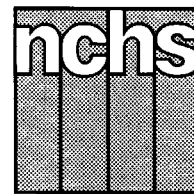


# Monthly Vital Statistics Report



Final Data From the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

## Birth and Fertility Rates by Educational Attainment: United States, 1994

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### Abstract

**Objectives**—This report presents birth rates for the United States by educational attainment of mother for 1994. Rates are shown by age, race, Hispanic origin of mother, birth order, and marital status. Calculated for the first time are total fertility rates by educational attainment of mother.

**Methods**—Descriptive tabulations of birth rates by educational attainment of mother for the United States are presented and explained.

**Results**—Birth rates differ considerably by educational attainment. In 1994 women with 0–8 years of education had the highest birth rates overall, while those who started but did not complete college had the lowest. For women 30–39 years of age, however, those with college degrees had the highest rates. Among women aged 25 years and older, unmarried women with less education have much higher birth rates than unmarried women who attended school longer. Conversely, rates for college-educated married women are much higher than those of less educated women. For college-educated women, low first birth rates for women in their twenties and high rates for women in their thirties point to the continuing trend of delayed childbearing.

**Keywords:** education and fertility • birth rates by education

### Introduction

Educational attainment has long been considered the most important measure of socioeconomic status in describing fertility differentials. Maternal education

has been shown to be associated with the number of children per woman, the timing of childbearing, and contraceptive use, among other fertility-related variables (1,2). It has the advantage over other measures of socioeconomic status

of being fairly easy to report and to have relatively uniform categories throughout the country.

Since 1969 items on the educational attainment of the mother and father have been included on the U.S. Standard Certificate of Live Birth. The number of States that included these items on their birth certificates increased from 36 in 1969 to 47 and the District of Columbia in 1980. All States and the District of Columbia have reported this information since 1992.

Birth rates by maternal educational attainment provide a way to interpret variations in childbearing patterns. These rates are based on the number of completed years of education at the time the mother gives birth and reflect the risk of giving birth, considering her current age and education. The mother may have already completed her education, her education may have ended with the birth, or she may complete more years of education. Thus, these rates do not necessarily reflect the total educational attainment of

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the mother. These limitations should be considered when reviewing the findings in this report.

This report presents and describes rates for 1994 by a variety of characteristics, including age, marital status, race, and Hispanic origin of mother, and live-birth order of the child. A report presenting birth and fertility rates by education for 1980 and 1985 was published previously (3).

## Methods

Data shown in this report are based on 100 percent of birth certificates registered in all States and the District of Columbia. More than 99 percent of births occurring in this country are registered. Educational attainment is based on an item on the birth certificate asking "Education—Specify only highest grade completed." The instructions in the *Hospitals' and Physicians' Handbook for Birth Registration and Fetal Death Reporting* specifically state that for purposes of this item, only formal schooling is counted; attendance at technical or vocational schools is not to be included (4).

During the years 1980–87, 47 States and the District of Columbia reported education on the birth certificate; these areas accounted for about three-quarters of total U.S. births. This item was not on the birth certificates of California, Texas, and Washington State.

Tabulations of births for 1994 are by race of mother; for 1980 and 1985, tabulations are by race of child. Details of the differences in tabulation procedures are described in the "Technical notes." Racial and ethnicity differentials in birth rates by education may reflect differences in income, access to health care, and health care coverage. Additional information on sources of data, the measurement of marital status, population denominators, and sampling and measurement error are presented in the "Technical notes."

## Results

### Differentials

The pattern of birth rates by maternal educational attainment and age is shown in [table 1](#) and [figure 1](#). Birth rates for older teens aged 18–19 years were highest for women with 8 years of education or

fewer (281 per 1,000 women). Because many teenagers have not yet completed all their education, their rates are less meaningful than those of women aged 20 years and older; thus, rates for teenagers, although shown in many of the tables, are discussed very little in the text. Similarly, birth rates for women aged 20–24 years who have completed some college must be interpreted with caution. Many of these women are in the process of completing their education. Their very low birth rates reflect this fact. Birth rates for women aged 20–24 years in 1994 declined steadily with increased education, from 248 per 1,000 for women with a grade school education (0–8 years) to 56 per 1,000 for women with 1–3 years of college.

Birth rates for women aged 25–29 years were highest for women with 8 years of education or fewer, 166 per 1,000, and ranged from 98 to 126 per 1,000 for more educated women. For women aged 30–34 years, rates were highest for college graduates, 124 per 1,000, followed by women with a grade school education, 107 per 1,000. Rates for women in other educational groups were much lower, 54–70 per 1,000. The pattern of rates by education was similar for women aged 35–39 years, although the levels of the education-specific rates were much lower than those for women aged 30–34 years. Education-specific rates for women aged 40–44 years were substantially lower than the rates for younger women.

The patterns described previously for women of all races also were generally observed for white and black women ([table 1](#)) and for Hispanic and non-Hispanic women ([table 2](#) and [figure 2](#)). Rates for American Indian and Asian or Pacific Islander women could be computed for only a few education/age groups, because the numbers of births and numbers of women by age and education were often too small to permit the computation of reliable rates ([table 1](#)) (see "Technical notes").

The pattern of education-specific birth rates was similar for Hispanic and non-Hispanic black women, although the absolute levels of the rates were consistently higher for Hispanic women in each education subgroup. Rates declined from 0–8 to 9–11 years of schooling and then

rose for high school graduates. Rates for women with some college were sharply lower—a half to a third lower—than the rates for high school graduates. Rates then increased for college graduates.

The pattern of birth rates for non-Hispanic white women according to educational attainment was somewhat different from that for Hispanic and non-Hispanic black women. Rates increased steadily from 0–8 years through 12 years of education. Rates dropped by about a third for women with some college and then rose considerably for college graduates.

For women with less than a high school education, rates were generally highest for Hispanic women in all age groups, 1.5–6.2 times the rates for non-Hispanic white women and up to 2.4 times the rates for non-Hispanic black women ([table 2](#)). The differential between Hispanic and non-Hispanic white women is greatest for teenagers and women aged 30 years and over. For high school graduates under age 25, age-specific rates were higher for Hispanic and non-Hispanic black women than the rates for non-Hispanic white women. The birth rate for non-Hispanic black teenagers with 12 years of education was considerably higher than that for other groups, whereas at ages 25 years and over, birth rates for Hispanic women were notably higher than rates for other groups. Age-specific rates for women aged 25 years and older with some college and for college graduates were fairly similar among racial and Hispanic origin groups.

*Live-birth order*—The pattern of first birth rates by maternal education is shown in [table 3](#) and [figure 3](#). For women ages 20–24, rates in 1994 were essentially the same for women with a grade school education and for high school graduates (82–83 per 1,000). Rates were somewhat lower for women who did not finish high school, 56 per 1,000, and sharply lower, 35–36 per 1,000, for women with 1 year of college or more. For women in age groups 25–44 years, rates declined from 0–8 years to 9–11 years of schooling and then increased steadily through 16 years or more.

The first birth probability is a refinement of the first birth rate in that it relates first births to childless women, that is, women at risk of having a first birth

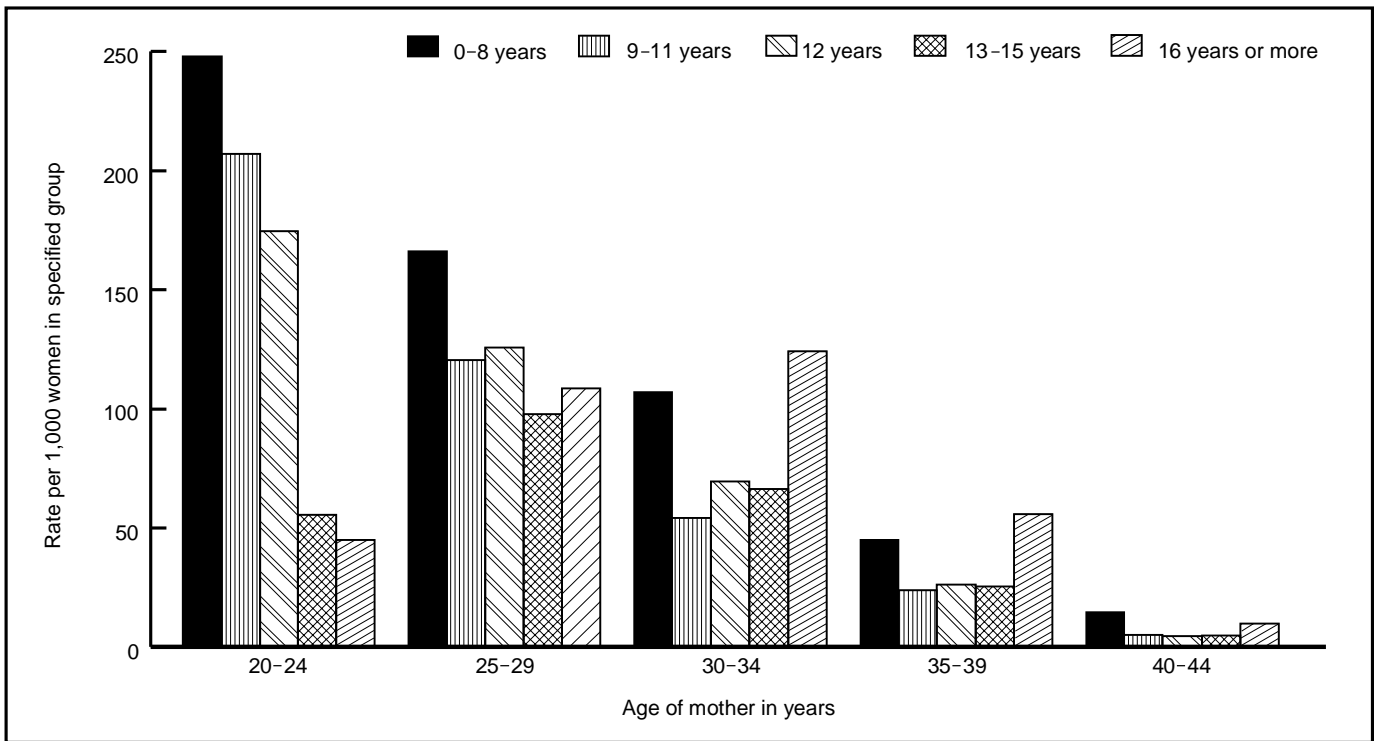


Figure 1. Birth rates by age and educational attainment of mother: United States, 1994

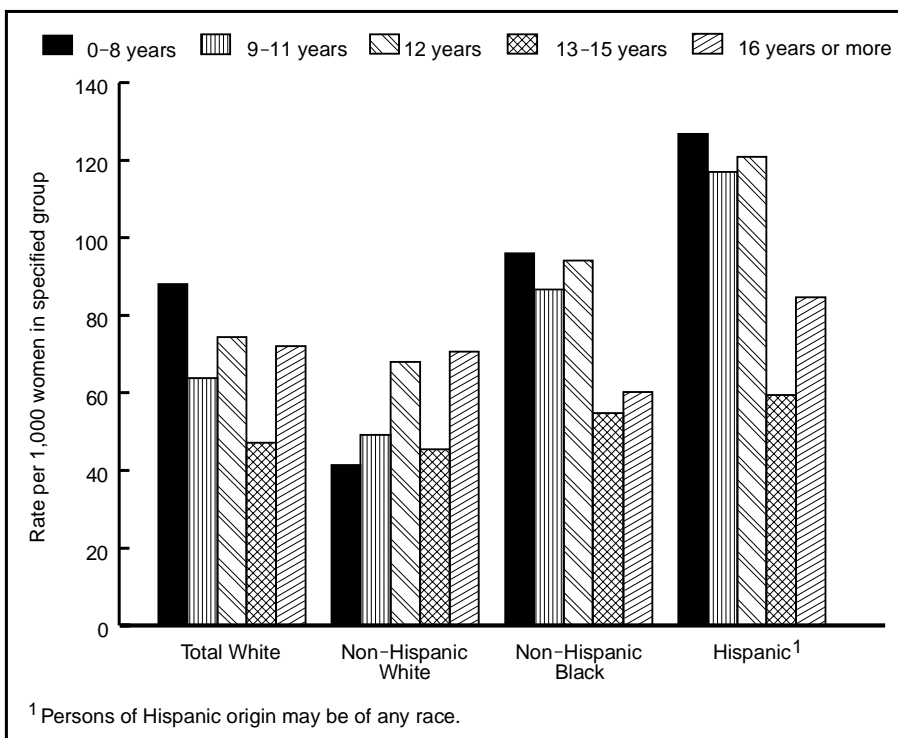
(table 4). For childless women aged 20–24 years in 1994, probabilities declined steadily and sharply with increasing educational attainment—from 238 per 1,000 for women with 0–11 years of schooling

to 38 per 1,000 for college graduates. In other words, 24 percent of childless women aged 20–24 years without a high school diploma gave birth in 1994 compared with only 4 percent of childless

college graduates aged 20–24 years. The pattern was generally similar for childless women aged 25–29 years except that the decline with increasing education was substantially smaller. For older childless women, the first birth probabilities were sharply higher for college graduates than the probabilities for women with less education. In 1994 the first birth probability for childless college graduates aged 30–34 years was 107 per 1,000 compared with 64–73 per 1,000 for less educated childless women aged 30–34 years.

The patterns of the probabilities differ somewhat from the rates. The differences reflect variations in the proportions of women in each age/education group who are childless. For example, the differential in the first birth rate for women in their thirties who are college graduates compared with women with some college is greater than the differential in the probability. This reflects the fact that a substantially larger proportion of college graduates are childless compared with women with some college.

The relationships between maternal age and educational attainment for second and higher order birth rates are considerably different from those for first births (table 3). For women in their twenties, rates in 1994 declined dramati-



<sup>1</sup> Persons of Hispanic origin may be of any race.

Figure 2. Birth rates by educational attainment, race, and Hispanic origin of mother: United States, 1994

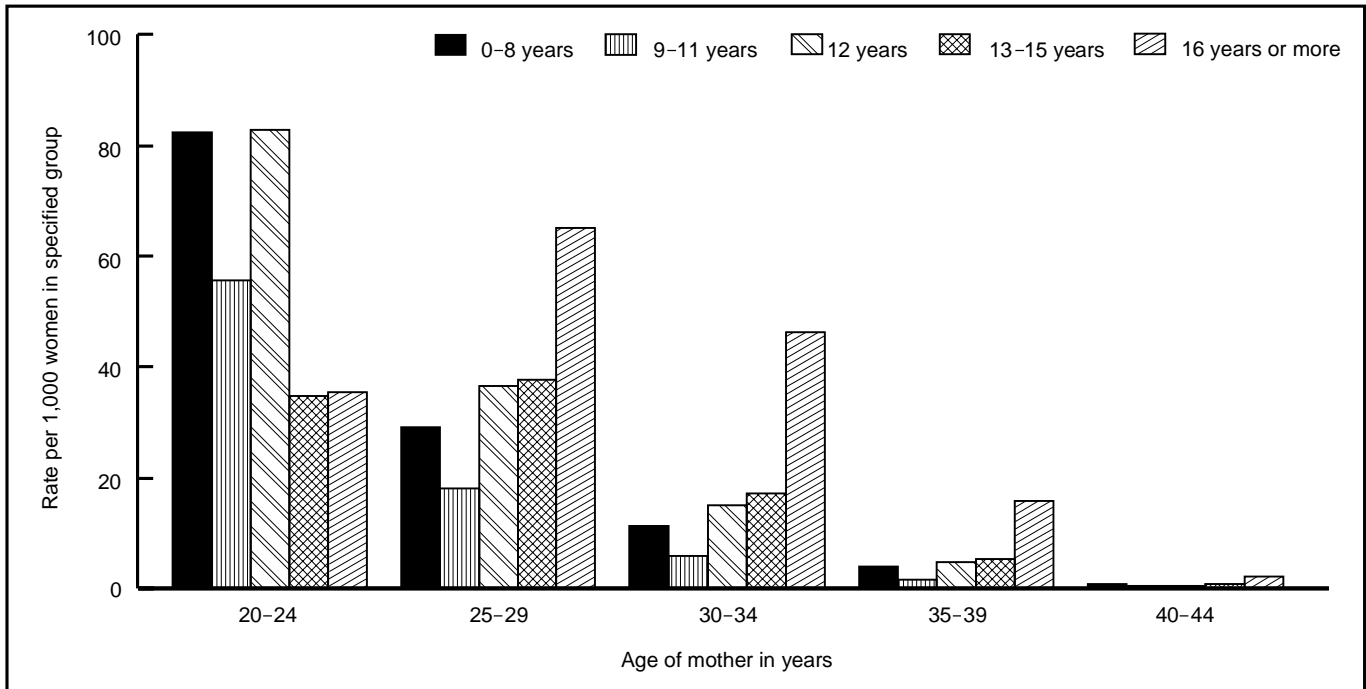


Figure 3. First birth rates by age and educational attainment of mother: United States, 1994

ically with increasing education— from 164 per 1,000 (0–8 years) to 9 per 1,000 (college graduates) for ages 20–24 and from 136 to 43 for women aged 25–29 years. At ages 30 and older, the pattern changed. Rates were still consistently highest for women with a grade school education in all age groups. Rates were relatively similar across educational attainment groups from 9–11 years of school through women with some college and then increased sharply for college graduates.

Second and higher order birth rates for teenagers are of particular concern, because these rates measure the levels of early, repeat childbearing. For example, among teenagers 18–19 years, more than a quarter were having their second or higher order birth in 1994. Rates for black women aged 18–19 years in each educational group for which rates could be computed were up to 4 times the rates for white women.

*Lifetime fertility*—Another way to compare the fertility patterns of women across educational attainment groups is to compute the total fertility rate (TFR), which is the number of lifetime births that women would have if the age-specific birth rates in a given year continued throughout their childbearing years. The TFR suggests the implications

of current age-specific birth rates for completed family size. It thus assumes no changes in age-specific birth rates for a given group of women. Another analytic limitation of this measure is that it assumes that women will remain at a given educational attainment throughout their childbearing years. This of course is not the case, especially for young women with limited education. In contrast, TFR's for college-educated women are more stable and less subject to change because these women have probably completed most of their education. TFR's for college-educated women, however, are greatly affected by the current pattern of high first birth rates for older women, because college-educated women are most likely to delay their childbearing to older ages; however, birth rates for older women are substantially lower than the rates for women in their twenties.

The patterns of TFR's for Hispanic and non-Hispanic black women were very similar, and the levels were quite comparable. Consistent with the age-education-specific birth rates discussed earlier, the TFR's were highest for women with a grade school education. Hispanic women averaged 4.1 children each and non-Hispanic black women, 4.5 children. TFR's declined from a sixth to a half for women with some high school but no diploma and then increased for high school graduates. TFR's for Hispanic and non-Hispanic black women with some college and for college graduates were sharply lower, ranging from 1.6 to 2.0. The range in TFR's for non-Hispanic white women was much narrower than those for Hispanic and non-Hispanic black women. Additionally, the education-specific rates for non-Hispanic white women were lower than those for Hispanic and non-Hispanic black women in all categories, except college graduates. The difference by race and Hispanic origin diminishes considerably for women with some college and for college graduates.

*Marital status*—Birth rates for married women aged 25 years and older tended to increase with advancing maternal education from 9–11 years through college graduates (table 5 and figure 4).

	Total	Non-	Non-	Hispanic
		Hispanic White	Hispanic Black	
Total fertility rates				
Total . . . . .	2.0	1.8	2.3	3.0
0–8 years . . .	3.2	1.9	4.5	4.1
9–11 years . . .	2.3	1.9	2.4	3.4
12 years . . . .	2.7	2.4	3.6	3.8
13–15 years . .	1.4	1.3	1.7	1.6
16 years or more . . . .	1.7	1.7	1.6	2.0

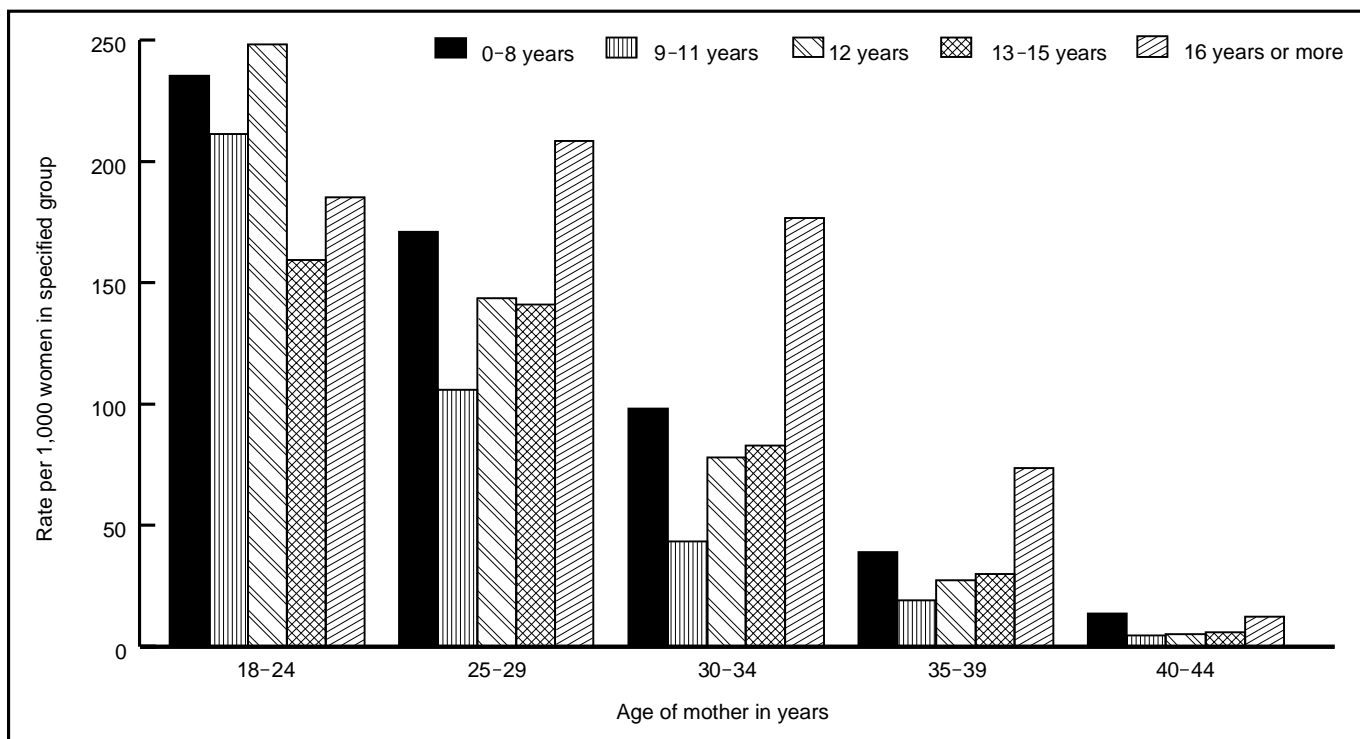


Figure 4. Birth rates for married women by age and educational attainment of mother: United States, 1994

Rates were also relatively high for married women with a grade school education in all age groups. Rates for married college graduates were especially high for women in age groups 25–29 and 30–34 years, with rates of 209 and 177 per 1,000, respectively.

The relationship of fertility and educational attainment for unmarried women was directly opposite that for married women (table 5 and figure 5). A generally negative relationship between education and fertility was observed for unmarried women in every age group 18 years and older. Rates for unmarried women with a grade school education were 3 to 24 times the rates for unmarried college graduates.

Rates for women aged 25 years and older with less than a high school education did not differ substantially by marital status, with rates for unmarried women tending to be higher. For women with a high school diploma, the rate was somewhat higher for married women. Rates for married women with at least 1 year of college were substantially higher—2 to 16 times—than the rates of unmarried women.

### Proportions

Birth rates are clearly the most appropriate way to examine fertility trends and variations by educational attainment. Because they are computed on the basis of 1,000 women in each education/age subgroup, they are not affected by differences in population composition or in the distribution of births by education. However, sometimes the populations needed to compute birth rates are not available, for example, subnational population groups or numerically small population groups in the U.S. population. In these cases, the percent distributions of births by educational attainment provide an alternative, although less satisfactory approach, for gauging shifts in fertility levels by population subgroup and for examining changes over time in the educational attainment of women giving birth.

While the educational attainment of the entire U.S. population increased from 1980 to 1985 and has since leveled off, the educational attainment among women having their first child has exceeded that of the general population in 1980, 1985, and 1994 (5–7). For example, among all

women in the United States aged 35–39 years, the proportion with college degrees rose from 26 percent in 1980 to 38 percent in 1985 and 40 percent in 1994. Among women in this age group having their first child, the proportions were 44 percent in 1980 and 52 percent in 1985 and 1994 (table 6).

Because there was an important change between 1985 and 1994 in the States reporting educational attainment on the birth certificate, comparisons of the distributions of women giving birth by educational attainment are somewhat compromised. In 1985 data on educational attainment were not available for California, Texas, and Washington State, which accounted for 24 percent of all births in 1994 and 60 percent of Hispanic-origin births. The educational attainment of Hispanic women is generally much lower than that for non-Hispanic women. One-fourth of Hispanic women giving birth in 1994 had 8 years of education or fewer compared with 2 percent of non-Hispanic women.

With the addition of California, Texas, and Washington State to the education reporting area, the distribution of births



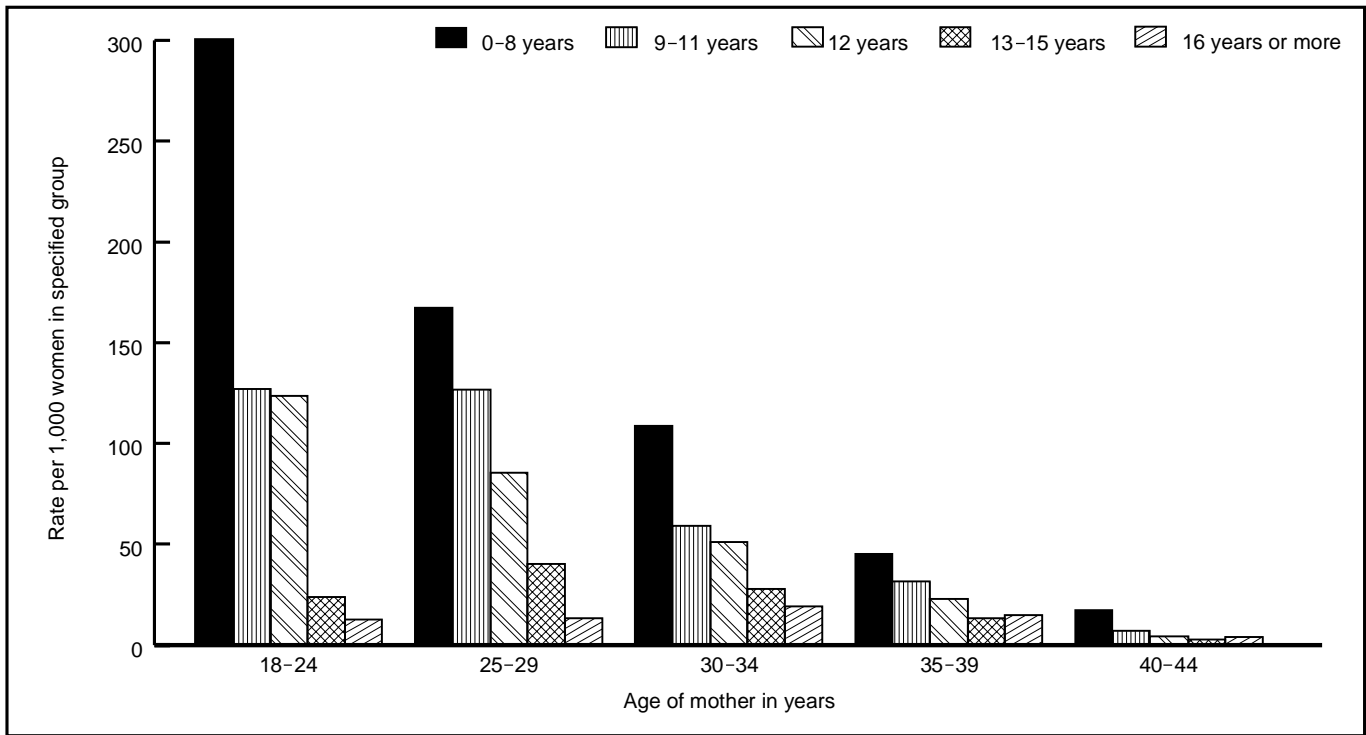


Figure 5. Birth rates for unmarried women by age and educational attainment of mother: United States, 1994

by mother’s education has changed, shifting to lower overall educational attainment. For example, based on data for all States except California, Texas, and Washington State, 3.6 percent of women giving birth in 1985 and 3.9 percent of women giving birth in 1994 had completed 8 years of schooling or fewer (8). However, based on birth data for the entire United States in 1994, 6.3 percent of mothers giving birth were in this educational attainment category, a difference of 62 percent (table A). The relative disparity between the two reporting areas in the proportions of mothers who had completed 9 years of schooling or more is much smaller than that for mothers with 8 years of education or fewer, ranging from 4 to 6 percent among the higher educational attainment groups. Because of this change in the number of areas reporting educational attainment, birth rates for 1994 are not compared with rates for previous years in this report.

**Discussion**

The fertility of Hispanic women is among the highest of any groups for which fertility can be reliably measured (9,10). The contribution of the fertility of

Table A. Percent distribution of births by educational attainment and race of mother: United States and total of 47 States and the District of Columbia, 1994

Years of school completed by mother	United States			Total of 47 States and the District of Columbia <sup>1</sup>		
	All races <sup>2</sup>	White	Black	All races <sup>2</sup>	White	Black
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
0-8 years . . . . .	6.3	6.8	3.6	3.9	3.8	3.8
9-11 years . . . . .	16.6	14.9	25.7	15.6	13.1	26.4
12 years . . . . .	35.0	34.2	40.7	36.5	35.6	40.6
13-15 years . . . . .	21.7	21.9	21.2	22.5	23.1	20.7
16 years or more . . . . .	20.4	22.2	8.7	21.5	24.3	8.5

<sup>1</sup>Excludes California, Texas, and Washington, which did not report educational attainment on the birth certificate in 1985.  
<sup>2</sup>Includes races other than white and black.

Hispanic women to that for all women with 8 years of schooling or fewer can be seen by comparing the age-specific birth rates in 1994 for Hispanic and non-Hispanic women in this education category (table 2). The rates for Hispanic women were substantially higher than those for non-Hispanic white and black women. Moreover, births to Hispanic women accounted for nearly two-thirds of births in this educational attainment group in 1994.

The patterns of total fertility rates (TFR’s) indicate that educational attainment is a very critical factor in accounting for lifetime fertility differentials.

Educational attainment of 1 year of college or more is predictive of sharply lower lifetime fertility, regardless of race or Hispanic origin. The TFR’s for Hispanic and non-Hispanic white and black women with some college were all lower than “replacement” level, 2.1, which is the level considered necessary for a given generation to exactly replace itself. As the educational attainment of the U.S. population continues to rise, the relatively low TFR’s of women with 1 year of college or more may be a factor in stopping the overall TFR from increasing.

The distinctive characteristics of the trend to delayed childbearing have been

described in previous reports (3,11). This pattern, observed mainly for college-educated women, is linked to lower first birth rates for women in their twenties and much higher first birth rates for women in their thirties. The differential in the rates by age was substantial in 1994, because rates for college-educated women in their twenties changed relatively little, while rates for women in their thirties have increased substantially.

The widespread assumption that unmarried college-educated women have contributed disproportionately to the recent increases in nonmarital fertility is not accurate. In fact birth rates for college-educated unmarried women are substantially below those of less-educated unmarried women (table 5). Among unmarried mothers aged 25 years and older, the proportion with college degrees was only 9 percent. More than 40 percent of nonmarital births were to women with less than a high school education.

Higher levels of education are typically associated with more timely receipt of prenatal care, better nutritional levels, higher weight gains, lower smoking rates, and better birth outcomes (9,12,13). In fact the higher education and more timely prenatal care receipt observed for many relatively older mothers have been credited with attenuating the usually elevated risk of a low birthweight outcome for their babies. For example, the risk of low birthweight for all first births to women aged 30–34 years was 7.8 percent in 1994; for first births to college graduates, it was 6.4 percent.

The relationship of education, prenatal care receipt, and low birthweight for mothers with 8 years of schooling or fewer differs from the expected pattern for Hispanic women. Despite the low educational level and less timely receipt of prenatal care, the low birthweight rate for babies born to these women is surprisingly favorable. This finding, often referred to as an epidemiologic paradox, has been reported elsewhere for Hispanic women (14–16); two-thirds of women with a grade school education are Hispanic. For these mothers—largely born outside the United States—other factors are involved in reducing a potentially high risk of low birthweight to levels comparable to those observed for babies born to low-risk mothers (15,16).

Maternal educational attainment continues to be an important factor in describing and interpreting variations in fertility. Birth rates by education can help to explain changes in fertility behavior including family formation. Over the last quarter century, childbearing patterns have changed dramatically in the United States. Large numbers of women—especially well-educated women—have postponed the start of their families. Over the next several years, it will be important to see whether fertility patterns by educational attainment described here continue as members of the large baby boom generation are replaced by the smaller numbers of women born after the baby boom.

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**Table 1. Birth rates by educational attainment, age, and race of mother: United States, 1994**

[Rates are live births per 1,000 women in specified group. Figures for educational attainment not stated are distributed]

Age and race of mother	Total	Years of school completed by mother					
		0-11 years					
		Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more
<b>All races</b>							
15-44 years <sup>1</sup>	66.7	72.7	88.9	67.9	78.0	48.4	70.9
15-19 years	58.9	50.8	50.3	50.9	147.1	20.2	*
15-17 years	37.6	35.0	31.2	35.8	*	*	*
18-19 years	91.5	114.4	281.4	103.8	140.3	20.2	*
20-24 years	111.1	216.1	247.9	207.0	174.6	55.7	45.1
25-29 years	113.9	133.4	166.1	120.2	125.7	97.7	108.5
30-34 years	81.5	68.7	107.0	54.2	69.7	66.4	124.1
35-39 years	33.7	31.4	44.9	23.8	26.2	25.4	56.0
40-44 years <sup>2</sup>	6.6	8.8	14.7	5.3	4.6	5.0	10.0
<b>White</b>							
15-44 years <sup>1</sup>	64.9	69.9	88.1	63.9	74.4	47.2	72.2
15-19 years	51.1	44.5	48.9	43.6	126.5	16.2	*
15-17 years	30.7	28.5	27.7	28.7	*	*	*
18-19 years	82.1	112.2	*	99.1	121.1	16.2	*
20-24 years	106.2	217.8	239.8	209.9	165.7	52.4	43.1
25-29 years	115.5	138.8	164.1	126.2	127.9	96.7	112.1
30-34 years	83.2	69.2	105.9	52.8	69.5	68.1	126.0
35-39 years	33.7	31.0	44.4	22.2	25.3	25.3	56.5
40-44 years <sup>2</sup>	6.4	8.5	13.7	4.9	4.2	4.8	10.3
<b>Black</b>							
15-44 years <sup>1</sup>	76.9	87.6	96.1	86.6	94.2	54.8	60.2
15-19 years	104.5	85.4	61.0	89.2	265.8	58.1	*
15-17 years	76.3	71.5	52.8	75.3	*	*	*
18-19 years	148.3	127.9	*	125.6	252.8	57.9	*
20-24 years	146.0	208.2	*	201.5	215.8	81.5	68.2
25-29 years	104.0	106.5	*	98.1	110.6	101.4	87.9
30-34 years	65.8	56.4	*	53.1	67.1	54.5	105.8
35-39 years	28.9	29.2	*	27.0	28.1	22.7	45.8
40-44 years <sup>2</sup>	6.1	6.7	*	5.4	5.9	5.1	7.7
<b>American Indian<sup>3</sup></b>							
15-44 years <sup>1</sup>	70.9	76.8	*	80.4	88.1	46.8	*
15-19 years	80.8	*	*	*	*	*	*
15-17 years	*	*	*	*	*	*	*
18-19 years	*	*	*	*	*	*	*
20-24 years	134.2	*	*	*	*	*	*
25-29 years	104.1	*	*	*	*	*	*
30-34 years	61.2	*	*	*	*	*	*
35-39 years	27.5	*	*	*	*	*	*
40-44 years <sup>2</sup>	6.2	*	*	*	*	*	*
<b>Asian or Pacific Islander</b>							
15-44 years <sup>1</sup>	66.8	60.8	95.1	44.9	90.4	52.5	67.0
15-19 years	27.1	21.7	*	20.4	*	*	*
15-17 years	16.1	14.7	*	14.7	*	*	*
18-19 years	44.1	*	*	*	*	*	*
20-24 years	73.1	*	*	*	*	33.0	*
25-29 years	118.6	*	*	*	174.1	105.8	93.0
30-34 years	105.2	*	*	*	86.6	89.0	118.2
35-39 years	51.3	*	*	*	48.1	44.4	59.5
40-44 years <sup>2</sup>	12.5	*	*	*	10.7	*	10.2

\* Figure does not meet standards of reliability or precision (based on fewer than 20 births or population less than 75,000).

<sup>1</sup>Includes births to women under 15 years, not shown separately.

<sup>2</sup>Rates computed by relating births to mothers aged 40 years and over to women aged 40-44 years.

<sup>3</sup>Includes births to Aleuts and Eskimos.

**Table 2. Birth rates by educational attainment, age and Hispanic origin of mother, and by race of mother for mothers of non-Hispanic origin: United States, 1994**

[Fertility rates are live births per 1,000 women 15–44 years of age specified group. Figures for educational attainment not stated are distributed]

Origin and age of mother	Total	Years of school completed by mother					
		0–11 years					
		Total	0–8 years	9–11 years	12 years	13–15 years	16 years or more
<b>Hispanic<sup>1</sup></b>							
15–44 years <sup>2</sup>	105.6	122.6	128.8	117.5	121.0	59.6	84.8
15–19 years	107.7	101.2	145.4	90.1	219.5	32.0	*
15–17 years	74.0	70.3	83.5	66.6	*	*	*
18–19 years	158.0	184.2	*	148.4	213.0	31.3	*
20–24 years	188.2	278.6	287.7	271.5	230.6	69.4	89.7
25–29 years	153.2	180.5	181.5	179.3	171.5	102.4	115.3
30–34 years	95.4	104.7	124.4	82.5	88.5	72.9	131.7
35–39 years	44.3	49.9	52.8	44.0	43.8	29.1	56.5
40–44 years <sup>3</sup>	11.1	15.6	18.5	10.0	8.2	6.6	12.5
<b>Non-Hispanic</b>							
<b>White</b>							
15–44 years <sup>2</sup>	58.3	48.3	43.6	49.2	68.0	45.5	70.8
15–19 years	40.4	32.7	23.4	34.3	111.5	14.5	*
15–17 years	22.8	20.8	15.4	22.0	*	*	*
18–19 years	67.4	88.8	*	84.5	106.9	14.5	*
20–24 years	90.9	181.9	161.1	185.6	152.9	49.7	40.4
25–29 years	107.9	101.2	*	99.0	119.9	95.1	110.5
30–34 years	80.7	43.3	59.6	40.5	66.5	67.1	124.6
35–39 years	32.1	17.7	25.0	16.0	23.5	24.8	55.9
40–44 years <sup>3</sup>	5.9	4.2	6.4	3.5	3.8	4.6	10.1
<b>Non-Hispanic</b>							
<b>Black</b>							
15–44 years <sup>2</sup>	79.0	89.8	97.0	88.9	96.7	56.4	61.8
15–19 years	107.7	88.2	61.5	92.4	274.4	58.3	*
15–17 years	78.6	73.7	54.0	77.7	*	*	*
18–19 years	152.9	133.0	*	131.2	261.4	58.1	*
20–24 years	150.3	209.2	*	203.4	223.3	84.8	69.7
25–29 years	107.0	108.5	*	101.4	113.6	104.7	91.3
30–34 years	67.5	56.8	*	54.3	68.8	56.2	108.6
35–39 years	29.5	29.3	*	27.1	28.5	23.4	47.1
40–44 years <sup>3</sup>	6.2	6.8	*	5.5	6.0	5.3	7.8

\* Figure does not meet standards of reliability or precision (based on fewer than 20 births or population less than 75,000).

<sup>1</sup>Persons of Hispanic origin may be of any race.

<sup>2</sup>Includes births to women under 15 years, not shown separately.

<sup>3</sup>Rates computed by relating births to women aged 40 years and over to women aged 40–44 years.

**Table 3. Birth rates by educational attainment, age and race of mother, and live-birth order of the child: United States, 1994**

[Rates are live births per 1,000 women in specified group. Figures for educational attainment not stated are distributed. Figures for live-birth order not stated are not distributed]

Live-birth order, age and race of mother	Total	Years of school completed by mother					
		Total	0-11 years				
			0-8 years	9-11 years	12 years	13-15 years	16 years or more
<b>All races<sup>1</sup></b>							
First births:							
15-44 years <sup>2</sup> . . . . .	27.5	29.8	29.6	29.8	30.1	19.8	31.9
15-19 years . . . . .	45.8	38.1	34.8	38.7	118.1	17.6	*
15-17 years . . . . .	32.8	30.3	25.4	31.3	*	*	*
18-19 years . . . . .	65.6	69.4	149.1	64.3	111.5	17.6	*
20-24 years . . . . .	52.9	61.6	82.4	55.6	82.8	35.0	35.5
25-29 years . . . . .	42.3	21.3	29.2	18.1	36.6	37.8	65.2
30-34 years . . . . .	22.3	7.5	11.7	6.0	14.9	17.3	46.2
35-39 years . . . . .	7.3	2.6	3.6	2.0	4.6	5.4	15.8
40-44 years <sup>3</sup> . . . . .	1.4	0.6	1.0	0.4	0.7	1.0	2.9
Second and higher order births:							
15-44 years <sup>2</sup> . . . . .	39.0	42.4	58.7	37.7	47.4	28.4	38.5
15-19 years . . . . .	13.1	12.4	15.1	11.9	28.0	2.4	*
15-17 years . . . . .	4.8	4.5	5.6	4.2	*	*	*
18-19 years . . . . .	25.8	44.3	130.5	38.8	27.9	2.4	*
20-24 years . . . . .	57.9	153.4	164.2	150.3	90.8	20.5	9.3
25-29 years . . . . .	71.2	111.5	136.2	101.5	88.4	59.4	42.7
30-34 years . . . . .	58.9	60.7	94.7	47.9	54.4	48.8	77.2
35-39 years . . . . .	26.2	28.6	41.1	21.6	21.4	19.9	39.9
40-44 years <sup>3</sup> . . . . .	5.2	8.1	13.6	4.8	3.9	4.0	7.1
<b>White</b>							
First births:							
15-44 years <sup>2</sup> . . . . .	27.0	28.4	27.7	28.6	29.6	19.4	32.2
15-19 years . . . . .	41.1	34.3	33.5	34.5	106.6	14.5	*
15-17 years . . . . .	27.6	25.3	22.5	25.9	*	*	*
18-19 years . . . . .	61.8	72.5	*	66.2	101.1	14.5	*
20-24 years . . . . .	53.2	67.8	81.4	62.9	83.9	33.9	34.2
25-29 years . . . . .	44.3	23.1	28.6	20.3	39.1	38.3	67.2
30-34 years . . . . .	23.0	7.6	11.1	6.0	15.2	17.9	46.2
35-39 years . . . . .	7.5	2.6	3.5	2.0	4.6	5.5	15.9
40-44 years <sup>3</sup> . . . . .	1.4	0.6	1.0	0.4	0.7	1.0	3.0
Second and higher order births:							
15-44 years <sup>2</sup> . . . . .	37.7	41.0	59.8	34.8	44.3	27.5	39.6
15-19 years . . . . .	9.9	9.8	15.0	8.8	19.0	1.6	*
15-17 years . . . . .	3.1	2.9	5.0	2.5	*	*	*
18-19 years . . . . .	20.2	38.9	*	32.3	19.1	1.6	*
20-24 years . . . . .	52.8	149.0	157.2	146.0	80.9	18.3	8.6
25-29 years . . . . .	70.9	115.0	134.7	105.3	88.2	58.0	44.3
30-34 years . . . . .	59.8	61.2	94.2	46.5	53.8	49.9	79.1
35-39 years . . . . .	26.0	28.2	40.7	20.1	20.4	19.7	40.3
40-44 years <sup>3</sup> . . . . .	5.0	7.8	12.6	4.4	3.5	3.8	7.2
<b>Black</b>							
First births:							
15-44 years <sup>2</sup> . . . . .	29.8	38.1	54.3	36.0	31.4	21.3	27.4
15-19 years . . . . .	73.9	59.3	45.0	61.5	186.8	48.1	*
15-17 years . . . . .	62.7	58.5	43.3	61.5	*	*	*
18-19 years . . . . .	91.3	61.9	*	61.5	174.4	47.9	*
20-24 years . . . . .	54.7	33.5	*	31.2	77.5	45.1	50.3
25-29 years . . . . .	27.6	10.6	*	8.8	22.8	31.8	48.6
30-34 years . . . . .	13.9	4.8	*	4.0	10.9	12.1	39.0
35-39 years . . . . .	4.7	1.7	*	1.5	3.3	3.8	12.7
40-44 years <sup>3</sup> . . . . .	0.9	0.5	*	0.4	0.6	0.8	2.0

See footnotes at end of table.

**Table 3. Birth rates by educational attainment, age and race of mother, and live-birth order of the child: United States, 1994—Con.**

[Rates are live births per 1,000 women in specified group. Figures for educational attainment not stated are distributed. Figures for live-birth order not stated are not distributed]

Live-birth order, age and race of mother	Years of school completed by mother						
	Total	0–11 years					
		Total	0–8 years	9–11 years	12 years	13–15 years	16 years or more
Black—Con.							
Second and higher order births:							
15–44 years <sup>2</sup> . . . . .	46.8	49.0	41.1	50.0	62.1	33.1	32.4
15–19 years . . . . .	30.4	25.6	15.6	27.2	77.5	9.6	*
15–17 years . . . . .	13.5	12.6	9.2	13.3	*	*	*
18–19 years . . . . .	51.4	65.2	*	63.3	77.0	9.6	*
20–24 years . . . . .	90.7	173.4	*	169.1	137.1	35.9	17.4
25–29 years . . . . .	75.9	95.1	*	88.5	87.0	69.0	38.8
30–34 years . . . . .	51.5	51.0	*	48.6	55.7	42.0	66.2
35–39 years . . . . .	24.0	27.2	*	25.3	24.5	18.6	32.8
40–44 years <sup>3</sup> . . . . .	5.2	6.1	*	4.9	5.2	4.3	5.6

\* Figure does not meet standards of reliability or precision (based on fewer than 20 births or population less than 75,000).

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>Includes births to women under 15 years, not shown separately.

<sup>3</sup>Rates computed by relating births to mothers aged 40 years and over to women aged 40–44 years.

**Table 4. First birth probabilities for women aged 20–44 years by educational attainment, age, and race of mother: United States, 1994**

[First birth probabilities are first births per 1,000 childless women. Figures for educational attainment not stated are distributed. Figures for live-birth order not stated are not distributed]

Age and race of mother	Years of school completed by mother				
	Total	0–11 years	12 years	13–15 years	16 years or more
All races <sup>1</sup>					
20–24 years . . . . .	81.5	237.7	164.4	44.9	38.0
25–29 years . . . . .	96.7	125.9	123.0	85.3	87.7
30–34 years . . . . .	83.3	70.1	72.5	64.4	107.3
35–39 years . . . . .	37.0	28.7	30.8	27.9	49.4
40–44 years . . . . .	7.8	6.4	5.4	6.3	10.3
White					
20–24 years . . . . .	79.6	260.5	158.0	42.7	36.5
25–29 years . . . . .	97.8	137.1	130.0	83.9	88.0
30–34 years . . . . .	83.6	69.7	72.2	64.6	107.4
35–39 years . . . . .	36.9	30.3	29.8	27.7	49.4
40–44 years . . . . .	7.8	6.2	4.9	6.5	10.4
Black					
20–24 years . . . . .	110.5	188.8	222.7	68.0	60.0
25–29 years . . . . .	84.2	*	83.7	86.1	87.2
30–34 years . . . . .	65.1	*	61.7	56.6	91.1
35–39 years . . . . .	28.5	*	*	23.8	*
40–44 years . . . . .	6.2	*	*	*	*

\* Figure does not meet standards of reliability or precision (based on fewer than 20 births or population less than 75,000).

<sup>1</sup>Includes races other than white and black.

**Table 5. Birth rates by educational attainment, age, marital status, and race of mother: United States, 1994**

[Rates are live births per 1,000 women in specified group. Figures for educational attainment not stated are distributed]

Marital status, age, and race of mother	Years of school completed by mother						
	Total	0-11 years					16 years or more
		Total	0-8 years	9-11 years	12 years	13-15 years	
<b>All races<sup>1</sup></b>							
<b>Married:</b>							
15-44 years <sup>2</sup> . . . . .	83.8	87.6	97.0	83.0	78.5	70.2	108.7
15-17 years . . . . .	*	*	*	*	*	*	*
18-24 years . . . . .	209.6	217.6	235.3	211.4	248.2	159.3	185.1
25-29 years . . . . .	153.9	125.0	170.9	105.7	143.5	141.0	208.6
30-34 years . . . . .	99.9	59.1	98.0	43.3	77.8	82.7	176.8
35-39 years . . . . .	38.9	26.7	39.0	18.9	27.3	30.0	73.4
40-44 years <sup>3</sup> . . . . .	7.4	8.1	13.5	4.5	4.8	5.8	12.3
<b>Unmarried:</b>							
15-44 years <sup>2</sup> . . . . .	46.4	63.1	80.7	59.5	74.7	23.4	12.9
15-17 years . . . . .	32.0	29.9	26.9	30.5	*	*	*
18-24 years . . . . .	71.5	141.0	300.9	126.9	123.5	23.7	12.5
25-29 years . . . . .	59.0	136.4	167.4	126.6	85.5	40.2	13.3
30-34 years . . . . .	40.1	70.2	108.7	59.0	50.8	28.0	19.0
35-39 years . . . . .	19.8	36.0	44.9	31.4	22.6	13.3	14.7
40-44 years <sup>3</sup> . . . . .	4.7	10.1	17.2	6.8	4.0	2.8	3.8
<b>White</b>							
<b>Married:</b>							
15-44 years <sup>2</sup> . . . . .	85.1	94.0	100.5	90.6	78.8	70.8	109.2
15-17 years . . . . .	*	*	*	*	*	*	*
18-24 years . . . . .	212.2	226.8	232.9	224.4	246.2	163.9	171.4
25-29 years . . . . .	156.4	128.5	177.8	107.9	147.2	140.1	213.7
30-34 years . . . . .	101.3	60.0	102.6	42.8	77.2	85.7	177.1
35-39 years . . . . .	38.8	27.6	37.3	20.1	26.7	30.1	71.7
40-44 years <sup>3</sup> . . . . .	7.2	7.8	12.5	4.3	4.4	5.6	12.6
<b>Unmarried:</b>							
15-44 years <sup>2</sup> . . . . .	38.3	56.0	79.7	50.5	62.7	17.0	9.7
15-17 years . . . . .	24.1	22.4	22.1	22.5	*	*	*
18-24 years . . . . .	57.6	137.8	307.2	118.9	98.6	16.7	8.4
25-29 years . . . . .	49.7	152.2	167.9	144.5	75.8	29.0	9.4
30-34 years . . . . .	34.2	75.7	111.9	60.6	43.7	21.9	14.3
35-39 years . . . . .	17.3	37.9	55.0	28.1	18.8	10.7	13.3
40-44 years <sup>3</sup> . . . . .	4.3	10.9	*	6.6	3.4	2.3	3.4
<b>Black</b>							
<b>Married:</b>							
15-44 years <sup>2</sup> . . . . .	67.0	48.5	*	46.0	68.7	59.6	98.4
15-17 years . . . . .	*	*	*	*	*	*	*
18-24 years . . . . .	161.7	*	*	*	204.8	121.1	*
25-29 years . . . . .	122.2	*	*	*	105.6	130.6	*
30-34 years . . . . .	76.2	42.2	*	*	74.8	59.8	150.1
35-39 years . . . . .	31.7	18.5	*	14.2	25.8	24.2	92.5
40-44 years <sup>3</sup> . . . . .	6.7	5.2	*	3.9	6.2	6.2	9.7
<b>Unmarried:</b>							
15-44 years <sup>2</sup> . . . . .	82.1	94.0	107.3	92.5	107.4	52.9	32.8
15-17 years . . . . .	75.1	70.4	61.0	72.0	*	*	*
18-24 years . . . . .	139.2	156.8	*	152.0	217.3	69.3	46.9
25-29 years . . . . .	93.6	117.0	*	109.0	105.7	90.4	38.4
30-34 years . . . . .	57.2	61.0	*	57.2	65.5	44.9	*
35-39 years . . . . .	26.3	32.3	*	35.2	31.3	20.1	20.1
40-44 years <sup>3</sup> . . . . .	5.9	8.1	*	*	5.2	4.6	5.1

\* Figure does not meet standards of reliability or precision (based on fewer than 20 births or population less than 75,000).

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>Includes births to women under 15 years not shown separately.

<sup>3</sup>Rates computed by relating births to mothers 40 years and over to women aged 40-44 years.



**Table 6. Total live births and first births to women aged 20–39 years of age by age of mother and percent distribution by educational attainment of mother, according to age and race of mother: Total reporting areas, 1980, 1985, and 1994**

[Figures for educational attainment not stated are included in frequency totals but excluded from percent distribution; figures for live-birth order not stated are not distributed]

Age of mother and years of school completed by mother	All races <sup>1</sup>			White			Black		
	1994	1985	1980	1994	1985 <sup>2</sup>	1980 <sup>2</sup>	1994	1985 <sup>2</sup>	1980 <sup>2</sup>
Total births									
20–24 years . . . . .	1,001,418	882,134	973,745	764,085	681,066	770,238	197,841	175,509	178,962
Number									
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	6.8	3.2	3.4	8.1	3.3	3.4	1.6	2.1	2.5
9–11 years . . . . .	20.0	19.7	19.4	19.7	18.5	17.9	21.7	24.0	25.6
12 years . . . . .	45.6	53.6	55.0	44.8	54.3	56.5	49.3	51.6	49.8
13–15 years . . . . .	22.7	19.3	18.0	22.3	19.3	17.9	23.9	19.5	18.9
16 years or more . . . . .	4.9	4.2	4.1	5.1	4.6	4.3	3.5	2.8	3.1
Number									
25–29 years . . . . .	1,088,845	935,356	884,636	889,581	777,887	743,117	142,355	127,859	115,612
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	5.2	2.2	2.7	5.7	1.9	2.4	1.7	2.7	3.3
9–11 years . . . . .	9.4	8.7	8.8	8.8	7.3	7.3	13.6	16.5	18.3
12 years . . . . .	36.0	43.4	43.0	35.0	43.6	42.9	44.1	44.2	45.2
13–15 years . . . . .	26.1	25.2	23.9	25.9	25.4	24.5	28.0	24.7	21.1
16 years or more . . . . .	23.3	20.5	21.6	24.6	21.8	22.9	12.5	11.8	12.2
Number									
30–34 years . . . . .	906,498	538,122	434,383	754,871	451,436	362,502	99,155	66,132	54,796
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	4.4	2.4	3.7	4.6	1.9	3.2	2.0	4.0	5.3
9–11 years . . . . .	5.8	5.6	7.4	5.1	4.3	5.9	11.5	14.3	17.0
12 years . . . . .	29.0	32.7	35.4	28.1	31.8	34.8	38.1	40.2	41.4
13–15 years . . . . .	24.6	24.0	21.3	24.3	24.3	21.8	28.7	23.1	19.4
16 years or more . . . . .	36.2	35.3	32.2	37.9	37.7	34.3	19.7	18.4	16.8
Number									
35–39 years . . . . .	371,608	161,821	108,969	305,291	131,600	86,599	42,029	22,542	17,070
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	5.4	4.2	7.4	5.5	3.5	6.6	2.8	6.3	9.8
9–11 years . . . . .	5.1	6.6	11.8	4.2	5.0	9.7	11.4	15.4	23.0
12 years . . . . .	26.4	30.3	37.0	25.3	29.0	37.3	36.1	39.3	38.9
13–15 years . . . . .	23.4	21.1	17.4	23.2	21.4	18.2	27.0	20.2	14.1
16 years or more . . . . .	39.7	37.9	26.4	41.7	41.1	28.2	22.7	18.8	14.3
Number									
20–24 years . . . . .	474,004	429,220	479,424	380,435	349,070	401,811	73,726	68,805	66,514
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	4.8	1.7	1.8	5.5	1.7	1.8	1.1	1.2	1.3
9–11 years . . . . .	11.3	10.4	9.9	11.9	10.1	9.5	9.0	11.3	11.4
12 years . . . . .	45.7	55.3	57.4	45.6	55.9	58.5	47.5	53.2	52.3
13–15 years . . . . .	30.0	25.7	24.2	28.9	25.1	23.4	35.5	29.1	28.9
16 years or more . . . . .	8.1	6.9	6.7	8.1	7.2	6.8	7.0	5.3	6.1

See footnotes at end of table.

**Table 6. Total live births and first births to women aged 20–39 years of age by age of mother and percent distribution by educational attainment of mother, according to age and race of mother: Total reporting areas, 1980, 1985, and 1994—Con.**

[Figures for educational attainment not stated are included in frequency totals but excluded from percent distribution; figures for live-birth order not stated are not distributed]

Age of mother and years of school completed by mother	All races <sup>1</sup>			White			Black		
	1994	1985	1980	1994	1985 <sup>2</sup>	1980 <sup>2</sup>	1994	1985 <sup>2</sup>	1980 <sup>2</sup>
Number									
25–29 years . . . . .	402,096	328,466	296,048	338,969	285,810	262,062	37,470	31,532	24,861
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	2.5	0.9	1.1	2.6	0.7	1.0	1.2	1.9	1.9
9–11 years . . . . .	3.8	3.1	2.7	3.7	2.8	2.3	4.6	5.3	5.6
12 years . . . . .	28.4	35.8	34.1	28.1	35.9	34.1	34.6	36.7	36.9
13–15 years . . . . .	27.3	27.2	26.1	27.0	27.0	26.2	33.4	30.8	26.7
16 years or more . . . . .	38.0	33.0	36.0	38.7	33.6	36.4	26.3	25.2	28.9
Number									
30–34 years . . . . .	246,522	131,625	87,240	207,789	115,253	75,708	20,794	11,089	7,610
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	1.8	0.9	1.6	1.7	0.7	1.3	1.4	2.5	2.7
9–11 years . . . . .	2.4	2.0	2.5	2.1	1.6	2.1	4.1	5.4	5.4
12 years . . . . .	22.7	25.2	26.4	22.4	24.8	26.0	29.4	31.0	33.8
13–15 years . . . . .	23.5	23.3	20.6	23.2	23.3	20.5	30.4	25.2	22.3
16 years or more . . . . .	49.6	48.6	48.9	50.5	49.7	50.0	34.7	36.0	35.8
Number									
35–39 years . . . . .	80,272	29,591	13,812	67,667	25,273	11,506	6,730	2,920	1,581
Percent distribution									
All years of school completed . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–8 years . . . . .	2.0	1.8	3.7	2.0	1.4	3.3	1.3	3.8	6.4
9–11 years . . . . .	2.0	2.4	4.6	1.7	2.0	4.1	3.9	5.3	8.4
12 years . . . . .	21.4	23.4	30.3	21.0	22.5	29.9	26.9	32.7	37.1
13–15 years . . . . .	22.9	20.1	17.8	22.5	20.0	18.0	28.6	22.3	18.4
16 years or more . . . . .	51.8	52.3	43.5	52.8	54.2	44.7	39.2	35.9	29.7

<sup>1</sup>Includes races other than white and black.

<sup>2</sup>Figures are by race of child; see [Technical notes](#).

NOTES: Data for 1980 and 1985 exclude California, Texas, and Washington, which did not report educational attainment on the birth certificate. All States and the District of Columbia reported educational attainment in 1994.

**Table 7. Births by educational attainment, age, and race of mother: United States, 1994**

[Figures for educational attainment not stated are distributed]

Age and race of mother	Total	Years of school completed by mother					
		0-11 years					
		Total	0-8 years	9-11 years	12 years	13-15 years	16 years or more
<b>All races</b>							
15-44 years <sup>1</sup>	3,952,767	905,965	251,162	654,803	1,383,955	857,313	805,534
15-19 years	505,488	324,506	50,063	274,443	158,453	22,529	-
15-17 years	195,169	178,783	28,695	150,089	16,074	312	-
18-19 years	310,319	145,722	21,368	124,354	142,379	22,217	-
20-24 years	1,001,418	268,625	68,422	200,203	456,986	227,064	48,744
25-29 years	1,088,845	158,893	56,827	102,065	391,693	284,064	254,195
30-34 years	906,498	92,595	39,647	52,948	262,899	222,561	328,443
35-39 years	371,608	39,160	20,101	19,059	98,053	86,922	147,473
40 years and over	66,009	9,286	5,811	3,475	15,871	14,172	26,679
<b>White</b>							
15-44 years <sup>1</sup>	3,121,004	678,945	212,390	466,555	1,065,898	682,010	694,151
15-19 years	348,081	222,576	39,848	182,728	110,314	15,190	-
15-17 years	126,388	115,311	20,721	94,589	10,847	230	-
18-19 years	221,693	107,266	19,127	88,139	99,467	14,960	-
20-24 years	764,085	212,251	61,719	150,532	342,408	170,446	38,980
25-29 years	889,581	128,555	50,304	78,251	311,574	230,833	218,619
30-34 years	754,871	72,920	34,370	38,551	212,313	183,425	286,212
35-39 years	305,291	29,900	16,937	12,963	77,307	70,702	127,382
40 years and over	53,117	6,765	4,478	2,288	11,982	11,412	22,958
<b>Black</b>							
15-44 years <sup>1</sup>	636,391	186,674	23,274	163,400	258,883	135,257	55,577
15-19 years	140,968	91,718	8,782	82,936	42,798	6,452	-
15-17 years	62,563	57,792	7,211	50,582	4,699	71	-
18-19 years	78,405	33,926	1,571	32,354	38,099	6,380	-
20-24 years	197,841	46,113	3,243	42,870	97,524	47,251	6,953
25-29 years	142,355	21,780	2,465	19,315	62,841	39,930	17,804
30-34 years	99,155	13,358	1,976	11,382	37,799	28,417	19,581
35-39 years	42,029	5,984	1,198	4,786	15,184	11,334	9,527
40 years and over	7,578	1,257	412	845	2,737	1,873	1,712
<b>American Indian<sup>2</sup></b>							
15-44 years <sup>1</sup>	37,740	12,852	1,745	11,106	15,337	7,411	2,140
15-19 years	7,705	5,161	603	4,558	2,239	305	-
15-17 years	3,067	2,857	407	2,451	207	3	-
18-19 years	4,638	2,304	196	2,108	2,032	302	-
20-24 years	12,158	3,640	411	3,228	5,771	2,470	277
25-29 years	9,010	2,038	264	1,774	3,907	2,325	740
30-34 years	5,738	1,203	179	1,024	2,343	1,490	702
35-39 years	2,435	483	93	391	906	701	345
40 years and over	483	115	27	88	171	121	76
<b>Asian or Pacific Islander</b>							
15-44 years <sup>1</sup>	157,632	27,526	13,636	13,891	44,071	32,708	53,317
15-19 years	8,734	5,036	806	4,230	3,111	587	-
15-17 years	3,151	2,825	348	2,476	319	7	-
18-19 years	5,583	2,212	458	1,754	2,792	580	-
20-24 years	27,334	6,576	3,014	3,562	11,300	6,920	2,539
25-29 years	47,889	6,528	3,760	2,767	13,437	10,981	16,943
30-34 years	46,734	5,159	3,104	2,055	10,527	9,256	21,791
35-39 years	21,853	2,821	1,865	955	4,703	4,198	10,131
40 years and over	4,831	1,160	899	261	992	765	1,913

- Quantity zero

<sup>1</sup>Includes births to mothers under 15 years, not shown separately.

<sup>2</sup>Includes births to Aleuts and Eskimos.

NOTE: Figures for education not stated are distributed independently by age and education; therefore, figures may not add to totals.

**Table 8. Female population by educational attainment, age, and race: United States, 1994**

Age and race of woman	Total	Years of school completed by mother				
		0-8 years	9-11 years	12 years	13-15 years	16 years or more
All races <sup>1</sup>		Number in thousands				
15-44 years . . . . .	59,283	2,826	9,641	17,746	17,702	11,368
15-19 years . . . . .	8,580	994	5,388	1,077	1,115	5
15-17 years. . . . .	5,188	918	4,190	62	16	1
18-19 years. . . . .	3,392	76	1,198	1,015	1,099	4
20-24 years . . . . .	9,015	276	967	2,618	4,073	1,081
25-29 years . . . . .	9,558	342	849	3,117	2,907	2,343
30-34 years . . . . .	11,119	371	978	3,773	3,351	2,647
35-39 years . . . . .	11,040	447	801	3,739	3,417	2,635
40-44 years . . . . .	9,970	395	657	3,422	2,839	2,657
White						
15-44 years . . . . .	48,121	2,411	7,305	14,336	14,451	9,617
15-19 years . . . . .	6,814	815	4,190	872	935	2
15-17 years. . . . .	4,113	748	3,300	51	13	Z
18-19 years. . . . .	2,701	67	889	822	922	2
20-24 years . . . . .	7,195	257	717	2,066	3,250	905
25-29 years . . . . .	7,699	307	620	2,435	2,388	1,950
30-34 years . . . . .	9,074	325	729	3,056	2,693	2,271
35-39 years . . . . .	9,072	381	584	3,062	2,791	2,255
40-44 years . . . . .	8,266	327	466	2,844	2,395	2,234
Black						
15-44 years . . . . .	8,272	242	1,888	2,749	2,470	923
15-19 years . . . . .	1,349	144	930	161	111	3
15-17 years. . . . .	820	136	672	10	1	Z
18-19 years. . . . .	529	8	258	151	110	2
20-24 years . . . . .	1,355	9	213	452	580	102
25-29 years . . . . .	1,369	8	197	568	394	203
30-34 years . . . . .	1,507	23	214	563	521	185
35-39 years . . . . .	1,453	27	177	541	500	208
40-44 years . . . . .	1,239	32	157	464	364	223

Z Quantity more than 0 but less than 500 where numbers are rounded to thousands.

<sup>1</sup>Includes races other than white and black.

SOURCES: U.S. Bureau of the Census. Unpublished tabulation by educational attainment from the March 1994 Current Population Survey.

## Technical notes

### Source of data

Data shown in this report for 1985 and 1994 are based on 100 percent of the birth certificates in all States and the District of Columbia. The data are provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program (VSCP). Data for 1980 are based on 100 percent of the birth certificates from 44 States participating in the VSCP and on a 50-percent sample from all other States. A more detailed explanation of the sampling procedures and sampling errors for 1980 is presented in the NCHS annual report, *Vital Statistics of the United States, 1980*, Volume I, Natality (17).

Birth data used to compute rates by educational attainment are based on information obtained from all States and the District of Columbia in 1994.

For computing rates for 1994, births with educational attainment not stated were distributed in the same proportions as those of known educational attainment within each age/race/ethnicity category (table 7). The proportion of births with maternal education not reported was 1.4 percent in 1994. When computing birth-order specific birth rates, births of unknown birth order (0.6 percent) were omitted.

### Marital status

Marital status of mother was reported directly on the birth certificates of 45 States and the District of Columbia in 1994. For the remaining five States, mother's marital status was inferred from the presence of a paternity acknowledgment, a comparison of the child's and parents' surname(s), or from other information on the birth certificate. Detailed information on the inferential procedures is presented in other reports (9,18).

### Race and Hispanic origin

The racial designation used in tabulations in this report is the race of the mother for 1994 and that of the child for 1980 and 1985; the race of the child was determined from the race of the parents as entered on the birth certificate. A number of factors influenced NCHS' decision

to tabulate birth data by race of mother beginning in 1989; these are discussed elsewhere (9). When race of mother is not reported (0.5 percent of 1994 births), race is assigned to that of the father if known or it is allocated electronically to the specific race of the mother on the preceding record with a known race of mother.

Tabulations by Hispanic origin are by the origin of the mother. Births with origin not stated (1.1 percent in 1994) are included with births of non-Hispanic origin before calculating birth rates.

### Populations

Data on educational attainment of the population for 1994 are based on a question in the March 1994 Current Population Survey (CPS), a large national household survey: "What is the highest grade of school [name of person] has completed, or the highest degree [name of person] has received?" This question has been used since 1992 and differs from questions asked before 1992. In earlier years the educational attainment was determined from a two-part question that asked respondents to report the highest grade they had attended, and whether they had completed that grade. As is the case for the birth certificate question, educational attainment refers to formal education only. A major reason for the change in question was that many people are now taking more than the traditional 4 years to complete a bachelor's degree. In addition, it was not possible with the previous question to identify exactly what degree, if any, a person had attained. For others the reporting of 12 years of school completed was not necessarily an indication that the person had attained a high school diploma. The reasons for the change in procedure for measuring educational attainment are described in detail elsewhere (19,20). There is potential incompatibility between the birth certificate question and the new CPS question. The intention of the birth certificate question is to accurately identify the educational attainment of mothers, including the implied receipt of a diploma or degree. However, there may be some disparity between the reported educational level and the receipt of a diploma or degree, particularly in recent

years as the length of time to acquire a bachelor's degree has lengthened for many people.

It is believed that the rates in this report are generally valid for comparing fertility levels among women of varying educational levels. The differences of particular interest in birth rates are quite large for women in adjacent educational attainment categories. It is unlikely that a shift of a few percentage points in the number of women in a specific group would change the relationships shown here. Moreover, rates are not shown separately for women with post-bachelor degrees, the group for whom the discontinuity is probably greatest.

Populations used to compute birth rates by educational attainment for 1994 were provided by the U.S. Bureau of the Census (7) (table 8). Rates by marital status and rates for childless women are based on unpublished population tabulations obtained from the U.S. Bureau of the Census (7,21).

*Marital status*—Birth rates by marital status shown in this report for ages under 25 years are provided for somewhat different categories than other rates. Because the March 1994 CPS did not provide separate estimates of the population for ages 18–19 and 20–24 years by marital status, education, sex, and race, birth rates have been computed for the combined age group 18–24 years for this report.

### Reliability of rates

Because the numbers of births for most rates are relatively large, the standard error (expressed as a percent of the rate) is generally small. Rates are not shown if there were fewer than 20 births in the numerator.

The populations used to compute rates for 1994 are based on the March 1994 CPS. Rates are not shown for categories where the denominator for a rate is fewer than 75,000 estimated women. These guidelines follow the suggestions of the U.S. Bureau of the Census (20,22).

In accordance with NCHS editing guidelines, when mothers aged 15–17 years are reported to have completed 16 years of schooling or more, the educational attainment is considered "Not stated" because the reported age of mother



and educational attainment level are not compatible. Consequently, no rates are computed for mothers aged 15–17 years with 16 years of schooling or more.

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