This chapter presents the 2000-2001 UDHS findings on the general state of reproductive health and child care in Uganda. The chapter is divided into two major sections. The first part covers women's access to health care and utilisation of antenatal, delivery, and postnatal care. The second part of the chapter covers immunisation of children and prevalence and management of childhood diseases, including acute respiratory infection (ARI), fever, and diarrhoea. Hygiene practices and the relationship between women's status and children's health care are also discussed.

The results of the 2000-2001 UDHS are very important in evaluating reproductive health programmes and achievements in implementing the action plan agreed upon at the 1994 International Conference on Population and Development in Cairo. These findings also provide an opportunity to evaluate the child health care programmes, particularly the introduction of the Integrated Management of Childhood Illnesses (IMCI) programmes. The findings further provide an evaluation of service utilisation and the implementation of appropriate strategies for improving the health of mothers and children.

In this report, data about children refer to those born in the five-year period prior to the survey. These data are not comparable with those presented in the 1995 UDHS, which include only children under four years old. For studying trends since 1995, the 2000-2001 UDHS data have also been tabulated for children under four years.

# 9.1 ANTENATAL CARE

The major objective of antenatal care is to identify and treat problems during pregnancy such as anaemia and infections. It is during an antenatal care visit that screening for complications and advice on a range of issues including place of delivery and referral of mothers with complications occur. In the UDHS, interviewers recorded source of antenatal care and the person who provided that care for women's most recent births. If a woman received antenatal care from more than one provider, the provider with the highest qualifications is presented in the table. Table 9.1 shows the distribution of women who had live births in the five years preceding the survey according to the type of antenatal care provider.

The results indicate that 94 percent of women in Uganda received antenatal care. Most women receive care from a medical professional: 83 percent from a nurse or a midwife, and 9 percent from a doctor. The role of traditional birth attendants in providing antenatal care is negligible (1 percent).

Data in Table 9.1 further indicate that the choice of antenatal care provider varies slightly by the mother's age. Mothers age 35-49 are less likely than younger mothers to receive antenatal care (89 percent compared with 96 percent for mothers less than 20). First births are the most likely to receive antenatal care. On the other hand, sixth order births are the least likely to receive antenatal care.

#### Table 9.1 Antenatal care

Percent distribution of women who had a live birth in the five years preceding the survey by source of antenatal care during pregnancy for the most recent birth, according to background characteristics, Uganda 2000-2001

Background		Nurse/	Traditional birth				
characteristic	Doctor	midwife <sup>1</sup>	attendant	No one	Missing <sup>2</sup>	Total	Number <sup>3</sup>
Age at birth							
<20	9.0	85.4	1.7	3.8	0.2	100.0	746
20-34	9.8	83.1	1.3	5.6	0.2	100.0	3,058
35-49	8.0	80.0	0.9	10.9	0.2	100.0	685
Birth order							
1	14.8	81.6	1.1	2.4	0.2	100.0	717
2-3	10.0	82.9	1.6	5.1	0.4	100.0	1,380
4-5	8.4	83.7	1.5	6.2	0.2	100.0	1,057
6+	6.6	83.2	1.0	9.0	0.1	100.0	1,335
Residence							
Urban	25.5	71.3	0.1	2.9	0.1	100.0	560
Rural	7.1	84.7	1.5	6.6	0.2	100.0	3,930
Region							
Central	17.5	76.3	1.8	4.3	0.0	100.0	1.323
Fastern	4.3	89.7	0.7	5.1	0.2	100.0	1,273
Northern	4.5	87.4	0.6	7.2	0.3	100.0	775
Western	8.9	80.2	1.8	8.6	0.5	100.0	1,119
Education							
No education	4.3	82.1	1.6	12.1	0.0	100.0	1.103
Primary	8.1	85.5	1.4	4.7	0.3	100.0	2.791
Secondary+	25.0	73.0	0.5	1.4	0.1	100.0	594
Wealth index quintile							
Lowest	4.1	84.0	1.7	9.8	0.4	100.0	980
Lower middle	4.8	84.6	1.3	9.3	0.0	100.0	955
Middle	7.5	86.7	1.3	4.3	0.2	100.0	897
Upper middle	8.9	84.9	1.8	3.8	0.5	100.0	851
Highest	23.8	73.7	0.2	2.2	0.1	100.0	806
DISH/CREHP districts							
DISH	15.4	76.9	1.7	5.9	0.2	100.0	1,239
I Mbarara and Ntungamo	11.7	77.9	2.2	7.8	0.4	100.0	263
Sembabule	11.0	80.0	3.5	5.5	0.0	100.0	327
III Luwero, Masindi and	10 -	-	4 -	10.2	0.0	100.0	162
Nakasongola	10.5	/6.9	1.5	10.2	0.9	100.0	162
V Kamuli and Jinja	/.6	87.1	0.6	4./	0.0	100.0	219
CREHP (Kisoro, Kabale,	33.6	63.6	0.0	2.8	0.0	100.0	268
and Rukungiri)	10.0	79.0	0.7	10.3	0.0	100.0	255
Neither	6.9	85.9	1.2	5.8	0.2	100.0	2,995
Total	9.4	83.0	1.3	6.1	0.2	100.0	4,489

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

<sup>1</sup> Includes medical assistant, clinical officer, and nursing aide

<sup>2</sup> Includes women who don't know the type of provider
<sup>3</sup> Total includes one woman with missing information on education

Practically all women in urban areas receive antenatal care. Mothers in urban areas are three times more likely than mothers in rural areas to receive antenatal care from a doctor (26 percent compared with 7 percent). Women in rural areas are more likely to get antenatal care from a nurse or a midwife than urban women (85 percent and 71 percent, respectively). Because the Central Region is the most urbanised region in Uganda with a relatively large number of health facilities and better access to health care than other regions, women in the Central Region are much more likely to receive antenatal care from a doctor than women in other regions (18 percent compared with 9 percent or less).

Antenatal care coverage is strongly associated with the woman's education. Better educated women are more likely to have antenatal care and more likely to be attended by a doctor than less educated women. Although one in four women who have attained secondary or higher education received antenatal care from a doctor, the corresponding proportion for women with primary education is only 8 percent, and for women with no education, it is 4 percent. Twelve percent of women with no education received no antenatal care, the highest level in any socioeconomic group.

Antenatal coverage is clearly influenced by the woman's wealth status: women in the lowest quintile are the least likely to receive antenatal care, and those in the highest quintile are the most likely to have care during pregnancy. Furthermore, women in the highest quintile are also the most likely to receive care from a doctor, while women in the lower quintiles receive care from a midwife or nurse.

Antenatal coverage does not vary much by whether a woman lives in districts included in the DISH project or the CREHP project. However, women in these districts are more likely to receive care from a doctor, while in other districts the role of midwife and nurse is more visible.

Data on antenatal care in the 2000-2001 UDHS are not directly comparable with that in the 1995 UDHS for two reasons. In the later survey, questions on antenatal care were asked only of the last live births in the preceding five years, while in 1995, data were collected for all live births. Furthermore, the 2000-2001 UDHS covered births occurring in the five years preceding the survey, while the 1995 UDHS covered only births in the four years prior to the survey. Despite these differences, the data show almost no differences in source of antenatal care.

# 9.1.1 NUMBER OF ANTENATAL CARE VISITS AND TIMING OF FIRST VISIT

Antenatal care attendance is important in monitoring the progress of a pregnancy, identifying complications, and referring mothers for specialised care at an appropriate time for intervention. In Uganda, the Ministry of Health (MOH) recommends that a woman attend antenatal care at least four times during a pregnancy. It is further recommended that a woman attend antenatal care monthly during the first seven months, every two weeks in the eighth month, and then weekly until birth.

Information on antenatal care visits and the stage at which pregnant women seek antenatal care is presented in Table 9.2. Overall, only 42 percent of women make four or more visits during a pregnancy. Furthermore, half of women make one to three visits, which is below the MOH recommendation, while 6 percent did not seek antenatal care at all. Table 9.2 further shows that half (49 percent) of women make their first antenatal care visits during the first six months of pregnancy, while 44 percent make their first visit during the last three months of pregnancy. Half of these women had their first visit when the pregnancy was at 5.9 months, when it is sometimes too late to identify complications and to refer the woman appropriately.

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, and by the timing of the first visit, Uganda 2000-2001										
Number and timing of ANC visits	Percent									
Number of ANC visits										
None	6.1									
1	7.7									
2-3	42.3									
4+ Devilt luces device in a	41.9									
Don't know/missing	2.1									
Total	100.0									
Number of months pregnant at time of first ANC visit										
No antenatal care	6.1									
<4 months	14.4									
4-5 months	34.9									
6-7 months	37.6									
8+ months	6.7									
Don't know/missing	0.3									
Total	100.0									
Median months pregnant at first visit (for those with ANC)	5.9									
Total	4,489									

# 9.1.2 QUALITY OF ANTENATAL CARE

The Sexual and Reproductive Health Minimum Package for Uganda (1999) provides details of what is to be done by a health service provider during antenatal care. Some health workers have been trained to offer this package. Table 9.3 shows the percentage of mothers who receive antenatal care by content of antenatal care and background characteristics. The results show that not all women received the minimum package. The most common components of antenatal care include the administration of tetanus toxoid injection (74 percent), weight measurement (71 percent), measurement of blood pressure (56 percent), and receipt of iron tablets (54 percent). Height was measured for only 34 percent of pregnant women, while only one in five received information on pregnancy complications, and 35 percent were given antimalarial drugs.

Certain patterns can be seen in Table 9.3. In general, older women, those pregnant with their first birth, urban women, women in the Central Region, and better educated women tend to get more comprehensive antenatal care than other women. For example, 36 percent of women with secondary education are informed of pregnancy complications, compared with less than 17 percent of less educated women.

### Table 9.3 Antenatal care content

Background characteristic	Informed of signs of pregnancy compli- cations	Weight measured	Height measured	Blood pressure measured	Urine sample given	Blood sample given	Received tetanus toxoid injection	Received iron tablets	Received anti- malarial	Number
Mother's age at birth										
<20	16.5	68.0	31.2	54.8	9.7	15.4	79.3	59.6	34.9	717
20-34	19.5	71.3	34.7	55.9	10.7	15.1	73.9	53.6	33.8	2,880
35+	19.0	74.7	36.4	59.3	12.1	14.1	68.9	51.6	37.6	609
Birth order										
1	22.0	71.8	38.5	61.6	16.4	22.6	83.8	61.6	35.7	699
2-3	20.9	73.3	34.7	56.2	8.6	14.4	78.8	55.0	33.4	1,304
4-5	16.6	67.3	32.8	52.3	9.3	12.4	69.9	51.4	31.9	990
6+	16.9	71.9	32.8	56.2	10.9	13.3	66.8	51.8	37.3	1,213
Residence										
Urban	38.1	88.2	59.4	83.7	32.0	36.6	83.7	66.1	38.3	543
Rural	16.1	68.7	30.6	52.1	7.6	11.8	72.6	52.6	34.0	3,663
Region										
Central	26.6	73.9	41.2	71.3	20.1	22.7	74.6	67.2	40.7	1,265
Eastern	14.1	72.3	29.3	46.8	6.5	10.3	78.5	55.3	39.4	1,206
Northern	18.3	81.0	37.3	57.0	8.7	11.0	77.5	60.0	31.4	716
Western	15.5	59.8	29.7	48.0	5.6	13.6	65.8	33.1	23.4	1,018
Education										
No education	14.6	68.5	31.9	51.4	7.2	10.5	71.1	46.0	30.5	970
Primary	16.6	69.6	31.4	53.5	8.6	13.6	73.1	54.6	34.4	2,650
Secondary+	36.3	83.4	51.7	76.6	26.3	28.6	83.4	67.1	42.2	585
Total	18.9	71.3	34.3	56.2	10.8	15.0	74.1	54.3	34.6	4,206

Percentage of women with a live birth in the five years preceding the survey who received antenatal care for the most recent birth, by content of antenatal care and background characteristics, Uganda 2000-2001

In summary, the content of antenatal care in Uganda is inadequate. Coupled with poor coverage of antenatal care, this situation calls for concerted efforts to improve the attendance and quality of antenatal care.

# 9.1.3 PLACE OF ANTENATAL CARE

The place where a woman receives antenatal care is important because it influences the frequency and quality of antenatal care received. Table 9.4 presents the distribution of women who delivered in the five years preceding the survey who received ANC, tabulated by place of ANC and background characteristics of the mother. Overall, 71 percent of mothers use a public facility for antenatal care. Among these, the most commonly used facilities are government health centres (38 percent), followed by government hospitals (28 percent). Private hospitals and clinics are the most often used by women who go to a private facility (24 percent).

The place where a woman receives antenatal care does not seem to have a pattern according to mother's age or the child's birth order. However, place of antenatal care varies according to the woman's education, urban or rural residence, and region. Government hospitals are frequented more by urban women, women who live in the Central Region, and those with secondary or higher education.

## Table 9.4 Place of antenatal care

Percent distribution of women with a live birth in the five years preceding the survey who received antenatal care (ANC) for the most recent birth from a health professional by place of ANC, according to background characteristics, Uganda 2000-2001

			Place w	/here antena	atal care was	received				
Background characteristic	Govt. hospital	Govt. health centre	Govt. health post	Other public	Private hospital/ clinic	Other private medical	Other	Missing	Total	Number <sup>1</sup>
Mother's age at birth										
<20	28.6	39.0	4.9	0.4	23.3	0.2	0.2	3.5	100.0	704
20-34	28.1	37.4	5.4	0.1	24.5	0.5	0.2	3.6	100.0	2,840
35-49	24.5	40.4	5.4	0.3	22.4	1.4	0.6	5.0	100.0	603
Birth order										
1	31.8	33.9	4.3	0.0	26.5	0.4	0.0	3.3	100.0	691
2-3	29.0	37.8	4.4	0.3	24.1	0.3	0.2	3.9	100.0	1,282
4-5	24.5	39.1	7.5	0.2	24.4	1.0	0.3	3.1	100.0	974
6+	26.4	40.1	5.2	0.2	22.3	0.7	0.5	4.5	100.0	1,200
Residence										
Urban	53.2	12.4	1.2	0.1	31.6	0.0	0.0	1.5	100.0	542
Rural	23.8	42.0	5.9	0.2	22.9	0.7	0.3	4.1	100.0	3,606
Region										
Central	35.3	21.1	1.7	0.0	38.7	0.1	0.5	2.6	100.0	1,241
Eastern	29.0	44.6	8.8	0.5	13.5	0.9	0.0	2.7	100.0	1,197
Northern	28.6	45.5	3.8	0.2	18.2	0.4	0.0	3.3	100.0	712
Western	15.9	46.3	6.7	0.0	22.6	1.0	0.7	6.9	100.0	997
Education										
No education	22.8	45.8	6.3	0.2	19.7	0.5	0.3	4.4	100.0	952
Primary	26.6	39.3	5.4	0.2	23.5	0.7	0.3	4.0	100.0	2,612
Secondary+	40.5	20.2	3.5	0.0	33.3	0.6	0.2	1.9	100.0	583
Total	27.7	38.1	5.3	0.2	24.0	0.6	0.3	3.8	100.0	4,148

Note: For women who had more than one antenatal care visit, the place refers to the last visit. Total includes one woman with missing information on education.

## 9.1.4 TETANUS TOXOID VACCINATION

Neonatal tetanus is common among newborns in developing countries where deliveries are conducted at home or in places where hygiene conditions may be poor. Tetanus toxoid (TT) immunisation is given to pregnant women to prevent neonatal tetanus. For full protection, a pregnant woman needs two doses of TT injections. If a woman had been immunised before she became pregnant, she only needs one dose of TT injection. For a woman to have lifetime protection, a total of five doses is required.

The 2000-2001 UDHS collected data for women's most recent live birth in the five years preceding the survey as to whether the mother received a TT vaccination and the number of doses received. Table 9.5 shows that only 42 percent of pregnant women in Uganda receive two or more TT injections, 28 percent receive one dose, and 30 percent do not receive any TT vaccinations.

## Table 9.5 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, Uganda 2000-2001

Background characteristic	None	One injection	Two or more injections	Don't know/ missing	Total	Number				
Age at birth										
<20	23.4	30.9	45.4	0.3	100.0	746				
20-34	29.7	27.8	42.0	0.5	100.0	3,058				
35-49	38.1	24.4	36.4	1.1	100.0	685				
Birth order										
1	18.1	27.8	53.8	0.3	100.0	717				
2-3	24.6	30.6	44.4	0.4	100.0	1,380				
4-5	34.1	28.1	37.1	0.7	100.0	1,057				
6+	38.4	24.6	36.2	0.7	100.0	1,335				
Residence										
Urban	18.4	25.6	55.6	0.4	100.0	560				
Rural	31.6	28.1	39.8	0.6	100.0	3,930				
Region										
Central	28.5	25.9	45.5	0.1	100.0	1.323				
Eastern	25.2	33.3	41.0	0.5	100.0	1,273				
Northern	27.2	28.5	43.0	1.3	100.0	775				
Western	38.8	23.3	37.3	0.6	100.0	1,119				
Education										
No education	36.5	25.1	37.5	0.9	100.0	1.103				
Primary	29.9	29.3	40.3	0.5	100.0	2,791				
Secondary+	17.7	25.5	56.5	0.3	100.0	594				
Total	29.9	27.8	41.7	0.5	100.0	4,489				
Note: Total includes one woman with missing information on education.										

The age of the mother and the birth order influence TT vaccination. Young mothers and women pregnant with their first child are more likely to receive a TT vaccination than other mothers. This could be because older women and women pregnant with higher order births received the injections prior to the current pregnancy. Women in urban areas are more likely than rural women to have received two doses of TT vaccinations (56 percent and 40 percent, respectively). Women in the Western Region are less likely than other women to have received TT injections. TT vaccination coverage varies according to the woman's education, with 57 percent of mothers with secondary education having received two or more doses, compared with 38 percent for mothers with no education.

# 9.2 DELIVERY

Some of the factors associated with delivery outcome include the place where a mother delivers a baby and the hygiene practices associated with such delivery. Table 9.6 shows the percent distribution of live births in the five years preceding the survey by place of delivery by background characteristics of the mother.

## Table 9.6 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Uganda 2000-2001

Background characteristic	Health facility	At home	Other	Missing	Total	Number
Mother's age at birth	46 E	F2 2	0.6	0.7	100.0	1 5 4 2
<20 20-34	46.5	52.2	0.6	0.7	100.0	1,543
35-49	27.2	71.0	0.9	0.9	100.0	892
Birth order						
1	55.0	43.4	0.7	0.9	100.0	1,378
2-3	36.6	62.3	0.6	0.5	100.0	2,519
4-5	31.6	66.5	1.2	0.7	100.0	1,733
6+	28.4	/0.2	0.9	0.6	100.0	2,042
Residence						
Urban	79.2	19.6	0.8	0.4	100.0	821
Kural	31.5	67.0	0.9	0.7	100.0	6,850
Region					100.0	0.470
Central	56.9	41.5	0.8	0.8	100.0	2,1/3
Eastern Northern	36.5 24 5	61.8 74.7	1.1	0.6	100.0	2,305
Western	21.7	76.8	0.9	0.6	100.0	1,878
Education						
Primary	20.8	77.9	0.9	0.5	100.0	1.890
Secondary+	36.4	62.1	0.8	0.6	100.0	4,922
Number of antenatal care visits <sup>1</sup>	72.2	25.5	1.2	1.0	100.0	858
None	7.8	91.3	0.6	0.3	100.0	274
1-3 visits	28.5	70.3	0.9	0.3	100.0	2,242
4+ visits	53.4	45.1	1.0	0.5	100.0	1,881
Don't know/missing	52.8	42.9	0.0	4.3	100.0	92
Wealth index quintile			0.6	- <b>-</b>	100.0	
Lowest	18.4	80.5	0.6	0.5	100.0	1,/45
Middle	26.4	72.6 68.8	0.4	0.6	100.0	1,677
Upper middle	44.3	53.4	1.6	0.7	100.0	1,303
Highest	76.0	22.3	1.1	0.7	100.0	1,228
DISU/CDEUD districts						
DISH	48.8	50.3	0.7	0.2	100.0	2,068
I Mbarara and						,
Ntungamo II Masaka Rakai and	20.6	78.3	0.8	0.3	100.0	448
Sembabule	37.5	61.9	0.5	0.1	100.0	568
III Luwero, Masindi and	0.0 C	c <b>-</b> o	1.0		100.0	225
Nakasongola	33.6	65.2	1.3	0.0	100.0	286
V Kampala	70.7 88 5	20.0 10.1	0.5	0.1	100.0	390
CREHP (Kisoro, Kabale.	50.5	10.1	0.0	0.0	100.0	570
and Rukungiri)	20.6	78.0	0.5	0.9	100.0	419
Neither	33.0	65.3	0.9	0.8	100.0	5,184
Total	36.6	61.9	0.9	0.6	100.0	7,672

Note: Total includes one woman with missing information on education Includes only the most recent birth in the five years preceding the survey

Overall, 37 percent of births occurred at health facilities, and 62 percent were delivered at home. This is cause for concern, given that 92 percent of women received antenatal care from a trained health worker. In general, births to younger women and low order births are more likely to be delivered in a health facility than births to older women and higher order births. For example, 27 percent of births to mothers age 35-49 are delivered at a health facility, whereas the corresponding figure for births to women under 20 years old is 47 percent. Similarly, 55 percent of first order births were delivered at health facilities, compared with 28 percent of sixth order births.

The proportion of births delivered in a health facility is much higher in urban areas (79 percent) than in rural areas (32 percent). Mothers with secondary or higher education are three times more likely to deliver at a health facility than women with no education (72 percent 21 percent, respectively).

Another related factor is antenatal care attendance. Mothers who made four or more antenatal care visits are seven times more likely to deliver at a health facility than women who do not attend antenatal care (53 percent and 8 percent, respectively).

A woman's wealth status has a direct relationship with the place she delivers her baby. Births to women in the highest quintile are the most likely to be delivered in a health facility, while those in the lowest quintile are the most likely to be delivered at home. Choice of place of delivery varies by whether a woman lives in districts included in the DISH project or the CREHP project. Women who live in a district included in the DISH project are more likely to deliver in a health facility (49 percent) than women in the CREHP districts (21 percent) and women who are in districts not included in either project (33 percent). As expected, women in Kamuli and Jinja (71 percent) and Kampala (89 percent) are the most likely to deliver in a health facility.

# 9.2.1 Assistance During Delivery

In addition to place of delivery, assistance during delivery is an important variable that influences the delivery outcome and the health of the mother and the infant. This is because the skills of the person attending the delivery determine whether the provider can manage any complication and observe hygienic practices. Table 9.7 shows the percent distribution of live births in the five years preceding the survey, by person providing assistance, according to background characteristics.

Overall, four in ten births in the five years preceding the survey were assisted by a trained medical professional during delivery. However, only 4 percent of births were delivered with the assistance of a doctor, and 35 percent were assisted by a nurse, a midwife or other trained medical professional. Eighteen percent of births were assisted by a traditional birth attendant and 28 percent by relatives or friends. For one in seven births, the mother did not receive any assistance during delivery.

Births to younger women, low order births, and births to women in urban areas and in the Central Region are more likely to receive assistance at delivery from a doctor, a nurse, or a midwife than births to other women. The most striking differentials in assistance during delivery are by woman's education and by urban-rural residence (see Figure 9.1). Women who have attained secondary education are more likely to be assisted at delivery by a medical professional than women with no education (76 percent compared with 22 percent). Similarly, 81 percent of births to urban women were attended by a trained medical staff, compared with 34 percent of births to rural women.

## Table 9.7 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, Uganda 2000-2001

Background characteristic	Doctor	Nurse/ midwife <sup>1</sup>	Tradi- tional birth attendant	Relative, friends, other	No one	Don't know/ missing	Total	Number
Age at birth								
<20	5.2	43.0	19.4	25.6	6.4	0.4	100.0	1,543
20-34	3.7	34.0	17.9	29.2	14.9	0.3	100.0	5,236
35-49	2.0	28.5	13.6	27.3	27.8	0.7	100.0	892
Birth order								
1	8.2	48.7	16.0	22.8	3.7	0.6	100.0	1,378
2-3	3.5	35.1	19.0	30.8	11.3	0.2	100.0	2,519
4-5	3.0	31.0	19.8	29.5	16.4	0.3	100.0	1,733
6+	1.9	29.6	15.4	27.8	24.8	0.4	100.0	2,042
Residence								
Urban	14.3	66.2	4.3	10.6	4.4	0.2	100.0	821
Rural	2.5	31.5	19.3	30.4	15.9	0.4	100.0	6,850
Region								
Central	78	51.0	16.0	20.6	43	03	100.0	2 173
Eastern	1.7	38.5	10.8	33.0	15.8	0.2	100.0	2.305
Northern	23	24.5	36.0	21.1	15.5	0.5	100.0	1 316
Western	2.8	20.3	15.3	36.3	24.7	0.6	100.0	1,878
Mother's education								
No education	1.2	20.8	17.2	35.7	24.8	0.2	100.0	1.890
Primary	33	35.7	19.6	28.2	12.8	0.5	100.0	4 922
Secondary+	12.6	63.7	8.0	12.2	3.4	0.2	100.0	858
Wealth index quintile								
Lowest	16	18 1	25.5	333	20.5	0.9	100.0	1 745
Lower middle	1.0	25.7	19.8	33.0	18.1	1.5	100.0	1,677
Middle	2.1	29.8	18.7	32.5	15.5	1.3	100.0	1,67
Upper middle	2.1	43.1	14.6	26.6	11.1	1.5	100.0	1 457
Highest	12.4	65.0	6.0	11.2	4.9	0.5	100.0	1,228
DISU/CDEUD districts								
	71	42.2	116	<b>11 1</b>	12.6	0.1	100.0	2.06.9
L Mbarara and	7.1	43.2	14.0	22.5	12.0	0.1	100.0	2,000
I MDdfdfd dffu	2.2	10.0	10.4	25.7	22.6	0.2	100.0	440
II Masaka Rakai an	ے.د ط	10.0	10.4	55.7	52.0	0.5	100.0	440
Sembabule	u 1	34.0	30.3	24.1	75	0.1	100.0	568
III Luwero Masindi	7.1	54.0	50.5	27.1	7.5	0.1	100.0	500
and Nakasongola	5.1	31.6	21.9	31.0	10.4	0.0	100.0	286
IV Kamuli and linia	15	51.0 60.2	∠1.9 3.1	1/ /	8 7	0.0	100.0	200 300
V Kampala	20 A	60.0	2.1	5 /	0./ ງ 2	0.1	100.0	376
CREHP (Kisoro Kabala	20.0	05.0	2.5	5.4	2.5	0.5	100.0	570
and Rukungiri)	-, 1.0	21.1	73	45.6	24.4	0.5	100.0	/10
Neither	1.4	∠1.1 31.0	7.5 10.8	-+J.U 20.2	24.4 117	0.5	100.0	5 1 8 4
	2.1	51.3	15.0	29.5	17./	1.0	100.0	5,104
Total	3.8	35.2	17.7	28.3	14.7	0.4	100.0	7,672

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Total includes one woman with missing information on education <sup>1</sup> Includes medical assistant, clinical officer, and nursing aide

# Figure 9.1 Percentage of Births for Which Women Received Medical Assistance During Delivery, by Background Characteristics



The relationship between a woman's wealth status and assistance at delivery shows that women in the highest quintile are the most likely to be assisted by a health professional. On the other hand, women in the lowest quintile are the most likely to be assisted by a traditional birth attendant. Women in the lowest quintile have the poorest care during delivery, since they are also more likely to be assisted by untrained personnel or not assisted at all (33 percent by friends or relatives and 21 percent by no one).

In general, women who live in districts included in the DISH project are more likely to be assisted by a health professional during delivery (50 percent) than in CREHP districts (22 percent) or in districts not covered by either project (35 percent). Women in Kampala District are more likely to have their births assisted by a doctor, than women in other districts (21 percent compared with 5 percent or less).

# 9.2.2 CHARACTERISTICS OF DELIVERY

Birth weight is a proxy indicator of a baby's health status because infants born with low birth weight generally face higher morbidity and mortality risks. In the 2000-2001 UDHS, information was obtained on delivery characteristics, and the results are given in Table 9.8. The data show that 3 percent of live births are delivered by caesarean section. Caesarean section is more common for younger women, first births, births to women in urban areas, those in the Central Region, and births to better educated women.

The majority of births (seven in ten) in the five years preceding the survey were not weighed. This is not surprising given that only 37 percent are delivered in a health facility. Among those who were weighed, 90 percent have a normal birth weight (2.5 kilograms or more). This proportion varies little by background characteristics.

## Table 9.8 Delivery characteristics

			Birth	weight			Size of cl	hild at birth	ו		
Background characteristic	Delivery by C- section	Not weighed	Less than 2.5 kg	2.5 kg or more	Does not know/ missing	Very small	Smaller than average	Average or larger	Does not know/ missing	Numbe	
Age at birth											
<20	3.8	65.0	4.9	27.9	2.2	8.0	13.5	76.8	1.6	1,543	
20-34	2.4	69.9	2.5	25.6	2.0	6.2	11.0	81.4	1.3	5,236	
35-49	1.3	78.0	2.1	18.2	1.8	6.8	12.7	78.2	2.3	892	
Birth order											
1	4.5	55.8	5.2	35.8	3.2	8.5	14.3	75.8	1.4	1,378	
2-3	2.7	70.0	2.9	25.5	1.6	6.1	10.9	81.8	1.3	2,519	
4-5	2.1	73.0	1.8	23.1	2.0	5.9	11.3	81.4	1.5	1,733	
6+	1.4	76.5	2.5	19.2	1.8	6.8	11.5	79.9	1.8	2,042	
Residence											
Urban	7.3	27.2	6.0	64.5	2.2	6.7	11.3	81.6	0.4	821	
Rural	2.0	75.0	2.6	20.4	2.0	6.7	11.8	79.9	1.6	6,850	
Region											
Central	4.8	52.1	4.7	41.0	2.2	9.0	11.0	79.5	0.4	2,173	
Eastern	1.2	70.9	2.7	25.4	1.0	5.4	9.0	84.6	1.0	2,305	
Northern	2.1	76.3	2.6	19.1	2.0	8.6	16.7	69.3	5.5	1,316	
Western	1.8	84.6	1.5	10.7	3.1	4.1	12.5	82.9	0.5	1,878	
Education											
No education	1.2	82.6	2.0	13.5	1.9	8.1	13.4	76.3	2.3	1,890	
Primary	2.4	71.3	2.9	23.8	2.1	6.2	11.2	81.3	1.3	4,922	
Secondary+	6.4	33.4	5.6	59.0	2.0	6.2	11.4	81.9	0.5	858	
Total	2.5	69.8	3.0	25.2	2.0	6.7	11.7	80.1	1.5	7,672	

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, Uganda 2000-2001

Mothers were also asked to estimate the size of their babies. Eight in ten women stated that their baby was either average size or larger than average. This proportion varies little by background characteristics, except that babies in the Northern Region are more likely to be reported as smaller than average.

# 9.3 POSTNATAL CARE

Postnatal care is important for a woman's health and that of the infant, particularly within the first six weeks after delivery (puerperium). The Sexual and Reproductive Health Minimim Package recommends that a mother should attend postnatal care during the puerperal period, because complications may arise. Through provision of integrated services, the Ministry of Health recommends that mothers receive postnatal care when they bring their infants for immunisation.

In the 2000-2001 UDHS, women who delivered at home were asked if a health professional or a traditional birth attendant checked on their health after delivery. Table 9.9 presents data on postnatal care attendance by background characteristics of the woman. The table indicates that postnatal care for births delivered outside a health facility is poor, with more than nine in ten women not receiving postnatal care. Among women who received postnatal care, the majority (76 percent) were examined within two days after delivery. While a woman's age and number of

## Table 9.9 Postnatal care by background characteristics

Percent distribution of women who had a noninstitutional live birth in the five years preceding the survey by timing of postnatal care for the most recent noninstutional birth, according to background characteristics, Uganda 2000-2001

			First postn	atal checkup	)		
Background characteristic	Within 2 days of delivery	3-7 days after birth	8-28 days after birth	29-41 days after birth	Did not receive postnatal care <sup>1</sup>	Total	Number
Age at birth							
<20	5.8	1.6	0.0	0.0	92.5	100.0	379
20-34	5.9	1.3	0.3	0.2	92.3	100.0	1,902
35-49	5.6	1.7	0.1	0.0	92.6	100.0	495
Birth order							
1	7.1	1.8	0.6	0.0	90.5	100.0	289
2-3	5.4	1.4	0.2	0.0	92.8	100.0	842
4-5	6.0	1.6	0.2	0.4	91.9	100.0	700
6+	5.6	1.2	0.1	0.2	92.9	100.0	944
Residence							
Urban	12.7	3.2	1.2	0.2	82.7	100.0	110
Rural	5.5	1.3	0.2	0.2	92.8	100.0	2,666
Region							
Central	8.5	3.4	0.5	0.5	86.8	100.0	538
Eastern	8.0	1.0	0.3	0.0	90.7	100.0	792
Northern	3.2	1.4	0.0	0.3	95.1	100.0	587
Western	3.9	0.6	0.1	0.0	95.5	100.0	859
Education							
No education	4.9	0.9	0.2	0.2	93.8	100.0	892
Primary	5.9	1.5	0.2	0.1	92.3	100.0	1.733
Secondary+	11.1	3.0	0.0	1.0	85.0	100.0	, 150
Total	5.8	1.4	0.2	0.2	92.4	100.0	2,775

children have no clear relationship with whether she receives postnatal care, her residence and education play an important role in getting care after delivery. As expected, urban women and better-educated women are more likely than other women to get postnatal care. Women in the Central and Eastern regions are more likely to receive postnatal care than women in other regions.

# 9.4 WOMEN'S STATUS AND REPRODUCTIVE HEALTH CARE

Table 9.10 presents data on the relationship between a woman's status and her ability to access and use reproductive health services. In this report, three indicators of women's status are presented. They are the number of household decisions in which she participates, the number of circumstances in which the woman says a wife is justified in refusing to have sex with her husband, and the number of reasons the woman believes wife beating is justified.

Table 9.10 indicates that the number of decisions in which a woman participates does not correlate with antenatal care, postnatal care, or delivery from a medical professional. However, the number of circumstances in which a woman feels that refusing sex is justified seems to have an influence on a woman's likelihood of receiving antenatal, postnatal, and delivery care. Women who

#### Table 9.10 Women's status and reproductive health care

Among women who had a live birth in the five years preceding the survey, the percentage who received antenatal care and postnatal care (last birth only), and percentage of births in the five years preceding the survey for which mothers received delivery care, by women's status indicators, Uganda 2000-2001

Monorla status	Percentage of women who received antenatal care	Women w postnatal two days	ho received care within of delivery <sup>2</sup>	Births for whom mothers received delivery care from health professional <sup>1</sup>			
indicator	from a nealth professional <sup>1</sup>	Percent	Number	Percent	Number		
Number of decisions in which woman has final say <sup>3</sup>							
0 '	91.3	39.3	97	38.2	139		
1-2	92.4	39.4	700	35.4	1,110		
3-4	92.6	46.2	542	42.7	881		
5	92.4	41.5	536	38.0	801		
Number of reasons to refuse sex with husband							
0	89.7	30.9	40	29.9	65		
1-2	90.6	29.3	153	27.2	243		
3-4	92.7	43.8	1,683	40.0	2,621		
Number of reasons that wife beating is justified							
0	93.7	47.4	461	43.7	707		
1-2	91.9	44.7	743	41.3	1.162		
3-4	92.9	37.2	529	33.6	842		
5	89.7	33.0	143	29.8	219		
Total	92.4	41.8	1,876	38.2	2,929		

<sup>1</sup> Health professional includes doctor, midwife, nurse, medical assistant, clinical officer, and nursing aide <sup>2</sup> Includes mothers who delivered in a health facility

<sup>3</sup> Either by herself or jointly with others

agree with more reasons for refusing sex are more likely to receive postnatal and delivery care from medical professionals. For example, 31 percent of women who feel there are no justifiable reasons to refuse to have sex received postnatal care, compared with 44 percent of women who feel it is justifiable to refuse to have sex for three to four reasons. Similarly, women who do not justify wife beating for any reason are more likely to receive postnatal care and delivery care than women who think there are reasons to justify wife beating.

# 9.5 CHILDHOOD IMMUNISATION

Since 1995, when immunisation coverage was found to have declined, there have been special efforts to revitalise immunisation services in Uganda. The Uganda National Expanded Programme for Immunisation (UNEPI) recommends the following schedule of immunisation: polio and BCG at birth; polio and DPT at six, ten, and 14 weeks; and measles at nine months. BCG vaccination protects a child from tuberculosis, and DPT vaccination protects a child from diphtheria, pertussis, and tetanus. To be considered fully immunised, a child should have received one dose of BCG vaccine, three doses of DPT vaccine, three doses of polio vaccine and one dose of measles vaccine.

The 2000-2001 UDHS collected information on immunisation coverage among children born in the five years preceding the survey. Data on immunisation coverage for the 2000-2001 UDHS was obtained from two sources, the immunisation cards and mothers' recall. If the mother was able to present a vaccination card to the interviewer, information on immunisation was extracted from the card. The mother was then asked whether the child had received other vaccinations that were not recorded on the card. If the mother was not able to provide the card, then she was asked to recall whether the child had received BCG, polio, DPT, and measles vaccinations and the number of doses of polio and DPT. Table 9.11 presents the percentage of children 12-23 months who had received specific vaccines at any time before the survey by source of information.

# Table 9.11 Vaccinations by source of information

Percentage of children 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, Uganda 2000-2001

	Percentage of children who received:										
		DPT Polio <sup>1</sup>								No	
BCG	1	2	3	0	1	2	3	Measles	$All^2$	vacci- nations	Number
9											
46.2	44.8	38.5	31.2	24.9	45.7	40.9	33.5	32.2	26.3	0.1	711
32.5	32.2	25.4	15.0	8.3	38.2	31.3	20.6	24.6	10.4	12.7	793
78.7	77.0	63.9	46.1	33.2	83.9	72.2	54.1	56.8	36.7	12.8	1,504
75.0	72.9	59.6	42.0	31.9	79.4	67.5	49.6	42.3	28.5	17.3	1,504
	BCG e 46.2 32.5 78.7 75.0	BCG 1 2 46.2 44.8 32.5 32.2 78.7 77.0 75.0 72.9	DPT       BCG     1     2       e     46.2     44.8     38.5       32.5     32.2     25.4       78.7     77.0     63.9       75.0     72.9     59.6	Percer BCG 1 2 3 e 46.2 44.8 38.5 31.2 32.5 32.2 25.4 15.0 78.7 77.0 63.9 46.1 75.0 72.9 59.6 42.0	Percentage of DPT BCG 1 2 3 0 e 46.2 44.8 38.5 31.2 24.9 32.5 32.2 25.4 15.0 8.3 78.7 77.0 63.9 46.1 33.2 75.0 72.9 59.6 42.0 31.9	Percentage of children       DPT     Pol       BCG     1     2     3     0     1       e     46.2     44.8     38.5     31.2     24.9     45.7       32.5     32.2     25.4     15.0     8.3     38.2       78.7     77.0     63.9     46.1     33.2     83.9       75.0     72.9     59.6     42.0     31.9     79.4	Percentage of children who re       DPT     Polio <sup>1</sup> BCG     1     2     3     0     1     2       e     46.2     44.8     38.5     31.2     24.9     45.7     40.9       32.5     32.2     25.4     15.0     8.3     38.2     31.3       78.7     77.0     63.9     46.1     33.2     83.9     72.2       75.0     72.9     59.6     42.0     31.9     79.4     67.5	Percentage of children who received:       DPT     Polio <sup>1</sup> BCG     1     2     3     0     1     2     3       e     46.2     44.8     38.5     31.2     24.9     45.7     40.9     33.5       32.5     32.2     25.4     15.0     8.3     38.2     31.3     20.6       78.7     77.0     63.9     46.1     33.2     83.9     72.2     54.1       75.0     72.9     59.6     42.0     31.9     79.4     67.5     49.6	Percentage of children who received:       DPT     Polio <sup>1</sup> BCG     1     2     3     0     1     2     3     Measles       e     46.2     44.8     38.5     31.2     24.9     45.7     40.9     33.5     32.2       32.5     32.2     25.4     15.0     8.3     38.2     31.3     20.6     24.6       78.7     77.0     63.9     46.1     33.2     83.9     72.2     54.1     56.8       75.0     72.9     59.6     42.0     31.9     79.4     67.5     49.6     42.3	Percentage of children who received:       DPT     Polio <sup>1</sup> BCG     1     2     3     0     1     2     3     Measles     All <sup>2</sup> e     46.2     44.8     38.5     31.2     24.9     45.7     40.9     33.5     32.2     26.3       32.5     32.2     25.4     15.0     8.3     38.2     31.3     20.6     24.6     10.4       78.7     77.0     63.9     46.1     33.2     83.9     72.2     54.1     56.8     36.7       75.0     72.9     59.6     42.0     31.9     79.4     67.5     49.6     42.3     28.5	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

 <sup>1</sup> Polio 0 is the polio given at birth.
<sup>2</sup> BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
<sup>3</sup> 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.

The data show that 37 percent of children have been fully immunised; for 26 percent, data were obtained from information recorded on the immunisation card, and for 10 percent, data were obtained from the mother's recall. Coverage of individual vaccines varies from 79 percent for BCG to 33 percent for polio at birth. Only 29 percent of children are fully immunised by 12 months of age as recommended. Thirteen percent of children 12-23 months have not received any of the recommended vaccines.

Another way to evaluate the success of an immunisation programme is to calculate the dropout rate for DPT and polio. The dropout rate is defined as the percentage of children who received the first dose but did not receive the third dose of a specific vaccine. Using data in Table 9.11, the dropout rate for DPT is 40 percent and the rate for polio is 36 percent.

#### **CHILDHOOD IMMUNISATION BY BACKGROUND CHARACTERISTICS** 9.5.1

Table 9.12 shows immunisation by background characteristics among children age 12-23 months. The data show that the chance of a child being immunised does not vary by the child's sex. However, the chance varies according to the child's birth order. First order births are more likely to be immunised than higher order births. Similarly, children in urban areas are more likely to be immunised than children in rural areas. For all antigens, the percentage of children who received immunisations was higher in urban areas than in rural areas.

# Table 9.12 Vaccinations by background characteristics

Percentage of children age 12-23 months who had received specific vaccines at any time before the survey (according to vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Uganda 2000-2001

				Percei	ntage of	childrer	ı who re	ceived:				Per- centage	
De el energia			DPT			Po	olio <sup>1</sup>				No	vacci-	
characteristic	BCG	1	2	3	0	1	2	3	Measles	$\operatorname{All}^2$	nations	card	Number
Child's sex													
Male	79.6	77.5	63.7	44.6	33.4	85.6	72.0	52.5	56.2	36.4	11.8	47.5	763
Female	77.8	76.5	64.1	47.7	33.0	82.2	72.5	55.8	57.4	37.0	13.9	47.1	741
Birth order													
1	85.2	77.6	64.5	52.3	42.4	84.5	74.2	57.7	59.2	42.4	9.9	47.7	235
2-3	78.7	79.1	64.5	46.0	32.7	84.1	70.9	53.3	56.2	36.1	12.6	48.1	513
4-5	78.7	76.4	63.1	43.6	32.6	83.8	72.2	52.5	55.8	34.7	13.1	46.7	352
6+	/4.9	/4.6	63.5	44.9	29.1	83.4	/2./	54.6	57.1	35.9	14.6	46.4	405
Residence													
Urban	91.9	88.5	75.1	59.1	57.2	91.0	80.0	60.0	68.4	42.1	6.2	42.6	167
Rural	77.0	75.6	62.5	44.5	30.2	83.0	71.2	53.4	55.3	36.0	13.7	47.8	1,337
Region													
Central	70.7	68.5	52.6	37.9	34.4	74.8	59.6	40.9	50.9	29.0	20.9	40.6	423
Eastern	84.4	78.4	63.8	44.7	39.9	88.4	75.1	57.1	53.1	37.8	6.5	53.7	445
Northern	78.2	78.9	65.9	44.9	39.5	84.5	76.2	56.1	57.9	33.2	13.4	43.7	255
Western	81.2	83.5	75.1	57.7	20.0	88.4	80.2	64.0	66.9	46.3	10.9	49.6	382
Mother's education													
No education	70.9	71.0	55.2	37.0	25.5	81.2	65.8	48.2	54.1	28.3	16.7	41.1	368
Primary	79.5	77.4	64.9	46.9	32.9	84.1	73.1	54.6	55.5	37.2	12.4	49.2	957
Secondary+	90.4	87.5	76.4	60.6	50.9	88.6	80.4	64.1	69.4	51.1	6.9	49.3	179
Wealth index quintile													
Lowest	73.8	71.8	54.2	34.9	28.0	81.4	67.7	46.7	49.1	26.5	14.8	47.5	341
Lower middle	77.6	76.4	63.7	45.2	34.2	85.7	72.7	54.7	58.0	38.0	11.8	45.9	352
Middle	76.5	75.9	67.5	51.4	30.5	82.4	73.8	59.1	57.6	39.6	14.2	48.7	295
Upper middle	82.7	79.2	65.5	47.7	24.8	83.9	70.6	51.9	57.2	39.5	12.3	47.0	277
Highest	85.3	84.2	71.6	55.1	52.2	86.6	77.8	60.4	64.5	42.6	10.4	47.5	239
DISH/CREHP districts													
DISH	71.0	67.5	52.6	38.8	31.1	75.9	60.6	41.9	51.1	30.1	19.1	40.6	419
Ntungamo	68.5	68.3	63.4	45.0	4.7	77.1	67.9	53.1	56.5	38.1	22.9	31.5	107
II Masaka, Rakai and	17.0	12.4	20.4	40 -	24.2	54.0	ac <del>-</del>	10.0	26 7	10.0	20.2	07.0	105
Sembabule III Luwero, Masindi	47.0	43.1	28.4	18./	21.2	51.8	36./	18.9	36./	12.8	39.2	27.8	105
and Nakasongola	72.6	65.8	39.5	21.1	22.9	81.6	46.4	19.0	37.8	14.3	9.4	46.4	57
IV Kamuli and Jinja	84.2	78.1	56.4	48.1	58.7	85.8	71.9	52.7	51.6	42.2	6.8	66.9	71
V Kampala 🏾 🏾	93.3	90.7	76.0	61.3	61.3	93.3	82.7	64.0	72.0	42.7	5.3	42.7	79
CREHP (Kisoro, Kabale,													
and Rukungiri)	96.6	95.5	92.0	83.3	45.4	98.9	95.5	83.7	78.4	65.5	1.1	66.9	74
Neither	80.6	79.6	66.5	46.5	33.2	86.1	75.3	57.1	57.6	37.4	11.1	48.6	1,011
Total	78.7	77.0	63.9	46.1	33.2	83.9	72.2	54.1	56.8	36.7	12.8	47.3	1,504

Note: Total includes one woman with missing information on education. <sup>1</sup> Polio 0 is the polio given at birth

 $^{2}$  BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)



# *Figure 9.2* Percentage of Children Age 12-23 Months Who are Fully Vaccinated, by Background Characteristics

Childhood immunisation coverage is highest in the Eastern and Western regions, while children in the Central Region have a comparatively lower coverage for all vaccines (see Figure 9.2). Mother's education is strongly associated with the chances of children receiving immunisations: 51 percent of children whose mother has secondary education are fully immunised, compared with 28 percent of children whose mother has no education.

Children who fall in the highest wealth index quintile also show the highest vaccination coverage (43 percent), while children in the lowest quintile have the lowest coverage (27 percent). This pattern holds true for all types of vaccines. Children living in districts included in the DISH project have lower than average immunisation coverage (30 percent). In fact, the highest coverage is shown by districts in the CREHP project (66 percent), followed by districts covered by neither the DISH nor the CREHP project (37 percent).

# 9.5.2 VACCINATION TRENDS

Table 9.13 shows vaccination coverage of children 12-23 months from the vaccination card and mothers' recall in the 1995 UDHS and the 2000-2001 UDHS. The overall vaccination coverage found in the 2000-2001 UDHS is lower than that in the 1995 UDHS (37 percent and 47 percent). The decline is in part due to a slightly lower proportion of children who received BCG, measles, and the first dose of DPT and polio. However, the most important reason for the decline in the proportion of children fully immunised is an increase in the dropout rate for polio and especially for DPT. For example, in the 1995 UDHS, 25 percent of children 12-23 months who received the first dose of DPT did not go on to receive the third dose. By 2000-2001, the DPT dropout rate was 40 percent.

Table 9.13 Vaccinatio	on trend	<u>s</u>										
Percentage of children 2000-2001	12-23 r	nonths	who rea	ceived s	pecific	vaccine	s at any	time be	efore the	survey	, Uganda <sup>-</sup>	1995 and
				Percen	tage of (	childrer	who re	ceived:				
			DPT			Po	olio				No	
Survey	BCG	1	2	3	0	1	2	3	Measles	All	nations	Number
1995 UDHS	83.6	81.7	73.5	61.1	22.9	82.2	73.0	59.0	59.6	47.4	14.4	1,588
2000-2001 UDHS	78.7	77.0	63.9	46.1	33.2	83.9	72.2	54.1	56.8	36.7	12.8	1,504

# 9.6 ACUTE RESPIRATORY INFECTION

The accuracy of data on childhood illnesses depends heavily on how the mother recalls the events of child illnesses and the details of the treatment given. The prevalence of symptoms for ARI was obtained by asking mothers whether their children under five years had been ill with a cough accompanied by short, rapid breathing. Mothers whose children had experienced these symptoms were asked what they had done to treat the illnesses.

Table 9.14 presents data on prevalence and treatment of acute respiratory infections among children under five years who had a cough accompanied by short, rapid breathing during the two weeks preceding the survey. The table further presents the percentage of children with ARI taken to a health facility or provider by background characteristics.

Table 9.14 indicates that 23 percent of children were reported to have had acute respiratory infection. Two in three of these children were taken to a health facility for treatment. The highest prevalence of ARI was found among children age 6-11 months (33 percent). The prevalence of ARI decreases with age to 14 percent for children age 48-59 months.

Table 9.14 Prevalence and treatment of symptoms of acute respiratory infection and fever

Percentage of children under five years who had a cough accompanied by short, rapid breathing (symptoms of ARI), 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 provider, by background characteristics, Uganda 2000-2001

Background characteristic	Percentage of children with symptoms of ARI	Percentage of children with fever	Number	Percentage of children taken to a health facility or provider	Number
Child's age <6 months 6-11 months 12-23 months 24-35 months 36-47 months 48-59 months	22.1 32.8 28.5 21.8 18.6 13.9	32.3 56.6 57.5 44.6 40.0 29.7	715 770 1,504 1,256 1,334 1,232	60.0 72.6 70.2 59.8 60.1 60.0	303 491 967 645 599 434
<b>Child's sex</b> Male Female	22.8 22.2	44.7 43.1	3,372 3,439	66.5 62.7	1,741 1,697
<b>Birth order</b> 1 2-3 4-5 6+	19.9 20.9 23.9 25.0	37.2 43.3 45.1 48.1	1,199 2,244 1,564 1,803	68.0 65.4 63.7 62.8	515 1,107 824 992
<b>Residence</b> Urban Rural	18.6 23.0	32.9 45.3	767 6,044	78.1 63.4	298 3,140
<b>Region</b> Central Eastern Northern Western <b>Mother's education</b>	19.4 23.3 23.1 24.6	37.9 54.1 50.4 33.8	1,956 2,077 1,133 1,646	77.7 63.1 63.4 53.0	849 1,227 643 718
No education Primary Secondary+	23.3 22.6 20.1	43.0 45.7 36.4	1,649 4,357 805	57.4 65.9 73.5	827 2,267 344
Mother's smoking state Smokes cigarettes/toba Does not smoke cigarettes/tobacco	us acco 24.7 22.4	36.0 44.2	233 6,575	59.9 64.8	102 3,334
Total	22.5	43.9	6,811	64.7	3,438

Note: Total includes one woman with missing information on education, and two women with missing information on smoking status

Prevalence of ARI does not vary by children's sex, but there are differentials by birth order. The prevalence gradually increases from 20 percent for first order births to 25 percent for sixth and higher order births. Residence is associated with prevalence of ARI and health-seeking behaviour. A smaller percentage of children in urban areas than in rural areas are reported to have the symptoms of ARI. Prevalence of ARI is slightly lower in the Central Region than the other three regions (19 percent compared with 23 percent or higher). Prevalence of ARI among children does not vary much with mother's education. Children of mothers who smoke are slightly more likely than those who do not smoke to suffer from ARI (25 percent compared with 22 percent).

Forty-four percent of children had a fever in the two weeks preceding the survey. The differentials in the prevalence of fever across subgroups of children are in general similar to those of ARI. However, children whose mother smokes are less likely to be reported as having fever than children whose mother does not smoke.

Data in Table 9.14 also show that two in three children who showed symptoms of ARI and/or fever were taken to a health facility for treatment. This percentage fluctuates by the child's age, with children age 6-23 months being the most likely to be taken for treatment. Treatment-seeking behaviour varies only slightly according to the child's sex and birth order. Children in urban areas are more likely to be treated than those in rural areas (78 and 63 percent, respectively). Children in the Central Region are more likely than children in other regions to be taken for treatment (78 percent), while children in the Western Region are the least likely (53 percent). Mother's education makes a difference in the treatment of ARI and fever in children. Whereas 74 percent of children whose mothers have at least some secondary education were taken for treatment, the corresponding percentage for children of women with no education is 57 percent.

# 9.7 DIARRHOEA

Diarrhoea was singled out for investigation since dehydration from watery diarrhoea is a major cause of death in infancy and childhood and the condition responds well to oral rehydration therapy (ORT). The combination of a high cause-specific mortality rate and the existence of effective treatment make diarrhoea and its treatment priority concerns for health services in Uganda.

# 9.7.1 HAND-WASHING MATERIALS

In the 2000-2001 UDHS, if a household has a designated place for washing hands in the dwelling, yard, or plot, the respondent to the Household Questionnaire was asked to show this place to the interviewer. The interviewer then recorded whether materials required for washing hands (water, soap or other cleansing agent, and a basin) were available.

Frequent hand-washing is a hygienic practice that protects members of the household, particularly children, from infections that cause diarrhoeal diseases. The connection between hand-washing and diarrhoea prevalence is well established. Promoting the practice of hand-washing and ensuring the availability of water, soap, and a basin substantially decrease the occurrence of diarrhoea in young children. The data on the availability of hand-washing facilities in households are presented in Table 9.15. The table indicates that water was available in 14 percent of the households, soap in 10 percent of the households, and a basin in 17 percent of the households. Only 4 percent of the households had all three hand-washing materials.

Water was available in 23 percent of households in urban areas, compared with 12 percent of rural households. Availability of water is higher in the Central Region (22 percent) than in the other regions

(15 percent or less). It should be noted that water is available in less than 1 percent of households in the Northern Region.

The availability of hand-washing materials varies according to residence. Urban households and those in the Central and Eastern regions tend to have the three materials more often than households in the other areas. Access to water determines the degree to which the household is exposed to healthy practices. One in five households that have a water source within the dwelling have all of the required hand-washing materials, compared with only 4 percent of households that are ten minutes or more from a water source.

Table 9.15 Hand-washing materials in households

Percentage of households with hand-washing materials in dwelling/yard/plot, by background characteristics and presence in the household of a child with diarrhoea in the two weeks preceding the survey, Uganda 2000-2001

		Hand-washing ma	terials and	facilities	
Background characteristic	Water	Soap or ash	Basin	All three hand-washing materials	Number <sup>1</sup>
Residence					
Urban	22.9	20.9	29.2	9.0	1,174
Rural	12.1	7.7	14.6	3.6	6,711
Region					
Central	22.3	19.3	29.5	6.7	2,603
Eastern	14.7	8.0	11.8	6.3	2,106
Northern	0.6	2.3	8.4	0.3	1,191
Western	9.3	3.3	10.3	1.7	1,985
Source of drinking water					
Piped	27.7	22.9	30.8	10.0	854
Protected well	14.0	9.7	18.4	3.9	1,293
Open well	14.0	9.6	19.0	5.6	1,981
Surface	12.3	7.7	14.2	3.0	1,708
Other/missing	8.6	5.8	10.0	2.2	2,049
Time to water source					
In dwelling	45.8	36.9	37.1	20.5	271
<5 minutes	17.8	23.3	30.9	3.9	149
5 to 9 minutes	16.6	14.7	23.3	6.7	600
10+ minutes	12.1	7.9	15.1	3.5	6,859
Total	13.7	9.7	16.8	4.4	7,885

# 9.7.2 DISPOSAL OF CHILDREN'S STOOLS

The manner of disposal of children's stools is associated with the prevalence and spread of diarrhoeal diseases among children. The ideal methods of disposal include having a child use a toilet, throwing the waste in the toilet, and burying the stool in the yard. Table 9.16 presents data on disposal of children's stools by background characteristics and type of toilet facilities in households. The table shows that 76 percent of mothers dispose of their children's stools properly, namely, by throwing the stool in a toilet or a latrine (62 percent), having the child always use a toilet or a latrine (8 percent), and burying the stool in the yard (5 percent). Seventeen percent of mothers do not dispose of stools properly: they throw the stool outside the dwelling (8 percent) or in the yard (9 percent). Proper disposal of

### Table 9.16 Disposal of children's stools

Percent distribution of mothers whose youngest child under five years lives with her by way in which youngest child's faecal matter is disposed of, according to background characteristics and type of toilet facilities in household, Uganda 2000-2001

	Sto	ols contain	ed	Stools	s uncontain	ed			
Background characteristic	Child always uses toilet/ latrine	Thrown into toilet/ latrine	Buried in yard	Thrown outside dwelling	Thrown in yard	Other	Missing	Total	Number
Residence									
Urban Rural	13.5 7.5	75.7 60.5	1.0 6.0	3.9 8.5	2.5 10.4	3.3 6.5	0.1 0.5	100.0 100.0	499 3,689
Region									
Central	12.1	74.7	1.5	6.8	2.6	1.9	0.4	100.0	1,205
Eastern	6.6	62.5	5.5	6.9	13.3	4.8	0.3	100.0	1,215
Northern	3.9	38.3	9.4	17.3	21.5	9.0	0.5	100.0	718
Western	8.7	64.4	7.1	4.0	4.6	10.6	0.7	100.0	1,050
Education									
No education	6.9	54.0	7.7	10.6	12.8	7.6	0.4	100.0	1,030
Primary	7.8	64.0	5.3	7.5	9.0	5.8	0.5	100.0	2,616
Secondary+	12.7	70.2	1.6	4.8	5.1	5.2	0.5	100.0	543
Toilet facilities									
None	1.6	20.8	18.0	20.9	31.2	7.2	0.3	100.0	682
Pit latrine	9.0	71.0	3.0	5.5	5.2	5.9	0.5	100.0	3,325
Improved latrine	25.1	63.6	0.0	4.2	1.8	5.3	0.0	100.0	94
Flush toilet	19.6	73.6	0.0	3.7	0.0	3.1	0.0	100.0	46
Other	*	*	*	*	*	*	*	100.0	32
Total	8.2	62.4	5.4	7.9	9.4	6.2	0.5	100.0	4,188

Note: An asterisk indicates that the figure is based on fewer than 25 unweighted cases and has been suppressed. <sup>1</sup> Total includes one woman with missing information on education and seven women with missing information on toile facility.

children's stools is much more common in urban areas and in the Central Region than in other regions. The data further show that the way in which the mother disposes of the child's stool is related to mother's level of education. For example, 85 percent of mothers with secondary education dispose of their youngest child's stool properly, compared with 69 percent of mothers with no education.

The disposal of a child's stool varies according to the presence of a toilet or a latrine in the dwelling. Children are more likely to use a toilet or latrine if the amenity is available in the household. The same is true regarding use of a toilet or latrine to throw the stool away. Table 9.16 shows that 93 percent of mothers who have flush toilets dispose of their child's stool by throwing it in a toilet, compared with 21 percent of mothers with no toilet facilities. It is possible that these women used a communal toilet or a neighbour's toilet.

It should be noted that unsanitary disposal of stools is more common in the Northern Region than in other regions. In the Northern Region, safe disposal of stools is practised by 52 percent of mothers, compared with 75 percent or higher in the other regions.

# 9.7.3 PREVALENCE OF DIARRHOEA

In the 2000-2001 UDHS, mothers were asked whether their children under five years had had diarrhoea in the two weeks before the survey. This measure of diarrhoea prevalence is affected by the ability of the mother to recall when the diarrhoea episode occurred and by seasonal variation in the occurrence. Because the UDHS data collection took place over a period of more than five months, it is believed that seasonal variation was not a problem during interpretation of the findings.

Table 9.17 shows that 20 percent of children less than five years of age had diarrhoea in the two weeks preceding the survey. The prevalence of diarrhoea is highest among children age 6–11 months (38 percent). The risk of diarrhoea decreases as the child grows; thus, the lowest level is found among children 48-59 months (8 percent).

The prevalence of diarrhoea does not vary according to the child's sex. However, residence plays a role, with urban children having a lower prevalence than rural children (16 percent compared with 20 percent). Diarrhoea prevalence is higher in the Eastern and Northern regions (23 percent and 27 percent, respectively) than in the Central and Western regions (15 to 16 percent).

Mother's education is negatively associated with a child's risk of getting diarrhoea. Children born to mothers with secondary or higher education have a lower prevalence of diarrhoea than children whose mother has no education (13 percent and 21 percent, respectively). This finding is consistent with the results in Table 9.16, which show that mother's education is associated with the correct practice of stool disposal, which reduces the spread of diarrhoeal diseases.

Table 9.17 implies that the presence of handwashing materials has only a slight impact on the prevalence of diarrhoea among children in the household. Table 9.17 Prevalence of diarrhoea

Percentage of children under five years with diarrhoea in the two weeks preceding the survey, by background characteristics, Uganda 2000-2001

Background characteristic	Diarrhoea in preceding 2 weeks	Number
Child's age (in months) <6 6-11 12-23 24-35 36-47 48-59	17.8 38.1 29.4 17.9 11.1 7.9	715 770 1,504 1,256 1,334 1,232
<b>Child's sex</b> Male Female	20.4 18.7	3,372 3,439
<b>Residence</b> Urban Rural	15.5 20.1	767 6,044
<b>Region</b> Central Eastern Northern Western	14.5 23.3 26.7 16.0	1,956 2,077 1,133 1,646
<b>Education</b> No education Primary Secondary+	21.0 20.3 12.8	1,649 4,357 805
<b>Hand-washing material</b> Water Soap or ash Basin All three materials	<b>s<sup>1</sup></b> 17.1 12.5 15.4 14.1	1,018 665 1,225 314
Source of water Piped Protected well Open well Surface Other/missing	15.6 17.9 18.6 22.2 20.6	565 1,122 1,773 1,513 1,837
Total	19.6	6,811

Diarrhoea is most prevalent among children who live in households using surface water and least prevalent in households with piped water.

## 9.7.4 KNOWLEDGE OF ORS PACKETS

Since prevalence of diarrhoea is high among children under age five, the management of diarrhoea by mothers at home is of great importance. The 2000-2001 UDHS asked the mothers whether they had ever heard of a special product for the treatment of diarrhoea, oral rehydration salts (ORS). Table 9.18 presents data on mothers' knowledge of ORS.

Nine in ten mothers (92 percent) know about the use of ORS packets for treating diarrhoea. The level of knowledge of ORS ranges between 82 percent and 97 percent across all socioeconomic groups. Women in the Western Region and those with no education are least likely to know about ORS, with percentages below 90 percent.

# 9.7.5 TREATMENT OF DIARRHOEA

The 2000-2001 UDHS sought information on medical care for diarrhoea episodes in the two weeks preceding the survey. Particular attention was given to treatment with oral rehydration therapy (ORT), which includes a solution prepared from ORS packets; recommended home fluids (RHF) (either cereal-based or a solution made from sugar, salt, and water); and increased fluids. Table 9.19 shows the percentage of children with diarrhoea in the two weeks preceding the survey who were treated with ORT and other treatments.

Table 9.19 shows that 45 percent of children who had diarrhoea in the two weeks preceding the

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 in young children, by selected background characteristics, Uganda 2000-2001

F	Percentage of mothers wh	of o
Background	know abou	t .
characteristic	ORS packet	s Number
Age		
15-19	90.7	409
20-24	90.9	1,235
25-29	92.9	1,167
30-34	93.4	780
35+	91.0	899
Residence		
Urban	96.6	560
Rural	91.2	3,930
Region		
Central	95.5	1,323
Eastern	95.9	1,273
Northern	92.6	775
Western	82.3	1,119
Education		
No education	86.9	1.103
Primary	92.8	2,791
Secondary+	96.5	594
Total	91.8	4,489
Note: Total includes one information on education ORS = Oral rehydration salt	e woman s	with missing

survey were taken to a health facility for treatment. Wide differentials are seen in the proportion of children with diarrhoea who were taken to a health provider. Young children, first births, those in rural areas, and those whose mother has less education were less likely to be taken to a health provider for treatment.

Table 9.19 Diarı	rhoea treatme	ent											
Among children u oral rehydration	under five yea therapy (ORT	ars who had [), and the <sub>f</sub>	l diarrhoea i ɔercentage	in the two w given other	veeks prece	ding the surv , according 1	/ey, percent to backgrou	tage taken fr und charact	or treatmen eristics, Ug	t to a health anda 2000-2	provider, pt 2001	ercentage w	ho received
			Oral	rehydration t	therapy			Other tr	eatments				
Background characteristic	Percentage taken to a health provider	ORS packets	RHF	Either ORS or RHF	Increased fluids	ORS, RHF, or increased fluids	Tablet or syrup	Injec- tion	Intra- venous	Home remedy/ other	None	Missing	Number
Child's age (in months) <6 6-11 12-23 24-35 36-47 48-59	29.1 51.1 49.3 36.3 35.5	16.9 36.5 33.1 33.2 32.8 26.1	10.0 14.6 14.5 21.1 27.9	23.0 44.8 48.5 43.2 43.3 43.8	13.9 25.7 31.6 31.5 31.5 31.4	30.2 54.9 53.7 53.6 52.9	39.3 49.8 52.4 52.7 52.7 50.7	2.6 2.6 2.6	0.0 0.2 0.0 0.0 0.0	17.3 14.2 13.2 11.8 11.8	34.4 17.9 16.4 18.0 14.2	0.0 0.1 0.4 1.2	127 293 225 148 97
<b>Child's sex</b> Male Female	44.5 45.4	35.6 31.2	17.6 16.4	45.1 41.2	27.4 28.1	54.1 52.1	47.1 54.0	3.8 2.7	0.1 0.2	12.8 16.2	21.2 15.3	0.3	689 644
<b>Birth order</b> 1 2-3 4-5 6+	39.8 47.0 47.2	28.3 35.8 34.0 33.1	11.4 18.8 17.4 17.8	35.0 45.9 44.7	25.4 27.8 28.9	44.3 56.6 51.9 54.9	49.3 49.6 53.5	2.5 3.15 2.12 2.12	0.2 0.0 0.0	16.4 14.3 13.9	22.0 17.7 15.2 15.4	0.5 0.1 0.0	212 462 295 364
<b>Residence</b> Urban Rural	63.9 43.0	43.5 32.5	17.1 17.0	53.3 42.2	41.8 26.3	66.6 51.8	67.5 48.8	2.9 3.3	1.3 0.0	5.3 15.3	11.9 19.0	0.2 0.1	119 1,214
<b>Region</b> Central Eastern Northern Western	58.1 47.2 39.4 32.8	39.1 39.7 30.5 19.2	22.7 17.1 14.7 13.6	55.9 45.9 27.8	50.6 22.8 16.6	71.3 54.4 35.5	48.1 63.2 48.1 32.3	2.5 4.9 1.8	0.0 0.0 0.0	12.2 8.0 7.9 36.3	14.2 15.7 22.7 22.7	0.0 0.1 0.4	283 484 303 263
<b>Education</b> No education Primary Secondary+	38.9 45.0 64.0	32.8 32.8 41.3	19.6 15.6 20.6	42.7 42.2 53.7	21.6 27.9 46.5	50.9 52.4 67.2	43.7 52.0 59.9	3.4 3.3 1.9	0.0 0.1 0.5	14.1 14.9 11.7	22.5 17.3 13.0	0.3 0.1 0.2	347 883 103
Total	44.9	33.5	17.0	43.2	27.7	53.1	50.4	3.2	0.1	14.4	18.3	0.2	1,333
ORS = Oral rehyd RHF = Recommen	Iration salts nded home flui	ds											

More than half of the children with diarrhoea (53 percent) were treated with ORS, or recommended home fluids, or increased fluids. Individually, these treatments account for 34 percent (ORS packets), 17 percent (RHF), and 28 percent (increased fluids). Tablets and syrups were given to half of the children, and only a few children were treated with injections or intravenous fluids. Eighteen percent of the children with diarrhoea were not given any treatment at all.

# 9.7.6 FEEDING PRACTICES DURING DIARRHOEA

The recovery of a child suffering from diarrhoea depends, among other things, on the feeding practices during the diarrhoea episode. In particular, consumption of extra fluids is essential. Table 9.20 presents data on feeding practices of children who had diarrhoea in the two weeks preceding the survey. The data show that only 28 percent of children with diarrhoea were given more fluids than usual, while 31 percent were given the same amount of fluids. It should be noted that four in ten children with diarrhoea were given less fluid or none at all. The table further shows that only 5 percent of children were given more food than usual, while 51 percent were given less food or none at all.

Overall, the results of the 2000-2001 UDHS show that feeding practices for children with diarrhoea in Uganda are inconsistent with recommended interventions.

#### 9.8 WOMEN'S STATUS AND HEALTH CARE

# 9.8.1 WOMEN'S STATUS AND CHILDREN'S HEALTH CARE

The 2000-2001 UDHS investigated the relationship between children's health care and women's status as measured by their ability to influence household decisionmaking, the number of reasons a woman feels she is justified to refuse sex, and the number of reasons to justify wife beating.

Table 9.21 shows that a woman's independence is positively associated with her children's health care. For example, women who participate in more decisions are slightly more likely to have

fully vaccinated children. Data on the number of reasons for justifying wife beating do not show a strong pattern: children of women who have more reasons to refuse sexual relations with their husband are slightly less likely to be fully vaccinated. The opposite pattern is observed when the number of reasons to justify wife beating is considered: women with fewer reasons are also more likely to have fully vaccinated children.

The relationship between women's status and treatment during their children's illness is less clear. Children whose mother does not justify wife beating for any reason are more likely than children of women who think there are reasons to justify wife beating to receive treatment from a health professional for diarrhoea.

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 amount of food given compared with normal practice, Uganda 2000-2001

Liquid/food offered	Percent
Amount of liquid offered	
Same as usual	31.2
More	27.7
Somewhat less	20.6
Much less	10.7
None	9.4
Don't know/missing	0.4
Total	100.0
Amount of food offered	
Same as usual	29.2
More	4.6
Somewhat less	23.5
Much less	16.1
None (stopped)	10.9
Never gave food	14.9
Don't know/missing	0.8
Total	100.0
Number	1,333

#### Table 9.21 Child health care by women's status

Percentage of children age 12-23 months who were fully vaccinated, and percentage of children under five years ill with a fever, symptoms of ARI, or diarrhoea, in the two weeks preceding the survey who were taken to a health provider for treatment, by women's status indicators, Uganda 2000-2001

			C	hildren un	der five years	
	Childre 12-23 n	n age 10nths	Percentage		Percentage with	
Women's status indicator	Percentage fully vaccinated	Number	ARI taken to health provider	Number	taken to health provider	Number
Number of decisions in which woman has final say <sup>2</sup>						
0	*	18	(31.5)	49	*	27
1-2	36.0	225	30.4	473	42.6	240
3-4 5	40.7	143 167	30.5 26.8	279	49.9 45.5	154
Number of reasons to refuse sex						
0	*	7	(24.2)	27	*	24
1-2	40.2	65	23.4	79	40.0	63
3-4	37.1	480	30.5	913	45.4	512
Number of reasons wife beating justified						
0	39.3	122	27.5	201	54.5	134
1-2	38.6	219	31.5	371	46.5	206
3-4	35.3	176	28.5	333	40.9	198
5	(27.6)	36	31.3	114	38.0	60
Total	36.7	552	29.6	1,018	44.9	599

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

Those who have received BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)<sup>2</sup> Either by herself or jointly with others

## 9.8.2 WOMEN'S PROBLEMS IN ACCESSING HEALTH CARE

Many factors influence women's access to health care. These include socioeconomic status and medical and cultural factors. Some of these factors prevent women from getting medical advice or treatment for themselves. In the 2000-2001 UDHS, all women were asked whether they had problems seeking medical advice or treatment for themselves. Women were asked whether they had problems with knowing where to go, getting permission to go, getting money for treatment, travelling long distances to a health facility, getting transport to a health facility, having a person accompany them, lacking a female provider, and negative attitudes of providers.

Table 9.22 presents data on women's problems in accessing health care for these specific reasons. The results show that 85 percent of women experience at least one problem in assessing health care. The greatest problem in assessing health care is getting the money for treatment (63 percent). In the 2000-2001 UDHS, most of the fieldwork was carried out before February 2001, when cost sharing was abolished in government health units. This explains the high percentage of women who felt getting money to pay for treatment was a barrier in accessing health services. The other problems include distance to a health facility (44 percent), transportation (43 percent), and negative attitude of health care providers (42 percent). Table 9.22 shows that 7 percent of women have the problem of not knowing where to go and 8 percent have the problem of getting permission to seek health care.

### Table 9.22 Perceived problem in accessing women's health care by background characteristics

Background characteristic	Knowing where to go	Getting per- mission to go	Getting money for treat- ment	Distance to health facility	Have to take transport	Not wanting to go alone	Lack of a female health provider	Negative attitude of health care provider	Any of the specified problems	Number
Age										
15-19	9.8	15.7	58.0	41.3	40.3	32.9	25.9	45.0	84.3	1,615
20-29	6.0	6.8	60.8	42.1	41.6	19.1	15.6	42.5	84.I	2,846
40-49	6.7	4.7 5.5	73.2	46.5	49.1	17.5	13.6	40.0	89.6	993
Number of living children										
0	9.9	14.5	55.8	39.8	39.5	32.9	24.8	46.6	83.5	1,730
1-2	6.4	7.1	61.2	41.2	40.7	17.6	15.3	42.2	84.3	2,021
3-4	5.1	5.3	65.5	47.3	45.5	18.1	13.9	40.4	85.7	1,665
5+	6.0	5.5	70.0	47.4	48.2	18.1	12.8	38.9	87.2	1,830
Marital status										
Never married	10.4	15.1	56.7	37.8	38.7	34.1	26.3	47.8	83.2	1,456
Married	5./	6.9	63.0	44.5	43.4	18.5	13.9	39.8	84.9	4,881
widowed	7.4	2.7	73.6	50.2	50.8	17.5	15.7	44.6	89.5	910
Residence										
Urban	4.5	5.3	45.4	14.3	18.2	14.4	16.3	53.1	73.2	1,207
Rural	7.3	8.6	66.6	49.8	48.5	22.9	16.7	39.8	87.5	6,039
Region										
Central	5.5	5.5	50.4	36.8	38.1	16.3	22.7	60.1	82.5	2,341
Eastern	4.7	6.2	71.6	44.2	44.3	23.7	15.6	38.3	89.9	1,956
Northern	12.9	16.9	80.9	58.4	53.2	25.7	16.6	22.3	92.0	1,158
vvestern	7.0	/./	59.0	43.2	43.1	23.1	9.8	35.0	/9.0	1,792
Education										
No education	7.6	9.3	76.5	51.1	49.6	20.6	14.4	37.7	90.5	1,584
Primary	/.5	8.3	63.9	46.1	45.8	22.9	17.4	40.9	85.6	4,330
Secondary+	3./	5.9	44.6	27.9	28.4	18.2	16./	50.7	//.3	1,331
Current employment	0.0	10.0		27.6		0.5.4	00 <i>(</i>	10.0		1 100
Not employed	9.3	12.2	56.4	37.6	37.7	25.1	23.4	43.8	80.9	1,489
vvorks for cash	4.0	4.3	6U.6	39.2	39.8 52.0	14.9	12.4	41.4	82.6 01.0	3,511
Does not work for Cash	9./	11.2	/1.4	22.3	52.9	29.4	10./	41.0	91.9	2,246
Total	6.8	8.1	63.1	43.9	43.4	21.5	16.6	42.0	85.2	7,246

Percentage of women who reported they had a big problem in accessing health care for themselves, by type of problem and background characteristics, Uganda 2000-2001

The table shows variations by socioeconomic characteristics. The woman's age and number of living children do not significantly affect the women's health-seeking behaviour. In general, unmarried women cited more problems than married or formerly married women. Similarly, rural women were more likely to cite problems than their urban counterparts. For instance, distance to a health facility and having to take transport were cited by almost half of the rural women, compared with 14 to 18 percent of urban women.

Comparison across regions shows that women in the Northern Region tend to cite more problems than women in other regions. However, women in the Central Region are the most likely to cite lack of a female health provider and negative attitude of the health worker as big problems.

A woman's education and employment status have an impact on their perceived problems in accessing health care. Women with secondary or higher education and unemployed women were generally the least likely to perceive the issues as problems. On the other hand, women with no education and women who do not work for cash are the most likely to cite problems.

# 9.9 MALARIA

## 9.9.1 POSSESSION AND USE OF MOSQUITO NETS

Malaria is a major public health concern in Uganda, since it is a leading cause of morbidity and mortality. This disease especially affects children under 5 and pregnant women. In such a situation, the use of mosquito nets is important as a protection from the disease. Information on the possession and use of mosquito nets was collected from all households in the 2000-2001 UDHS.

Table 9.23 shows that only 13 percent of households in Uganda have mosquito nets. Mosquito nets are less likely to be available in households in the Western Region than in the other regions (6 percent compared to 15 percent). Urban households are more than three times more likely to have a mosquito net than rural households. The availability of mosquito nets is closely related with the quality of the house. Households which have electricity, piped water and finished floors are much more likely to have mosquito nets than households which have none of these amenities.

The last three columns in Table 9.23 refer to children under age 5 who live with their mothers. Eight percent of these children usually sleep under a mosquito net and 7 percent spent the night before the survey under a mosquito net. As mosquito nets are less available in the Western region, children in this region are also less likely to sleep under a mosquito net. Urban children are more than three times more likely than rural children to have slept under a mosquito net the night before interview (21 percent compared to 6 percent). Children living in households with the specified housing amenities are much more likely than children who live in households with none of the amenities to sleep under a net.

Table 9.23 Possessio	on and use o	f mosquito ne	<u>ets</u>								
Percentage of housel who sleep under a m	nolds with m nosquito net,	osquito nets a by backgrou	and the percer nd characteris	ntage of childr stics, Uganda 1	en under five 2000-2001						
			Percent age 5 livi	age of childre ing with moth	n under ers who:						
Background	House that owr one mose	useholds Slept Usually wn at least under a sleep osquito net mosquito under a net last mosquito Number night net Number									
characteristic	Percent	Number	night	net	Number						
<b>Residence</b> Urban Rural	32.9 9.2	1,174 6,711	21.1 5.7	23.4 6.3	773 6,793						
<b>Region</b> Central Eastern Northern Western	15.3 15.4 14.6 5.5	2,603 2,106 1,191 1,985	7.3 9.9 9.8 2.2	8.2 11.1 10.7 2.4	2,093 2,315 1,297 1,862						
Quality of housing Electricity Piped water Finished floor None Total	46.1 33.2 30.7 8.3 12.8	675 854 1,532 6,101 7,885	21.5 21.0 15.2 5.8 7.3	23.3 23.0 17.2 6.4 8.1	464 572 1,122 6,210 7,566						

# 9.9.2 INSECTICIDE TREATMENT OF MOSQUITO NETS

Table 9.24 presents the age and insecticide treatment of mosquito nets used by children under five, women age 15-49 and pregnant women age 15-49 the night before the interview, by background characteristics. On average, the nets were bought or obtained more than two years preceding the survey (28 months). Nets used in households in the Northern region are older than average (37 months), while those in the Western region are more recently obtained (13 months). Mosquito nets in rural households are in general older than those in urban households. There is no relationship between the education attainment of the children's mothers and the mosquito net's age.

Only 3 percent of nets had been treated or dipped in insecticide in the six months prior to the survey. On average, nets were dipped in insecticide more than 4 months prior to the survey. Nets in the Eastern and Western regions, in rural areas and in households where the child's mother has some secondary education have been dipped on average 5 months or more before the survey.

While 7 percent of all women age 15-49 slept under a mosquito net the night before interview, only a small percentage used nets that had been treated with insecticide. As in the case of children, women in Eastern and Northern regions, those living in urban areas and women with some secondary education are much more likely than other women to have slept under a mosquito net. The pattern of use of mosquito nets among pregnant women is the same as that of all women.

		Childre	n under 5		Per 15-4	centage of v 9 who slept	vomen under:	Perce women 1	entage of pre 5-49 who sl	egnant ept unde
Background characteristic	Average age of nets (months)	Percent of nets treated <sup>1</sup>	Average months since last treatment	Number of children using mosquito nets <sup>2</sup>	Any mos- quito net	Treated mosquito net <sup>1</sup>	Number of women	Any mos- quito net	Treated mosquito net <sup>1</sup>	Number of women
<b>Residence</b> Urban Rural	24.8 28.8	4.3 2.7	2.9 5.1	193 431	13.0 5.8	0.8 0.2	1,207 6,039	13.3 5.8	0.4 0.5	97 813
<b>Region</b> Central Eastern Northern Western	25.0 27.0 37.4 13.1	3.8 3.2 1.6 5.9	3.4 5.0 1.0 6.6	184 254 140 45	6.8 9.5 10.3 2.3	0.4 0.3 0.1 0.3	2,341 1,956 1,158 1,792	4.1 10.3 8.9 3.5	0.2 0.7 0.0 1.0	235 287 135 253
<b>Mother's education</b> No education Primary Secondary+	31.8 26.0 28.6	6.1 2.0 4.0	2.7 2.8 6.0	84 349 191	5.1 5.4 14.4	0.3 0.2 0.7	1,584 4,330 1,331	6.0 5.6 13.4	0.6 0.3 1.8	206 593 110
Total	27.6	3.2	4.4	624	7.0	0.3	7,246	6.6	0.5	910

# 9.9.3 MALARIA PROPHYLAXIS DURING PREGNANCY

In the UDHS, women who gave birth in the five years preceding the survey were asked whether they took drugs in order to prevent malaria during pregnancy. Women who took medicine were asked the type of drug and where they obtained the drug. Table 9.25 shows the responses to these queries.

Data in Table 9.25 show that thirty-four percent of women took drugs against malaria during pregnancy. Small variations are found by the woman's residence, except in the Western region (23 percent). The likelihood of a pregnant woman taking malaria tablets increases gradually with her education, from 29 percent for women with no education to 42 percent for women with some secondary education.

Table 9.25 also shows that pregnant women are more likely to obtain the malaria tablets during a visit to a health facility for other than antenatal care than during an antenatal care visit (47 percent compared to 38 percent). Women living in the Central and Northern regions, and women with secondary education are more likely than other women to obtain the malaria tablets during an antenatal care visit.

Table 9.25 Malaria prevention during pregnancy

Percentage of women who took malaria prophylaxis during the last pregnancy in the five years preceding the survey by source of malaria drugs, according to background characteristics, Uganda 2000-2001

Background characteristic	Percent of women who received prophylaxis		Source of drug						
		Number of women	During antenatal visit	During another facility visit	From another source	Total			
<b>Residence</b> Urban Rural	37.8 33.2	560 3,930	44.3 37.3	46.7 46.4	9.0 16.3	100.0 100.0			
<b>Region</b> Central Eastern Northern Western	39.7 39.2 30.4 23.0	1,323 1,273 775 1,119	52.9 29.1 48.0 17.8	36.8 46.9 42.1 68.8	10.3 24.0 9.9 13.4	100.0 100.0 100.0 100.0			
<b>Mother's educatio</b> No education Primary Secondary	29.3 33.9 41.9	1,103 2,791 594	37.9 36.0 48.3	43.7 48.4 41.9	18.4 15.6 9.8	100.0 100.0 100.0			
Birth order 1-2 3+	35.2 33.1	1,429 3,061	41.2 36.9	44.0 47.7	14.8 15.4	100.0 100.0			
Total	33.8	4,489	38.3	46.6	15.1	100.0			
Note: Includes one woman with missing information on education									

## 9.9.4 TYPE OF ANTI-MALARIAL TREATMENT

Figure 9.3 shows the percent distribution of women who took malaria tablets during pregnancy by the type of drug. Almost half of pregnant women who took malaria prophylaxis took chloroquine (45 percent). Fansidar, Camaquine and quinine are taken by 3-4 percent of women. Unfortunately, many women are unable to report the type of drug they take (13 percent) or take drugs other than those which are specified in the survey questionnaire (32 percent).



# *Figure 9.3* Type of Malaria Tablets Taken During Pregnancy

# 9.10 BIRTH REGISTRATION

Birth registration is one of the recognised rights of a child in Uganda today. Although registration has been compulsory since 1903, Uganda has never had a sound registration system for either statistical or legal purposes. The government of Uganda has started initiatives on a pilot basis to revive the civil registration system in the country. In the 2000-2001 UDHS, for each birth in the five years prior to the UDHS, women were asked whether the child was registered. If a child is registered in the local authority, a "short certificate" would normally be issued, while the Registrar General's office issues a "long certificate." Table 9.26 shows the distribution of births in the five years preceding the survey by whether the birth was registered and the type of certificate obtained.

Overall, coverage of birth registration in Uganda is poor, with only 4 percent of all births in the past five years reported by the mother to be registered at any of the authorities. However, among those registered, for most (81 percent) births, no document was seen by the interviewer. Among registered births, 13 percent were registered in the local authority and the mother was able to show a short certificate. Six percent of births were registered at the Registrar General's office, and less than 1 percent were registered at a local authority as well as the Registrar General's office.

Coverage of birth registration varies substantially by residence, region, and mother's education. Births in urban areas are three times more likely to be registered than births in rural areas. Mother's level of education is also important. Births to mothers with secondary or higher education are six times more likely to be registered than births to mothers with no education. Births in the Central and Northern regions are more likely to be registered than those in other regions.

## Table 9.26 Birth registration

Percentage of births in the five years preceding the survey that were registered and, of those registered, percent distribution by the type of certificate, according to background characteristics, Uganda 2000-2001

Background characteristic		Certificate seen			0		
	Percent registered	Short	Long	Both	Certificate not seen	Total	Number
Age of mother							
<20	3.9	*	*	*	*	100.0	518
20-24	5.0	8.9	6.7	1.9	82.5	100.0	2,237
25-29	4.7	12.2	3.9	0.0	83.9	100.0	2,116
30-34	3.2	(17.1)	(8.6)	(0.7)	(73.5)	100.0	1,389
35-39	3.4	(17.6)	(0.0)	(0.0)	(82.4)	100.0	901
40-44	2.3	*	*	*	*	100.0	388
45-49	3.1	*	*	*	*	100.0	123
Residence							
Urban	11.0	14.1	10.6	1.5	73.8	100.0	821
Rural	3.4	12.8	3.6	0.5	83.1	100.0	6,850
Region							
Central	7.1	16.6	9.4	1.6	72.4	100.0	2,173
Eastern	1.9	(23.8)	(0.5)	(0.0)	(75.7)	100.0	2,305
Northern	6.6	2.0	1.3	0.0	96.7	100.0	1,316
Western	1.8	(12.4)	(5.4)	(0.0)	(82.2)	100.0	1,878
Education							
No education	2.0	(9.8)	(3.2)	(0.0)	(87.0)	100.0	1.890
Primary	3.6	11.3	1.8	0.2	86.7	100.0	4.922
Secondary+	12.2	17.7	12.9	2.0	67.4	100.0	858
Total	4.2	13.2	5.6	0.8	80.5	100.0	7,672

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.