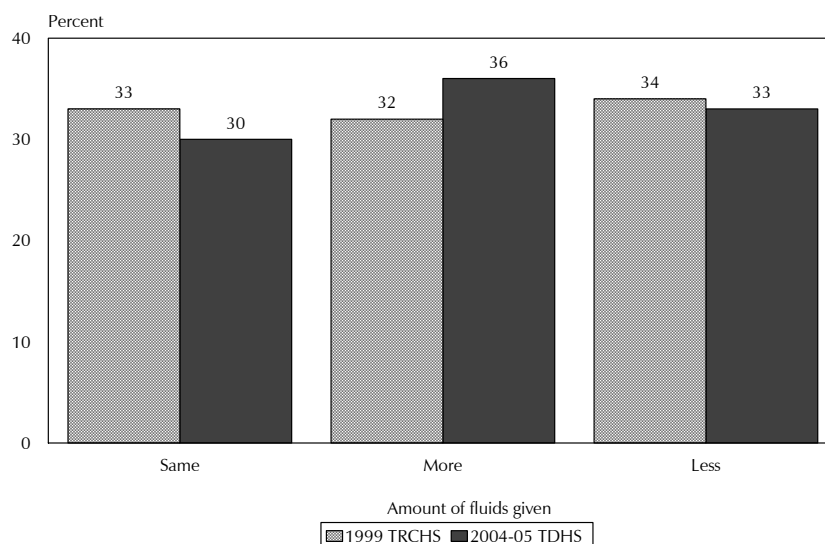
Table 9.20 shows that 49 percent of the children with diarrhoea were given somewhat less or much less than the usual amount of food, or no food at all, which could exacerbate the child's illness.

Table 9.20 Feeding practices during diarrhoea

Percent distribution of children under five years who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, Tanzania 2004-05

	Percent
Amount of liquids offered	
Same as usual	30.4
More	36.4
Somewhat less	16.3
Much less	8.2
None	8.7
Don't know/missing	0.1
Total	100.0
Amount of food offered	
Same as usual	37.1
More	8.6
Somewhat less	30.7
Much less	14.5
None	3.9
Never gave food	4.9
Don't know/missing	0.2
Total	100.0
Number of children	1,004

Figure 9.2 Trends in Feeding Practices during Diarrhoea



9.10 CHILDREN'S HEALTH CARE BY WOMEN'S STATUS

Status and self respect can be major determinants of a mother's ability to obtain adequate health care for her children. Table 9.21 shows data on utilisation of child health care services by the mother's level of empowerment, as measured by the three indicators of women's status defined in Chapter 3.

Table 9.21 Children's health care by women's status

Percentage of children age 12-23 months who were fully vaccinated, and percentage of children under five years who were ill with a fever and/or had symptoms of ARI and/or diarrhoea in the past two weeks and were taken to a health provider for treatment, by women's status indicators, Tanzania 2004-05

Women's status indicator	Percentage of children 12-23 months fully vaccinated ¹	Number of children	Percentage of children with fever and/or symptoms of ARI taken to a health provider ²	Number of children	Percentage of children with diarrhoea taken to a health provider ³	Number of children
Number of decisions in which woman has final say³						
0	60.9	195	58.4	268	46.0	121
1-2	68.7	655	55.3	862	45.8	417
3-4	75.7	379	60.8	536	44.5	260
5	75.4	431	53.2	463	47.1	206
Number of reasons to refuse sex with husband						
0	49.3	92	57.8	115	42.9	66
1-2	64.6	183	53.3	242	36.3	132
3-4	73.4	1,384	57.0	1,772	47.6	806
Number of reasons wife beating is justified						
0	74.4	615	61.6	623	51.9	314
1-2	70.2	345	58.3	449	45.5	209
3-4	70.9	498	52.6	728	38.8	329
5	62.9	201	53.8	330	48.5	152
Total	71.1	1,658	56.6	2,129	45.8	1,004

¹ Those who have received BCG, measles, and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth)

² Excludes pharmacy, shop, and traditional practitioner

³ Either by herself or jointly with others

The data indicate that the more empowered a woman, the more likely her child is to be fully vaccinated. There is no clear pattern, however, in the relationship between sick children being taken to a health care provider and the three indices of women's status.

9.11 SMOKING

To measure the extent of smoking among Tanzanian adults, women and men who were interviewed in the 2004-05 TDHS were asked if they currently smoked cigarettes or used tobacco. Less than 2 percent of women said that they used tobacco of any kind and less than 1 percent said they smoked cigarettes. Almost one-fourth of men use tobacco products, with 21 percent saying they smoke cigarettes. Rural men are more likely to smoke than urban men.

Table 9.22 Use of smoking tobacco

Percentage of women and men who smoke cigarettes or tobacco, according to urban-rural residence, Tanzania 2004-05

Residence	Uses tobacco		Does not use tobacco	Number of respondents
	Cigarettes	Pipe tobacco		
WOMEN				
Urban	0.6	0.0	0.1	2,935
Rural	0.5	0.1	1.2	7,394
Total	0.5	0.1	0.9	10,329
MEN				
Urban	18.5	0.0	0.4	716
Rural	21.9	0.5	1.2	1,919
Total	21.0	0.4	1.0	2,635