Fertility is the most important component of population dynamics and plays a major role in changing the size and structure of the population of a given area. Ethiopia, like most countries in subSaharan Africa, is characterized by rapid population growth, which is influenced by a high level of fertility. Comprehensive information on fertility and the factors affecting it were not totally available until the results of the 1990 National Family and Fertility Survey became available (CSA, 1993). Since then, no detailed information has been obtained to evaluate fertility trends and the magnitude of change in fertility. The Ethiopia DHS fills this data gap and generates detailed information on fertility that will be useful for the formulation of policies and the design of programs.

Current fertility levels, trends and differentials in fertility, cumulative fertility, birth intervals, age at first birth, and adolescent fertility are examined in this chapter. The fertility indicators presented in this chapter are based on information obtained from women age 15-49. All women who were interviewed in the survey were asked to report on the total number of sons and daughters who were living at home, the number living elsewhere, and the number who had died. A complete birth history was then obtained, including for each birth, name, whether the birth was single or multiple, month and year of birth, survival status, and age at death for dead children.

### 4.1 Current Fertility

The current level of fertility refers to data on live births occurring in the five-year period preceding the survey, which was obtained from the birth history data. From this information, reported measures of fertility were computed and presented in Table 4.1. The reported summary measures include age-specific fertility rates (ASFRs), ${ }^{1}$ total fertility rates (TFRs) for women age 15-44 and 15-49, the general fertility rate (GFR), and the crude birth rate (CBR). The ASFRs represent the number of live births per 1,000 women in the age group. The TFR is the number of children a woman would have by the end of her reproductive years if she experienced the current rate of childbearing at each age of her childbearing years assuming that she survived to the end of her reproductive age. The GFR is defined as the annual number of births per

[^0]1,000 women age 15-44, and the CBR refers to the total number of births occurring in a given year per 1,000 population.

The total fertility rate in Ethiopia for the five years ${ }^{2}$ preceding the survey (representing early 1995 to early 2000) is 5.9 children per woman. The TFR in the rural areas is 6.4 and is almost twice as high as the TFR in the urban areas (3.3). The ASFRs presented in Table 4.1 and Figure 4.1 by urbanrural residence indicate that in Ethiopia, childbearing begins at early ages. The ASFR is lower among adolescents and increases up to age 25-29 and declines thereafter. The rates are higher in rural areas than in urban areas at all ages. The maximum fertility occurs at age 25-29 among rural women and 3034 among urban women. At the current rate of childbearing, an Ethiopian woman would have more than half of her lifetime births (3.1) by age 30 and nearly three-fourths of the total children she will ever have (4.3) by age 35. The GFR, also presented in Table 4.1, is 193 per 1,000 women age $15-44$ for the five years prior to the survey. Like the TFR, the GFR and CBR also vary by urban-rural residence. Thus, with a GFR of 211 per 1,000, the average annual number of births to rural women is double that for urban women (111 per 1,000). Similarly, the CBR in the rural areas (43 per 1,000) is much higher than the CBR in the urban areas ( 31 per 1,000 ).

Figure 4.1 Age-specific Fertility Rates by Urban-Rural Residence


Ethiopia DHS 2000

[^1]
### 4.2 Fertility Differentials

Table 4.2 and Figure 4.2 present differentials in fertility by urban-rural residence, region, and education. The figures show large differences in the level of fertility among regions. Fertility is lowest in Addis Ababa at 1.9 children per woman and highest in Oromiya at 6.4 children per woman. High levels of fertility are also observed in the Amhara and SNNP regions, with TFRs at 5.9 in each of these regions. Female education is known to be inversely related to fertility. With a TFR of 6.2, a woman with no education has about 1 child more than a woman with primary education (5.1) and about 3 children more than a woman with at least some secondary education (3.1).

The mean number of children ever born to women by the end of their reproductive period, age $40-49$, is a measure of the average completed fertility (Table 4.2). If fertility remained constant in the recent past and the reported data on both children ever born and births during the five years preceding the survey are reasonably accurate, the average completed fertility should be equal to the total fertility rate. Comparison of the mean number of children ever born to women age 40-49 with the TFR suggests a decline of about one child per woman in Ethiopia over the past 10 to 15 years. Even though fertility has declined both in urban and rural areas, the difference between the level of completed and current fertility is more pronounced in urban areas (2.2) than in rural areas (0.8). Although fertility decline has occurred in all regions and at all educational levels, a noticeably large decline is observed in Addis Ababa.

Table 4.2 also shows the percentage of women who reported being pregnant at the time of the survey. This percentage may be underreported since women may not be aware of a pregnancy, especially at the very early stages, and some women who are early in the pregnancy, may not want to reveal that they

Table 4.2 Fertility by background characteristics
Total fertility rate for the five years preceding the survey, percentage currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Ethiopia 2000
$\left.\begin{array}{lccc}\hline & & & \begin{array}{c}\text { Mean } \\ \text { number }\end{array} \\ \text { of children }\end{array}\right]$

| Residence |  |  |  |
| :---: | :---: | :---: | :---: |
| Urban | 3.3 | 6.1 | 5.5 |
| Rural | 6.4 | 10.2 | 7.2 |
| Region |  |  |  |
| Tigray | 5.8 | 7.9 | 6.8 |
| Affar | 4.9 | 8.6 | 6.4 |
| Amhara | 5.9 | 8.5 | 6.9 |
| Oromiya | 6.4 | 10.3 | 7.2 |
| Somali | 5.7 | 13.1 | 7.7 |
| Benishangul-Gumuz | 5.4 | 10.5 | 6.6 |
| SNNP | 5.9 | 10.7 | 7.2 |
| Gambela | 4.5 | 8.4 | 6.0 |
| Harari | 4.4 | 7.3 | 6.3 |
| Addis Ababa | 1.9 | 3.3 | 4.7 |
| Dire Dawa | 3.6 | 6.9 | 5.4 |
| Education |  |  |  |
| No education | 6.2 | 10.6 | 7.1 |
| Primary | 5.1 | 6.6 | 5.9 |
| Secondary and higher | 3.1 | 4.8 | 4.6 |
| Total | 5.9 | 9.4 | 7.0 |

${ }^{1}$ Women age $15-49$ years are pregnant. Nine percent of women reported that they were pregnant at the time of the survey. The proportion of pregnant women is lower in urban areas ( 6 percent) than in rural areas (10 percent). Addis Ababa has the lowest proportion currently pregnant (3 percent), whereas the highest proportion pregnant is reported in the Somali Region (13 percent). Regarding differentials in current pregnancy status by level of education, the pattern is similar to that observed for the TFR.

Figure 4.2 Total Fertility Rates by Selected Background Characteristics


Ethiopia DHS 2000

### 4.3 Trends in Fertility

Table 4.3 shows the reported ASFRs and the TFRs for the 1990 NFFS (CSA, 1993) and the 2000 Ethiopia DHS. The TFR declined from 6.4 births per woman in the 1990 NFFS to 5.9 births per woman in the Ethiopia DHS, a drop of 0.5 children on average. Fertility has declined in every age group, except for the age group 15-19. The greatest decline was among women age 45-49 (57 percent), followed by women age 20-24 (11 percent).

Data from the Ethiopia DHS on age-specific fertility rates for successive five-year periods preceding the survey provide further evidence of a decline in fertility (Table 4.4). Figures in brackets represent partial fertility rates due to truncation. For example, rates cannot be calculated for women age 35-39 for the period 15-19 years before the survey, because these women were 50 years and older at the time of the survey and were not interviewed. A substantial decline in ASFRs is seen between five to nine years before the survey and zero to four years before the survey. In fact, the ASFRs had started to decline even earlier than this period (from 10 to14 years before the survey) among

| Table 4.3 Trends in fertility |  |  |
| :--- | ---: | :---: |
| Age-specific fertility rates (per 1,000 |  |  |
| women) and total fertility rates, Ethiopia |  |  |
| 1990 and 2000 |  |  |
|  |  |  |
|  | 1990 | Ethiopia |
| Age group | NFFS | DHS |
| $15-19$ | 95 | 110 |
| $20-24$ | 275 | 244 |
| $25-29$ | 289 | 264 |
| $30-34$ | 257 | 248 |
| $35-39$ | 199 | 183 |
| $40-44$ | 105 | 100 |
| $45-49$ | 56 | 24 |
| Total fertility rate | 6.4 | 5.9 |

Note: Rates for the 1990 NFFS are for the 12 months preceding the survey, and rates for the Ethiopia DHS are for the five years preceding the survey.
CSA, 1993 women age 15-19, 20-24, and 35-39. The cumulative fertility rates computed for women age 15-34 for the successive five years preceding the survey also show a sustained decline in the level of fertility for the period 0 to19 years prior to the survey. The level of fertility decreased from a cumulative fertility of 5.3 for the period 15 to 19 years before the survey to 4.3 for the period 0 to 4 years before the survey.

### 4.4 Children Ever Born and Living

The level of lifetime fertility is based on information about the total number of children ever born. From this information, the mean number of children born per woman (average parity) in a given age is computed to measure the cumulative experience from the beginning of the reproductive time to the age at the time of the survey. Table 4.5 shows the percent distribution of women by the number of children ever born and the mean number of children ever born and living, by five-year age groups, for all women and currently married women. The mean number of children ever born increases with women's age. From an average of 0.2 children among adolescents, the average parity is 2.7 children among women in their late twenties and 7.2 children among those at the end of their reproductive years. The distribution of women by the number of children ever born shows that childbearing in Ethiopia starts at an early age. Among teenage women, 13 percent have given birth to at least one child, and among women in their early twenties, more than one-third already have two or more children. Among women in their early thirties, more than 72 percent have had at least four children, and more than half of the women age 45-49 have given birth to eight or more children. A similar pattern is observed for currently married women except that mean parities are higher among currently married women than among all women at every age.

The Ethiopia DHS results also indicate that childlessness decreases with increasing age. Among teenage women, 87 percent of all women and 52 percent of currently married women are childless. However, among women in their early twenties, the proportion decreases to 38 percent for all women and 13 percent for currently married women. The percentage childless among currently married women at the end of the reproductive period (age 45-49) is a rough estimate of primary infertility. Voluntary childlessness is rare in Ethiopia, and married women with no live births are likely to be unable to bear children at all. The results indicate that primary infertility among currently married women is low ( 2 percent). The level of primary infertility has decreased from 3.9 percent reported in the 1990 NFFS (CSA, 1993).

Information on children ever born was collected for all men interviewed in the survey. They were asked to report on the total number of children living at home, the number living elsewhere, and those who had died. The average number of children by age group is computed from the total number of children ever born. The proportion of children ever born for all men and for currently married men is presented in the bottom two panels of Table 4.5.

The average number of children ever born increases with increasing age. Men in their early twenties have an average of less than 1 child ( 0.2 ); this increases to almost 3 children among men in their early thirties, 6 children among men in their early forties, and 8 or more children among men age 45 and over. The results for men who are currently married differ from those for all men particularly at younger ages. For example, the proportion of men in the age group 20-24 who had never had a child is two and a half times higher among all men than among currently married men.

Table 4.5 Children ever born and living
Percent distribution of all women and currently married women and of all men and currently married men by number of children ever born (CEB), and mean number of children ever born and mean number of living children, according to age group, Ethiopia 2000

| Age | Number of children ever born |  |  |  |  |  |  |  |  |  |  | Total | Number | Mean <br> Mean number number of of living CEB children |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ |  |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 87.2 | 10.5 | 2.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 3,710 | 0.15 | 0.13 |
| 20-24 | 38.1 | 24.3 | 22.2 | 11.3 | 3.3 | 0.5 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 100.0 | 2,860 | 1.20 | 1.02 |
| 25-29 | 14.6 | 12.7 | 19.7 | 22.2 | 16.1 | 9.3 | 3.4 | 1.3 | 0.7 | 0.1 | 0.0 | 100.0 | 2,585 | 2.65 | 2.17 |
| 30-34 | 4.5 | 4.6 | 9.0 | 10.4 | 17.0 | 19.8 | 16.9 | 10.2 | 5.2 | 1.7 | 0.7 | 100.0 | 1,841 | 4.57 | 3.62 |
| 35-39 | 3.5 | 2.9 | 5.8 | 8.0 | 8.3 | 14.8 | 18.9 | 15.6 | 10.6 | 6.2 | 5.3 | 100.0 | 1,716 | 5.66 | 4.40 |
| 40-44 | 1.8 | 3.4 | 3.6 | 3.7 | 6.2 | 11.1 | 12.4 | 15.4 | 15.3 | 12.9 | 14.0 | 100.0 | 1,392 | 6.74 | 4.99 |
| 45-49 | 2.4 | 2.4 | 4.0 | 4.1 | 5.3 | 6.9 | 10.3 | 12.6 | 16.2 | 13.1 | 22.8 | 100.0 | 1,264 | 7.23 | 5.21 |
| Total | 31.9 | 10.6 | 10.3 | 8.7 | 7.3 | 7.3 | 6.7 | 5.6 | 4.6 | 3.2 | 3.8 | 100.0 | 15,367 | 3.09 | 2.39 |


|  | CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $15-19$ | 51.5 | 39.9 | 7.8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 862 | 0.58 | 0.50 |
| $20-24$ | 13.4 | 31.8 | 31.8 | 16.7 | 5.0 | 0.8 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 100.0 | 1,807 | 1.73 | 1.48 |
| $25-29$ | 5.1 | 10.8 | 21.7 | 25.6 | 19.1 | 11.3 | 3.9 | 1.4 | 0.9 | 0.1 | 0.0 | 100.0 | 2,051 | 3.06 | 2.52 |
| $30-34$ | 2.0 | 3.7 | 7.1 | 9.6 | 17.3 | 22.0 | 19.1 | 11.4 | 5.1 | 2.0 | 0.8 | 100.0 | 1,572 | 4.87 | 3.89 |
| $35-39$ | 2.7 | 2.7 | 4.3 | 7.0 | 8.3 | 14.5 | 19.4 | 16.8 | 11.7 | 6.7 | 6.1 | 100.0 | 1,441 | 5.90 | 4.63 |
| $40-44$ | 1.5 | 3.1 | 2.6 | 2.5 | 5.4 | 10.1 | 11.0 | 15.5 | 16.3 | 15.2 | 16.7 | 100.0 | 1,096 | 7.10 | 5.32 |
| $45-49$ | 1.9 | 1.4 | 3.0 | 3.7 | 4.4 | 4.9 | 9.5 | 13.3 | 17.6 | 14.2 | 26.1 | 100.0 | 961 | 7.65 | 5.60 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 9.2 | 13.1 | 13.5 | 11.7 | 10.0 | 9.8 | 9.0 | 7.6 | 6.3 | 4.4 | 5.5 | 100.0 | 9,789 | 4.21 | 3.30 |
|  |  |  |  |  |  |  |  |  | ALL MEN |  |  |  |  |  |  |
| $15-19$ | 99.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 600 | 0.00 | 0.00 |
| $20-24$ | 85.5 | 9.1 | 3.7 | 1.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 100.0 | 408 | 0.22 | 0.19 |
| $25-29$ | 40.8 | 22.5 | 17.5 | 11.9 | 4.1 | 2.4 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 343 | 1.27 | 1.06 |
| $30-34$ | 20.2 | 8.3 | 24.7 | 17.8 | 11.2 | 12.0 | 2.4 | 2.0 | 0.1 | 0.1 | 1.2 | 100.0 | 276 | 2.59 | 2.14 |
| $35-39$ | 7.0 | 2.8 | 9.8 | 17.3 | 19.1 | 14.2 | 14.1 | 10.4 | 2.7 | 0.6 | 1.9 | 100.0 | 304 | 4.26 | 3.44 |
| $40-44$ | 6.4 | 6.0 | 5.0 | 11.0 | 5.0 | 6.6 | 18.0 | 13.4 | 10.9 | 8.1 | 9.6 | 100.0 | 182 | 5.88 | 4.37 |
| $45-49$ | 2.1 | 0.4 | 2.4 | 4.4 | 6.0 | 5.6 | 12.8 | 10.6 | 14.6 | 13.9 | 27.3 | 100.0 | 207 | 7.95 | 5.87 |
| $50-54$ | 0.0 | 1.1 | 3.0 | 2.4 | 0.3 | 4.4 | 11.9 | 15.7 | 18.8 | 12.6 | 29.7 | 100.0 | 142 | 8.45 | 6.48 |
| $55-59$ | 2.4 | 1.8 | 1.7 | 4.7 | 4.6 | 4.8 | 2.8 | 15.9 | 19.6 | 13.6 | 28.1 | 100.0 | 146 | 8.03 | 5.87 |
| Total | 45.4 | 6.3 | 7.5 | 7.1 | 5.1 | 4.7 | 5.1 | 4.9 | 4.4 | 3.2 | 6.4 | 100.0 | 2,607 | 2.92 | 2.25 |


|  |  |  | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | 100.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

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

Comparison of these results with those obtained for women who are currently in union shows that at younger ages, the average number of children ever born increases more rapidly with increasing age among currently married women than among currently married men. However, at older ages, the average number of children ever born is higher for currently married men than that for currently married women ( 8.2 for men and 7.7 for women at age 45-49). The more rapid rise in number of children ever born among younger women than among younger men is due to their earlier entrance into marital union. Among men, the higher level of average number of children ever born at older ages may be explained by the fact that men are more likely to enter into multiple unions and therefore may have more children than their wives.

### 4.5 Birth INTERVALS

Longer birth intervals contribute to improved health status of both mother and child. Infants born within two years of the birth of a previous child experience a higher risk of health problems. Table 4.6 shows the distribution of second and higher order births that occurred in the five years preceding the survey by the number of months since the previous birth, according to background variables.

In Ethiopia, 20 percent of nonfirst births occur less than 24 months after the preceding birth, with 8 percent occurring less than 18 months after the preceding birth. Forty-three percent of women give birth at least 36 months after the previous birth. The overall median birth interval is 34 months. This means that half of the births in Ethiopia occur close to three years after the previous birth. Data also indicate that birth intervals increase with increasing age of women. Thirty-seven percent of births to women age 15-19 occurred within two years of the previous birth, compared with only 14 percent of births among women age 40 and above. The median birth interval rises from 26 months among women age 15-19 to 38 months among women age 40 and above. Birth intervals do not seem to vary much by birth order, sex of the preceding child, or urban-rural residence. However, the birth interval does vary markedly by the survival status of the preceding birth. Four times as many births occurred within an 18month interval when the preceding child had died than when it was still alive. The median birth interval is 34 months if the previous child is living, but falls to 28 months if the preceding child is dead. Median birth intervals are shorter in the Somali and Harari regions and relatively longer in Addis Ababa and in the Gambela Region. The level of education of mothers does not significantly affect the length of the birth interval.

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 demographic and background characteristics, Ethiopia 2000

| Characteristic | Months since preceding birth |  |  |  |  | Total | Median number of months since preceding birth | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48+ |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 18.8 | 18.5 | 47.1 | 7.7 | 7.9 | 100.0 | 25.8 | 92 |
| 20-29 | 11.9 | 12.7 | 40.1 | 22.3 | 13.0 | 100.0 | 30.8 | 4,254 |
| 30-39 | 5.7 | 10.5 | 36.8 | 25.2 | 21.7 | 100.0 | 35.0 | 4,183 |
| 40-49 | 4.8 | 8.8 | 32.1 | 26.4 | 27.9 | 100.0 | 37.5 | 1,380 |
| Birth order |  |  |  |  |  |  |  |  |
| 2-3 | 10.0 | 12.6 | 37.7 | 21.3 | 18.5 | 100.0 | 32.2 | 3,669 |
| 4-6 | 7.5 | 9.2 | 37.8 | 25.6 | 19.8 | 100.0 | 34.7 | 3,794 |
| $7+$ | 7.4 | 12.5 | 37.4 | 25.4 | 17.3 | 100.0 | 33.6 | 2,445 |
| Sex of preceding birth |  |  |  |  |  |  |  |  |
|  | 8.9 | 11.5 | 36.3 | 24.0 | 19.3 | 100.0 | 33.8 | 5,157 |
| Female | 7.8 | 11.1 | 39.2 | 23.9 | 18.1 | 100.0 | 33.5 | 4,751 |
| Survival of preceding birth |  |  |  |  |  |  |  |  |
| Dead | 22.8 | 15.6 | 28.1 | 16.7 | 16.8 | 100.0 | 27.8 | 1,847 |
| Living | 5.1 | 10.3 | 39.8 | 25.6 | 19.2 | 100.0 | 34.4 | 8,061 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 10.2 | 9.7 | 33.7 | 16.2 | 30.3 | 100.0 | 35.2 | 921 |
| Rural | 8.2 | 11.5 | 38.1 | 24.8 | 17.5 | 100.0 | 33.5 | 8,987 |
| Region |  |  |  |  |  |  |  |  |
| Tigray | 6.0 | 7.0 | 42.8 | 25.7 | 18.5 | 100.0 | 34.4 | 656 |
| Affar | 12.0 | 16.6 | 30.9 | 20.7 | 19.8 | 100.0 | 31.9 | 95 |
| Amhara | 6.4 | 7.9 | 33.4 | 29.8 | 22.5 | 100.0 | 36.6 | 2,614 |
| Oromiya | 10.3 | 13.4 | 40.2 | 20.8 | 15.4 | 100.0 | 31.4 | 4,047 |
| Somali | 15.9 | 21.6 | 28.0 | 19.4 | 15.2 | 100.0 | 27.6 | 120 |
| Benishangul-Gumuz | 9.0 | 11.9 | 36.0 | 24.6 | 18.5 | 100.0 | 34.3 | 96 |
| SNNP | 7.4 | 11.8 | 38.4 | 23.1 | 19.3 | 100.0 | 33.4 | 2,099 |
| Gambela | 2.2 | 9.1 | 22.5 | 29.9 | 36.3 | 100.0 | 40.5 | 21 |
| Harari | 12.0 | 17.0 | 33.5 | 19.1 | 18.3 | 100.0 | 30.0 | 19 |
| Addis Ababa | 7.0 | 12.6 | 23.5 | 16.0 | 40.9 | 100.0 | 40.8 | 112 |
| Dire Dawa | 10.8 | 16.9 | 37.2 | 20.5 | 14.6 | 100.0 | 31.2 | 30 |
| Education |  |  |  |  |  |  |  |  |
| No education | 7.8 | 11.3 | 37.7 | 24.5 | 18.7 | 100.0 | 33.8 | 8,272 |
| Primary | 11.6 | 10.4 | 38.2 | 23.2 | 16.6 | 100.0 | 32.4 | 1,259 |
| Secondary and higher | 11.0 | 12.9 | 35.7 | 14.9 | 25.5 | 100.0 | 32.6 | 377 |
| Total | 8.4 | 11.3 | 37.7 | 24.0 | 18.7 | 100.0 | 33.6 | 9,908 |

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.

### 4.6 Age at First Birth

Early age at childbearing has a detrimental effect on the health of both mother and child. It also indicates a longer reproductive span and higher level of fertility. Table 4.7 presents the distribution of women by age at first birth and median age at first birth according to age at the time of the survey.

Childbearing begins early in Ethiopia. More than 50 percent of women age 30 and above have had their first birth in their teens, and even among the cohort age $20-24$, a sizable proportion ( 44 percent) have had a birth before age 20. The median age at first birth is 20 years for the youngest cohort (age 25-29) for whom a median could be computed and varies between 18 and 19 for the older cohorts, indicating a rise in the median age at first birth during the most recent period.

Table 4.7 Age at first birth
Percent distribution of women by age at first birth, according to current age, Ethiopia 2000

| Current age | No birth | Age at first birth |  |  |  |  |  | Total | Number | Median age at first birth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $<15$ | 15-17 | 18-19 | 20-21 | 22-24 | $25+$ |  |  |  |
| 15-19 | 87.2 | 1.1 | 8.4 | NA | NA | NA | NA | 100.0 | 3,710 | a |
| 20-24 | 38.1 | 3.3 | 20.9 | 19.4 | 13.8 | NA | NA | 100.0 | 2,860 | a |
| 25-29 | 14.6 | 5.7 | 23.8 | 19.4 | 17.1 | 14.8 | 4.5 | 100.0 | 2,585 | 20.1 |
| 30-34 | 4.5 | 6.5 | 36.5 | 22.9 | 12.1 | 10.5 | 7.0 | 100.0 | 1,841 | 18.5 |
| 35-39 | 3.5 | 9.9 | 29.7 | 18.2 | 16.8 | 12.1 | 9.8 | 100.0 | 1,716 | 19.1 |
| 40-44 | 1.8 | 6.6 | 39.5 | 23.1 | 12.2 | 9.8 | 7.0 | 100.0 | 1,392 | 18.4 |
| 45-49 | 2.4 | 8.0 | 32.2 | 23.0 | 15.9 | 10.6 | 7.9 | 100.0 | 1,264 | 18.7 |

NA = Not applicable
Omitted in populations where less than 50 percent of the women in the age group $\times$ to $\times+4$ have had a birth by age $\times$

Table 4.8 presents the median age at first birth by background characteristics and age at the time of the survey. The median age at first birth is higher in urban areas than in rural areas, with a difference of one year among women age 25-49. Addis Ababa has the highest median age at first birth (21.7), followed closely by Dire Dawa (21.4). The Amhara Region has the lowest median age at first birth (18). There is a positive relationship between educational attainment and median age at first birth.

## Table 4.8 Median age at first birth by background characteristics

Median age at first birth among women age 25-49 years, by current age and background characteristics, Ethiopia 2000

| Background characteristic | Current age |  |  |  |  | Women age 25-49 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |
| Urban | 22.5 | 18.8 | 18.8 | 18.8 | 18.4 | 20.0 |
| Rural | 19.6 | 18.5 | 19.1 | 18.3 | 18.8 | 18.9 |
| Region |  |  |  |  |  |  |
| Tigray | 19.1 | 18.7 | 19.0 | 19.0 | 19.2 | 19.0 |
| Affar | 21.0 | 20.1 | 19.6 | 21.5 | 19.4 | 20.2 |
| Amhara | 18.8 | 17.5 | 18.3 | 17.4 | 17.7 | 18.0 |
| Oromiya | 20.1 | 18.5 | 18.8 | 18.3 | 18.8 | 19.0 |
| Somali | 20.3 | 19.3 | 19.0 | 18.0 | 20.1 | 19.5 |
| Benishangul-Gumuz | 19.3 | 18.4 | 19.4 | 19.7 | 18.8 | 19.1 |
| SNNP | 21.3 | 19.5 | 20.6 | 18.8 | 19.7 | 20.1 |
| Gambela | 19.8 | 17.3 | 18.7 | 18.2 | 20.6 | 18.7 |
| Harari | 20.6 | 19.9 | 18.0 | 17.6 | 19.6 | 19.3 |
| Addis Ababa | a | 23.7 | 19.3 | 19.2 | 19.2 | 21.7 |
| Dire Dawa | 23.6 | 20.8 | 21.2 | 20.4 | 19.4 | 21.4 |
| Education |  |  |  |  |  |  |
| No education | 19.6 | 18.4 | 19.0 | 18.2 | 18.7 | 18.8 |
| Primary | 20.3 | 19.0 | 20.5 | 20.0 | 17.9 | 19.8 |
| Secondary and higher | 24.4 | 21.0 | 20.4 | 20.6 | 21.6 | 22.9 |
| All women | 20.1 | 18.5 | 19.1 | 18.4 | 18.7 | 19.0 |

[^2]The median age at first birth is 19 years among women with no education and increases to 20 years among women with primary education and to 23 years among women with at least secondary education. This means that women with no education become mothers four years earlier than those who have attained at least a secondary level of education.

### 4.7 Teenage Pregnancy and MOtherhood

In addition to the relatively higher level of pregnancy complications among young mothers, due to physiological immaturity, inexperience associated with child care practices also influences maternal and infant health. Moreover, an early start to childbearing greatly reduces the educational and employment opportunities of women and is associated with higher levels of fertility. Table 4.9 presents the proportion of women age 15-19 (teenagers) who are mothers or pregnant with their first child, by background characteristics.

Table 4.9 Teenage pregnancy and motherhood
Percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Ethiopia 2000

| Background characteristic | Percentage who are: |  | Percentage who have begun childbearing | Number |
| :---: | :---: | :---: | :---: | :---: |
|  | Mothers | Pregnant with first child |  |  |
| Age |  |  |  |  |
| 15 | 0.7 | 0.5 | 1.2 | 892 |
| 16 | 3.5 | 3.0 | 6.5 | 798 |
| 17 | 12.0 | 3.5 | 15.5 | 659 |
| 18 | 22.0 | 5.4 | 27.4 | 827 |
| 19 | 33.8 | 5.9 | 39.7 | 534 |
| Residence |  |  |  |  |
| Urban | 6.8 | 2.4 | 9.1 | 816 |
| Rural | 14.5 | 3.8 | 18.3 | 2,894 |
| Region |  |  |  |  |
| Tigray | 18.6 | 2.3 | 20.9 | 234 |
| Affar | 16.6 | 4.5 | 21.1 | 34 |
| Amhara | 21.9 | 3.2 | 25.0 | 842 |
| Oromiya | 11.4 | 4.4 | 15.8 | 1,594 |
| Somali | 10.1 | 2.7 | 12.7 | 43 |
| Benishangul-Gumuz | 17.1 | 5.2 | 22.2 | 41 |
| SNNP | 5.5 | 2.6 | 8.1 | 688 |
| Gambela | 21.9 | 4.1 | 26.0 | 8 |
| Harari | 9.1 | 3.8 | 12.9 | 9 |
| Addis Ababa | 3.5 | 1.2 | 4.7 | 199 |
| Dire Dawa | 7.2 | 3.8 | 11.0 | 18 |
| Education |  |  |  |  |
| No education | 16.4 | 4.4 | 20.8 | 2,265 |
| Primary | 7.4 | 1.5 | 8.9 | 977 |
| Secondary and higher | 6.5 | 3.0 | 9.5 | 468 |
| Total | 12.8 | 3.5 | 16.3 | 3,710 |

Sixteen percent of women age 15-19 have already become mothers or are currently pregnant with their first child. The percentage of women who have begun childbearing increases rapidly with age, from 1 percent among women age 15, to 40 percent among women age 19 . Twice as many teenagers residing in rural areas as in urban areas have begun childbearing. The level of teenage parenthood is also more than twice as high among women with no education than among women with primary or higher levels of education. Childbearing among teenagers is lowest in Addis Ababa (5 percent) and highest in the Gambela Region (26 percent).


[^0]:    ${ }^{1}$ Numerators of the ASFRs are calculated by summing the number of live births that occurred in the period 1-60 months preceding the survey (determined by the date of interview and the date of birth of the child) and classifying them by age (in five-year groups) of the mother at the time of birth (determined by the mother's birth date). The denominators of the rates are the number of woman-years lived in each of the specified five-year age groups during the 1-60 months preceding the survey.

[^1]:    ${ }^{2}$ A three-year rate is usually shown for DHS surveys but it was decided that a five-year rate would be more appropriate in Ethiopia since it is closer to estimates of fertility that are currently being used.

[^2]:    ${ }^{\mathrm{a}}$ Omitted because less than 50 percent of the women ages 25 to 29 have had a birth by age 25

