

In the 2005-06 ZDHS, data were collected on current and completed fertility. Drawing from the birth histories of women interviewed in the survey, the chapter begins with a description of current fertility, followed by differentials in fertility. Attention is next focused on trends in fertility, including examination of age-specific fertility rates in time periods going back 15 to 20 years. The chapter concludes with a presentation of information on age of women at their first birth and patterns of adolescent childbearing.

The fertility indicators presented in this chapter are based on reports provided by women age 15-49 years regarding their reproductive histories. As in the previous ZDHS surveys, each woman was asked to provide information on the total number of sons and daughters to whom she had given birth who were living with her, the number living elsewhere, and the number who had died, in order to obtain the total number of live births. In the birth history, women reported on the detailed history of each live birth separately, including such information as name, month and year of birth, sex, and survival status. For children who had died, information on age at death was collected.

4.1 CURRENT FERTILITY

Measures of current fertility presented in this chapter include age-specific fertility rates (ASFRs), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). These rates are generally presented for the three-year period preceding the survey, a period covering portions of the calendar years 2002 through 2005. The three-year period was chosen for calculating these rates (rather than a longer or a shorter period) to provide the most current information, to reduce sampling error, and to avoid problems of the displacement of births.

Age-specific fertility rates are useful in understanding the age pattern of fertility. Numerators of ASFRs are calculated by identifying live births that occurred in the period 1-36 months prior to the survey (determined from the date of interview and date of birth of the child), and classifying them by the age (in five-year groups) of the mother at the time of the child's birth. The denominators of these rates are the number of woman-years lived in each of the specified five-year age groups in the period 1-36 months prior to the survey.

The total fertility rate is a common measure of current fertility and is defined as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed age-specific rates. The general fertility rate is the number of live births occurring during a specified period per 1,000 women age 15-44. The crude birth rate is the number of births per 1,000 population during a specified period.

Table 4.1 Current fertility

Age-specific and total fertility rate, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Zimbabwe 2005-2006

Age group	Residence		Total
	Urban	Rural	
15-19	70	120	99
20-24	147	248	205
25-29	130	198	172
30-34	112	164	144
35-39	51	111	86
40-44	6	59	42
45-49	0	17	13
TFR 15-49	2.6	4.6	3.8
TFR 15-44	2.6	4.5	3.7
GFR	98	163	137
CBR	28.5	32.0	31.0

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation.

TFR: Total fertility rate for ages 15-49, expressed per woman

GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women

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

Table 4.1 shows the age-specific and aggregate fertility measures calculated from the 2005-06 ZDHS data. The total fertility rate for Zimbabwe is 3.8 children per woman. Peak childbearing occurs during ages 20-24 and 25-29 years, dropping sharply after age 34. Fertility among urban women is substantially lower (2.6 children per woman) than among rural women (4.6 children per woman). This pattern of lower fertility in urban areas is evident in every age group.

4.2 FERTILITY BY BACKGROUND CHARACTERISTICS

Table 4.2 and Figure 4.1 show differentials in fertility by urban-rural residence, province, level of education, and wealth quintile. The TFR ranges from about two births per woman in the urban provinces of Harare (2.5) and Bulawayo (2.3) to 4.9 births per woman in Masvingo.

Educational attainment is closely linked to a woman's fertility; the TFR for women with no formal education and women with a primary education is four or more children per woman, while that for women with at least some secondary education is three or fewer children per woman.

Table 4.2 also allows for a general assessment of differential trends in fertility over time among population subgroups. The mean number of children ever born to women age 40-49 years is a measure of fertility in the past. The mean number of children ever born to older women who are nearing the end of their reproductive period is an indicator of average completed fertility of women who began childbearing during the three decades preceding the survey. If fertility remained constant over time and the reported data on both children ever born and births during the three years preceding the survey are reasonably accurate, the TFR and the mean number of children ever born for women 40-49 years would be similar. When fertility levels have been falling, the TFR will be substantially lower than the mean number of children ever born among women age 40-49. A comparison of current (total) fertility with past (completed) fertility shows that there have been substantial and roughly equivalent declines in both urban and rural areas and within all provincial and education categories. Overall, the comparison of past and present fertility indicators suggests a decline from 5.2 to 3.8 children per woman.

At the time of the survey, 7 percent of interviewed women reported that they were pregnant. This percentage is an underestimate of the true percent pregnant because many women at early durations of pregnancy will not yet know for sure that they are pregnant and some women may not want to declare that they are pregnant. Differentials in pregnancy status closely parallel differentials in current fertility.

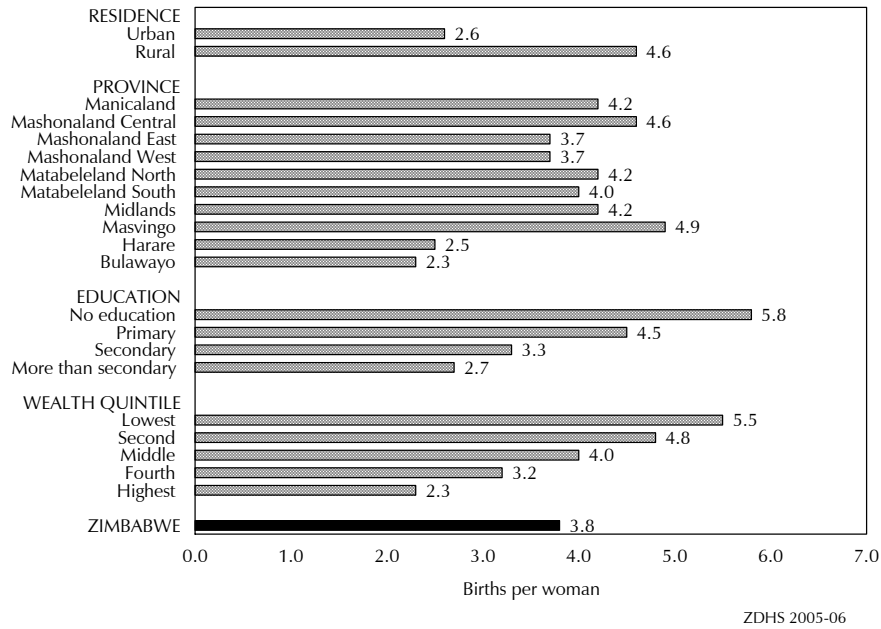
Table 4.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Zimbabwe 2005-2006

Background characteristic	Total fertility rate	Percentage currently pregnant ¹	Mean number of children ever born to women age 40-49
Residence			
Urban	2.6	4.4	4.0
Rural	4.6	8.0	5.8
Province			
Manicaland	4.2	7.4	5.5
Mashonaland Central	4.6	8.6	5.1
Mashonaland East	3.7	7.7	5.1
Mashonaland West	3.7	6.7	5.3
Matabeleland North	4.2	6.1	5.9
Matabeleland South	4.0	5.3	5.0
Midlands	4.2	7.3	5.7
Masvingo	4.9	8.0	6.5
Harare	2.5	5.3	4.1
Bulawayo	2.3	2.4	3.6
Education			
No education	5.8	2.0	6.1
Primary	4.5	7.9	5.5
Secondary	3.3	6.3	4.0
More than secondary	2.7	5.0	2.9
Wealth quintile			
Lowest	5.5	8.0	6.4
Second	4.8	10.0	6.1
Middle	4.0	7.1	5.5
Fourth	3.2	6.3	4.5
Highest	2.3	3.5	3.8
Total	3.8	6.6	5.2

¹ Women age 15-49 years

Figure 4.1 Total Fertility Rate by Background Characteristics



4.3 FERTILITY TRENDS

The data in Table 4.3 provide further evidence of a substantial fertility decline in Zimbabwe. This table uses information from the retrospective birth histories obtained from ZDHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. Because women age 50 and above were not interviewed in the survey, the rates are successively truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 35-39 for the period 15-19 years before the survey because these women would have been over the age of 50 at the time of the survey and were not interviewed.

Table 4.3 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Zimbabwe 2005-2006

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	101	114	117	113
20-24	205	211	225	242
25-29	179	200	223	243
30-34	143	163	191	[224]
35-39	90	113	[152]	-
40-44	46	[65]	-	-
45-49	[12]	-	-	-

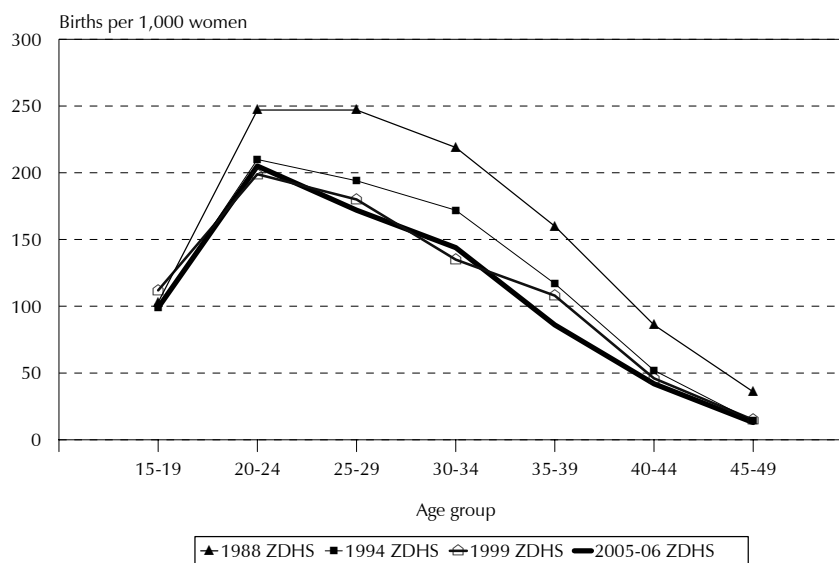
Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

Fertility has fallen among all age groups over the past two decades. Among women under age 35, substantial and sustained declines in age-specific fertility rates were observed from 15 to 19 years before the survey to 0 to 4 years before the survey. Fertility decline is steepest among women 25-34 years of age.

Table 4.4 and Figure 4.2 show trends in current fertility rates based on successive ZDHS surveys. Fertility declined by 1.7 births between the 1988 and 2005-06 surveys.

Age group	1988 ZDHS (1984-88)	1994 ZDHS (1991-94)	1999 ZDHS (1996-99)	2005-06 ZDHS (2004-05-2005-06)
15-19	103	99	112	99
20-24	247	210	199	205
25-29	247	194	180	172
30-34	219	172	135	144
35-39	160	117	108	86
40-44	86	52	46	42
45-49	36	14	15	13
TFR 15-49	5.5	4.3	4.0	3.8

Figure 4.2 Trends in Current Fertility Rates, Zimbabwe 1984-2006



4.4 CHILDREN EVER BORN AND LIVING

The distribution of women by the number of children ever born is presented in Table 4.5 for all women and for currently married women. The table also shows the mean number of children ever born to women in each five-year age group. These distributions reflect the accumulation of births among ZDHS respondents over the past 30 years and, therefore, their relevance to the current situation is limited. However, the information on children ever born is useful for observing how average family size varies across age groups, and for observing the level of primary infertility. On average, women in their early twenties have given birth to about one child, women in their early thirties have had three children, and women currently at the end of their childbearing years have had more than five children. Of the 5.7 children ever born to women age 45-49, 5.1 survived to the time of the survey.

Table 4.5 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, and mean number of children ever born and mean number of living children, according to age group, Zimbabwe 2005-2006

Age	Number of children ever born											Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+			
ALL WOMEN														
15-19	84.2	14.0	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,152	0.2	0.2
20-24	30.9	39.7	21.8	6.2	1.2	0.1	0.0	0.0	0.0	0.0	0.0	1,952	1.1	1.0
25-29	8.7	20.7	36.7	22.1	7.7	3.5	0.4	0.2	0.0	0.0	0.0	1,466	2.1	2.0
30-34	2.5	10.4	25.9	26.0	17.4	11.2	5.2	0.8	0.6	0.1	0.0	1,216	3.1	2.9
35-39	2.8	8.3	16.7	19.4	23.0	13.6	7.8	5.2	2.2	0.4	0.6	834	3.7	3.5
40-44	2.4	5.2	7.2	12.0	20.5	16.1	12.8	10.8	5.9	4.5	2.5	699	4.9	4.5
45-49	2.6	4.0	5.7	9.0	9.9	15.1	15.7	12.5	12.6	5.0	7.9	589	5.7	5.1
Total	29.5	18.4	17.3	11.9	8.3	5.7	3.6	2.3	1.6	0.7	0.8	8,907	2.2	2.0
CURRENTLY MARRIED WOMEN														
15-19	46.2	46.3	7.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	448	0.6	0.6
20-24	12.0	47.4	30.2	8.5	1.8	0.2	0.0	0.0	0.0	0.0	0.0	1,200	1.4	1.3
25-29	3.3	17.9	39.8	25.2	8.6	4.3	0.5	0.2	0.0	0.0	0.0	1,125	2.3	2.2
30-34	1.2	6.6	24.2	27.8	19.5	12.6	6.0	1.1	0.7	0.1	0.1	933	3.3	3.1
35-39	2.2	5.3	15.0	18.7	22.0	17.0	9.1	6.5	3.1	0.5	0.7	556	4.0	3.7
40-44	1.7	3.3	6.7	9.8	21.2	14.5	14.3	13.2	6.5	5.4	3.4	485	5.2	4.8
45-49	1.4	3.5	3.8	6.9	9.4	13.8	16.0	16.1	14.6	5.1	9.2	396	6.1	5.5
Total	8.3	21.4	23.3	16.1	10.9	7.5	4.8	3.4	2.2	1.0	1.1	5,143	2.9	2.7

Results at younger ages for currently married women differ from those for the sample as a whole because of the large number of unmarried women with minimal fertility. Differences at older ages generally reflect the impact of marital dissolution (either divorce or widowhood). About 1 percent of married women age 45-49 have never had a child. Under the proposition that desire for children is universal in Zimbabwe, this percentage represents a rough measure of primary infertility or the inability to bear children.

4.5 BIRTH INTERVALS

Information on the length of birth intervals provides insight into birth spacing patterns, which affect fertility as well as infant and child mortality. Research has shown that children born too soon after a previous birth are at increased risk of poor health, particularly when the interval is less than 24 months. Table 4.6 shows the distribution of births in the five years before the survey by the interval since the previous birth, according to various background and demographic characteristics.

Table 4.6 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, Zimbabwe 2005-2006

Background characteristic	Months since preceding birth							Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-54	55-59	60+			
Age										
15-19	(25.4)	(14.3)	(46.1)	(8.5)	(3.4)	(2.3)	(0.0)	100.0	38	29.0
20-29	4.2	7.4	32.1	26.1	10.6	5.5	14.2	100.0	1,817	38.2
30-39	2.8	5.2	20.6	21.9	11.2	5.6	32.7	100.0	1,390	47.8
40-49	2.4	7.4	21.5	20.3	6.3	5.2	36.8	100.0	323	47.0
Birth order										
2-3	3.6	5.8	27.7	23.7	10.9	5.3	23.0	100.0	2,198	41.5
4-6	3.4	7.3	25.1	22.3	10.4	6.6	24.9	100.0	1,086	42.6
7+	4.9	10.3	26.3	29.8	6.4	2.9	19.3	100.0	283	40.0
Sex of preceding birth										
Male	3.5	6.4	25.8	24.6	11.4	5.2	23.2	100.0	1,865	41.9
Female	3.8	6.9	28.0	22.8	9.3	5.8	23.4	100.0	1,702	41.2
Survival of preceding birth										
Living	2.0	5.8	26.6	24.6	10.8	5.9	24.5	100.0	3,290	42.6
Dead	23.9	16.7	29.5	13.6	5.9	0.9	9.4	100.0	277	27.5
Residence										
Urban	3.4	6.4	22.6	18.5	8.4	6.8	33.9	100.0	885	47.1
Rural	3.8	6.7	28.2	25.5	11.0	5.1	19.8	100.0	2,682	40.4
Province										
Manicaland	6.1	8.6	30.9	19.7	8.9	5.4	20.5	100.0	473	38.4
Mashonaland Central	2.7	2.8	24.2	28.0	14.1	6.9	21.3	100.0	437	44.5
Mashonaland East	2.1	6.2	21.7	22.0	13.1	6.7	28.2	100.0	247	46.2
Mashonaland West	3.2	6.1	27.4	25.8	7.8	4.7	24.9	100.0	361	41.0
Matabeleland North	3.3	5.2	35.0	24.5	8.1	3.4	20.5	100.0	233	38.5
Matabeleland South	2.6	7.2	31.4	24.6	7.3	3.2	23.7	100.0	185	38.8
Midlands	4.8	6.4	26.6	24.9	11.3	5.4	20.6	100.0	542	41.4
Masvingo	3.8	9.1	26.1	24.6	12.3	4.3	19.9	100.0	558	41.0
Harare	2.8	6.0	22.7	21.8	8.0	7.4	31.3	100.0	386	45.8
Bulawayo	2.3	8.1	24.5	17.0	9.0	7.5	31.7	100.0	146	45.8
Education										
No education	1.7	9.0	21.5	28.4	6.0	8.1	25.2	100.0	202	42.5
Primary	3.8	7.5	27.2	26.0	10.1	4.7	20.8	100.0	1,480	40.4
Secondary	3.8	5.6	27.2	21.9	11.3	5.8	24.4	100.0	1,806	42.7
More than secondary	2.7	9.2	24.6	11.2	5.5	5.6	41.2	100.0	80	48.7
Wealth quintile										
Lowest	3.2	7.7	32.4	25.1	11.2	5.1	15.2	100.0	982	38.2
Second	3.7	7.0	29.2	25.4	11.2	6.0	17.5	100.0	799	40.5
Middle	5.3	5.6	24.7	27.0	9.6	4.0	23.8	100.0	621	41.9
Fourth	2.5	6.6	23.3	20.6	10.7	6.4	30.0	100.0	658	45.6
Highest	4.0	5.1	19.2	18.7	8.1	5.9	38.9	100.0	507	51.0
Total	3.7	6.6	26.8	23.7	10.4	5.5	23.3	100.0	3,567	41.6

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. Figures in parentheses are based on 25-49 unweighted cases.

The median birth interval in Zimbabwe is 41.6 months. About one in ten children are born after too short an interval (less than 24 months). The median interval length is shorter among births to women under age 30 than among births to older mothers. The median birth interval length is 27.5 months among children whose older sibling did not survive compared with 42.6 months among children whose older sibling is still alive.

The median birth interval in urban areas (47.1 months) is somewhat higher than in rural areas (40.4 months). Of all the provinces, the longest birth interval is observed in Mashonaland East (46.2 months) and the shortest in Manicaland (38.4 months). By education, those with more than secondary education have the longest birth interval (48.7 months).

4.6 AGE AT FIRST BIRTH

The age at which childbearing begins has an impact on the health and welfare of a mother and her children. In many countries, the postponement of first births has contributed to an overall fertility decline. Table 4.7 shows the distribution of women by age at first birth, according to their current age. The median age at first birth in Zimbabwe is around 20 for most age groups. Although this broad measure has not changed since the 1999 ZDHS, more detailed analysis of trends in age at first birth does reveal a decline in early childbearing. For example, whereas about 26 percent of women age 35-39 had a birth at age 18, only 21 percent of women currently age 20-24 had their first birth at age 18. This slow but steady trend reflects positively on efforts to keep girls and women in school through more advanced levels to improve their social and economic status.

Table 4.7 Age at first birth

Among all women, percentage who gave birth by exact ages, percentage who have never given birth, and median age at first birth, by current age, Zimbabwe 2005-2006

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	1.3	na	na	na	na	84.2	2,152	a
20-24	1.5	20.8	46.9	na	na	30.9	1,952	a
25-29	2.9	21.4	48.7	70.0	86.3	8.7	1,466	20.1
30-34	5.1	25.3	47.4	70.5	87.0	2.5	1,216	20.2
35-39	4.2	26.1	48.3	66.9	83.7	2.8	834	20.2
40-44	3.9	26.3	56.6	75.0	89.0	2.4	699	19.5
45-49	4.9	28.5	54.1	76.5	88.5	2.6	589	19.7

a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group
na = Not applicable

4.7 MEDIAN AGE AT FIRST BIRTH BY BACKGROUND CHARACTERISTICS

Table 4.8 summarises the median age at first birth for different age cohorts across residential and educational subgroups. For all age groups, the median age at first birth is higher in urban areas than in rural areas. Similarly, age at first birth increases markedly with increasing level of education; for example, within the cohort age 25-29 years, women with only a primary education have their first birth at 18.9 years, compared with 24 years for women with more than secondary education. This is a difference of 5.1 years.

Table 4.8 Median age at first birth by background characteristics

Median age at first birth among women age 20-49 years, by current age and background characteristics, Zimbabwe 2005-2006

Background characteristic	Age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Urban	22.3	21.1	21.2	20.4	19.9	19.8	21.0	20.7
Rural	19.5	19.6	19.6	20.0	19.2	19.7	19.6	19.6
Province								
Manicaland	a	20.4	19.7	20.0	18.7	20.9	20.0	20.0
Mashonaland Central	19.1	19.1	19.2	19.8	20.0	18.8	19.2	19.4
Mashonaland East	20.0	19.4	20.2	20.8	19.6	19.4	19.9	19.8
Mashonaland West	19.4	19.7	20.4	19.8	18.7	20.1	19.7	19.8
Matabeleland North	19.8	19.6	19.1	19.2	19.2	19.4	19.4	19.3
Matabeleland South	a	19.3	20.3	20.3	19.2	19.6	19.9	19.7
Midlands	19.9	19.9	20.1	20.5	20.1	19.3	20.0	20.0
Masvingo	a	19.9	19.4	19.9	19.3	19.7	19.8	19.7
Harare	a	21.3	21.3	20.5	20.3	19.6	a	20.8
Bulawayo	a	21.1	21.7	20.4	19.9	19.9	a	20.8
Education								
No education	*	*	(18.7)	(18.4)	18.8	19.0	18.8	18.8
Primary	18.5	18.9	18.7	18.6	19.1	19.9	18.9	19.0
Secondary	a	20.7	20.7	21.0	20.2	19.8	a	20.7
More than secondary	a	24.0	23.0	(25.1)	(22.7)	*	a	23.7
Wealth quintile								
Lowest	19.0	19.3	18.9	19.1	19.5	19.4	19.2	19.2
Second	19.2	19.1	19.2	20.4	18.9	19.9	19.3	19.4
Middle	a	20.1	20.4	20.3	18.8	19.6	a	19.9
Fourth	a	20.7	20.6	19.8	19.7	19.7	a	20.3
Highest	a	21.3	21.2	20.8	20.3	20.0	a	20.9
Total	a	20.1	20.2	20.2	19.5	19.7	a	20.0

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

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

4.8 TEENAGE PREGNANCY AND MOTHERHOOD

The issue of adolescent fertility is important on both health and social grounds. Children born to very young mothers are at increased risk of sickness and death. Adolescent mothers are more likely to experience adverse pregnancy outcomes and are also more constrained in their ability to pursue educational opportunities than young women who delay childbearing.

Table 4.9 shows the percent distribution of women age 15-19 years who have given birth or were pregnant with their first child at the time of the survey, according to selected background characteristics. Overall, 21 percent of women age 15-19 have begun childbearing. The proportion of adolescents already on the path to family formation rises rapidly with age, from 2 percent at age 15 to 41 percent at age 19. Rural adolescents and those with less education tend to start childbearing earlier.

Table 4.9 Teenage pregnancy and motherhood

Percentage of women age 15-19 who are mothers or pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Zimbabwe 2005-2006

Background characteristic	Percentage who:			Number of women
	Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	
Age				
15	1.5	0.8	2.4	347
16	4.3	3.8	8.1	502
17	10.0	7.5	17.4	385
18	25.2	8.1	33.3	472
19	34.8	6.4	41.2	447
Residence				
Urban	10.2	3.2	13.4	849
Rural	19.4	7.0	26.4	1,303
Province				
Manicaland	16.5	7.2	23.7	230
Mashonaland Central	19.9	10.2	30.1	201
Mashonaland East	16.5	7.2	23.7	153
Mashonaland West	22.8	3.6	26.4	174
Matabeleland North	27.9	4.3	32.1	143
Matabeleland South	10.1	3.9	13.9	122
Midlands	12.4	6.1	18.5	280
Masvingo	19.1	6.2	25.3	315
Harare	11.5	3.8	15.3	350
Bulawayo	5.3	1.2	6.5	183
Education				
No education	*	*	*	8
Primary	25.1	9.0	34.1	607
Secondary	12.0	4.0	16.0	1,530
More than secondary	*	*	*	7
Wealth quintile				
Lowest	26.3	5.8	32.1	354
Second	19.6	11.6	31.1	357
Middle	17.3	5.8	23.1	406
Fourth	16.0	6.6	22.7	435
Highest	6.1	0.5	6.6	600
Total	15.8	5.5	21.2	2,152

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