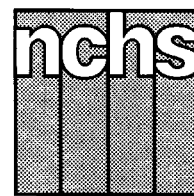


# Monthly Vital Statistics Report



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

## Report of Final Natality Statistics, 1996

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### Abstract

**Objectives**—This report presents 1996 data on U.S. births according to a wide variety of characteristics. Data are presented for maternal demographic characteristics including age, live-birth order, race, Hispanic origin, marital status, and educational attainment; maternal lifestyle and health characteristics (medical risk factors, weight gain, tobacco and alcohol use); medical care utilization by pregnant women (prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth, and method of delivery); and infant health characteristics (period of gestation, birthweight, Apgar score, abnormal conditions, congenital anomalies, and multiple births). Also presented are birth and fertility rates by age, live-birth order, race, Hispanic origin, and marital status. Selected data by mother's State of residence are shown including teenage birth rates and total fertility rates, as well as data on month and day of birth, sex ratio, and age of father. Trends in fertility patterns and maternal and infant characteristics are described and interpreted.

**Methods**—Descriptive tabulations of data reported on the birth certificates of the 3.9 million births that occurred in 1996 are presented.

**Results**—Birth and fertility rates declined very slightly in 1996. Birth rates for teenagers fell 3 to 8 percent. Rates for women in their twenties increased slightly in 1996, the first increase since 1990, while rates for women in their thirties rose 2 to 3 percent. The number and percent of births to unmarried women increased slightly in 1996 while the birth rate for unmarried women declined modestly. Smoking by pregnant women overall dropped again in 1996, but increased among teenagers. Improvements in prenatal care utilization continued. The cesarean delivery rate declined. The proportion of multiple births continued to rise; higher order multiple births (e.g., triplets, quadruplets) rose by 19 percent. Key measures of birth outcome—the percents of low birthweight and preterm births—increased slightly, in large part the result of increases in multiple births.

**Keywords:** birth certificate • maternal and infant health • birth rates • maternal characteristics

### Highlights

**Births** in the United States declined very slightly in 1996, to 3,891,494, the smallest number recorded since 1987. The **birth rate** also dropped slightly in 1996 to 14.7 births per 1,000 total population, the lowest level reported in two decades. The **fertility rate**, which relates births to the number of women of childbearing age, declined slightly in 1996 to 65.3 births per 1,000 women aged 15–44 years, its lowest level since 1976.

**Fertility rates for women in racial and Hispanic origin subgroups** increased for Mexican and Cuban women, but declined for other groups by 1–6 percent. Rates differ considerably among groups, with Mexican women having the highest rate, 119.3 per 1,000 aged 15–44 years. Rates are successively lower for “other” Hispanic, non-Hispanic black, Puerto Rican, American Indian, Asian or Pacific Islander, Cuban, and non-Hispanic white women.

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
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**The birth rate for teenagers** continued to decline in 1996, falling 4 percent to 54.4 births per 1,000 women aged 15–19 years. The rate for young teenagers 15–17 years declined 6 percent to 33.8 per 1,000, while the rate for older teenagers 18–19 years declined 3 percent to 86.0. During 1991–96, the rate for ages 15–19 years dropped 12 percent, while rates for teenagers 15–17 and 18–19 years fell 13 and 9 percent, respectively. Birth rates for teenagers 15–19 years declined for all racial and Hispanic subgroups except Cubans, with particularly large reductions for non-Hispanic black teenagers—5 percent overall for 1995–96. During the 1991–96 period, the rate for non-Hispanic black teenagers dropped 21 percent. Teenage birth rates fell significantly in all but 3 States during 1991–96. The reductions in U.S. teenage birth rates together with recently reported declines in abortions among teenagers indicate that the teenage pregnancy rate has continued to fall in the 1990's.

**Birth rates for women in their twenties**, the peak childbearing ages, increased in 1996 for the first time since 1990. The rate for women aged 20–24 years rose 1 percent to 110.4 per 1,000, while the rate for women aged 25–29 years rose 1 percent to 113.1 per 1,000. Birth rates for women in their twenties have been relatively stable over the past two decades; this age group accounts for 52 percent of all births.

**Birth rates for women in their thirties** increased 2–3 percent in 1996, to 83.9 per 1,000 for women aged 30–34 years, and to 35.3 for women aged 35–39 years. These rates have risen almost without interruption since the mid-to-late 1970's. However, the pace of increase has slowed in the 1990's, especially for women aged 30–34 years. **The birth rate for women aged 40–44** also increased in 1996, to 6.8 per 1,000.

**The first birth rate** declined in 1996 to its lowest level ever, 26.8 first births per 1,000 women aged 15–44 years. Among teenagers, first birth rates as well as rates for second and third order births (that is, repeat childbearing) declined considerably.

**The birth rate for unmarried women** in 1996 was 44.8 births per 1,000 unmarried women aged 15–44 years,

1 percent lower than in 1995 and 4 percent lower than its highest level, 46.9 in 1994. The number of births to unmarried women increased 1 percent to 1,260,306 in 1996, while the percent of all births occurring to unmarried women rose slightly to 32.4 percent. The birth rate for unmarried non-Hispanic white women increased slightly, while the rates for unmarried black and Hispanic women each declined 2 percent, with the rate for black women reaching a record low. The birth rate for unmarried teenagers fell 3 percent in 1996 to 42.9 per 1,000, down 8 percent from its 1994 high, 46.4.

**Cigarette smoking during pregnancy** continued to decline in 1996, to 13.6 percent of women giving birth. Tobacco use during pregnancy has fallen steadily since 1989. However, smoking among pregnant teenagers increased in 1996, with particularly large increases among teenagers 15–17 years; 15.4 percent were reported to have smoked in 1996, up 5 percent compared with 1995. Increases were also particularly large for Mexican, Puerto Rican, and non-Hispanic black teenagers 15–17 years. In general, smoking rates are lowest for Hispanic and Asian or Pacific Islander women. Maternal smoking has a strong adverse impact on infant birthweight. In 1996, 12.1 percent of births to smokers compared with 6.9 percent of births to non-smokers weighed less than 2,500 grams (5 lb 8 oz).

The proportion of women with timely **prenatal care** rose for the seventh consecutive year, climbing to 81.9 percent from 81.3 percent for 1995, and the percent of women with late or no care declined from 4.2 to 4.0 percent. Timely care has risen for all racial and ethnic groups during the 1990's, and improvement has been especially noteworthy among non-Hispanic black, Mexican, Puerto Rican, and Central and South American mothers.

Data on **method of delivery** show that the rate of cesarean delivery declined for the seventh consecutive year, and was 9 percent lower in 1996 (20.7 percent) than in 1989 (22.8 percent). The primary cesarean rate was also 9 percent lower in 1996 than in 1989 (14.6 first cesareans per 100 women who had no previous cesarean in 1996 compared with 16.1 in

1989). The rate of vaginal birth following a previous cesarean delivery (VBAC) was 50 percent higher in 1996 (28.3) than in 1989 (18.9). Cesarean rates increased steadily with advancing age of mother and were more than twice as high for mothers in their forties (31.6) as for teenagers (14.5). The percent of births delivered by forceps continued to decline (3.2 percent in 1996), while the use of vacuum extraction rose (6.2 percent in 1996).

The number of twins born in 1996 increased 4 percent (100,750 compared with 96,736 for 1995), while higher order **multiple births** rose 19 percent to an unprecedented 5,939 (nearly 1,000 more compared with 4,973 in 1995). For comparison, there were approximately 1,000 total higher order multiple births in each year during the 1970's. The higher order multiple birth total included 5,298 triplets, 560 quadruplets, and 81 quintuplets and other higher order multiples. The twinning rate grew by 4 percent (from 24.8 to 25.9 per 1,000) and higher order multiple birth rate by 20 percent (from 127.5 to 152.6 per 100,000) for 1995–96. Since 1980, the twinning rate has risen slightly more than a third (from 18.9 per 1,000) and the higher order multiple birth rate has quadrupled (from 37.0 per 100,000).

The percent of **babies born preterm**, i.e., at less than 37 completed weeks of gestation was unchanged in 1996, at 11.0 percent. The preterm rate rose fairly steadily from 1981 (9.4 percent), but has not improved since 1993. The rate increased for births to non-Hispanic white mothers for 1995–96, but declined among births to non-Hispanic black mothers (17.8 to 17.5 percent), and was unchanged for Hispanic mothers. Most of the rise in preterm births to non-Hispanic white mothers can be attributed to increases in multiple births among these women. (Multiple births are at greater risk of preterm delivery.)

**The low-birthweight (LBW)** rate rose to 7.4 percent for 1996 from 7.3 percent for 1995. The percent LBW has risen 10 percent since 1984, from 6.7. Most of the increase in LBW for the current year is attributable to the rise in LBW among births to non-Hispanic white women (from 6.2 to 6.4 percent) and to the growth in

the multiple birth rate among these women. Low birthweight for births to non-Hispanic black mothers declined from 13.2 to 13.1 percent for 1995–96, and has decreased from 13.4 since 1993. LBW was stable among births to women of Hispanic origin at 6.3 percent for the current year.

## Introduction

This report presents detailed data on numbers and characteristics of births in 1996, birth and fertility rates, maternal lifestyle and health characteristics, medical services utilization by pregnant women, and infant health characteristics. These data provide important information on fertility patterns among American women by such characteristics as age, live-birth order, race, Hispanic origin, marital status, and educational attainment. Up-to-date information on these fertility patterns is critical to understanding population growth and change in this country and in individual States. Data on maternal characteristics affecting birth outcome such as weight gain, tobacco and alcohol use, and medical risk factors are useful in accounting for differences in birth outcomes. Information on use of prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth and place of delivery, and method of delivery by maternal demographic characteristics can also help to explain differences in birth outcomes. It is very important that data on birth outcomes, especially levels of low birthweight and preterm birth, be continuously monitored, because these variables are important predictors of infant mortality and morbidity.

A report of preliminary birth statistics for 1996 presented data on selected topics based on a substantial sample (about 94 percent) of the 1996 birth file (1). The selected measures included birth rates by age, race, and Hispanic origin of mother, and by live-birth order, and summary national and State data on marital status, prenatal care, cesarean delivery, and low birthweight. Findings based on the complete file in this report are essentially identical to those based on the preliminary series, thus validating the preliminary statistics.

The tabulations in this release of birth statistics for the Nation have been extensively redesigned for the 1996 data year. New tables have been added showing data by Hispanic origin of the mother. In most cases, data are shown for the following minimum categories: Hispanic, non-Hispanic white, and non-Hispanic black. In addition, several tables provide data separately for Hispanic subgroups: Mexican, Puerto Rican, Cuban, Central and South American, and other and unknown Hispanic. Other tables provide data for racial and ethnic subgroups: American Indian, Chinese, Japanese, Filipino, Hawaiian, and other Asian or Pacific Islander.

Although the overwhelming majority of Hispanic-origin births are to white women (97 percent in 1996), there are notable differences in childbearing patterns between Hispanic women and non-Hispanic white women. Thus, it is important to present data and trends for these groups separately. In addition, there are sizable differences in fertility patterns between women born in the 50 States and the District of Columbia and women born elsewhere. Therefore, several of the tables that present data for Hispanic births and for Asian or Pacific Islander births also show statistics separately according to the mother's place of birth.

Birth data by race and Hispanic origin are presented in several different ways in the tables. Race and Hispanic origin are reported independently on the birth certificate. In tabulations by race only, data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race (data for fathers are tabulated according to the father's race). In tabulations of birth data by race and Hispanic origin, data for Hispanic persons are not further classified by race because as noted above, the vast majority of births to Hispanic women are reported as white. In these tabulations, data for non-Hispanic persons are classified according to the race of the mother, because there are substantial differences in fertility and maternal and infant health between Hispanic and non-Hispanic white women.

Data for Hispanic subgroups are shown in most cases for five groups: Mexican, Puerto Rican, Cuban, Central

and South American, and other and unknown Hispanic. The category "other and unknown Hispanic" includes births to women from Spain, births to "U.S. Southwest" women in New Mexico, and births for whom the Hispanic origin group was not further specified. Tables providing birth rates for Hispanic subgroups present rates for the category "other Hispanic," which includes all births to Central and South American and other and unknown Hispanic women. These groups are combined because more detailed population data are not available.

Trend tables have been introduced to provide data by Hispanic origin for the period 1989–95, the years for which this information is generally complete (2). Text discussions of trends focusing on this recent period are based on data tabulated by race and Hispanic origin in most cases. For longer-term trends, the discussions are based on data tabulated by race only. In these cases, births to Hispanic women are tabulated according to the mother's race; as noted above, 97 percent of Hispanic births were to white women in 1996. Also included in this report for the first time are State-specific teenage birth rates and total fertility rates for 1996.

## Methods

Data shown in this report are based on 100 percent of the birth certificates registered in all States and the District of Columbia. More than 99 percent of births occurring in this country are registered (3). Tables showing data by State also provide separate information for Puerto Rico, Virgin Islands, and Guam; however, data for these areas are not included in totals for the United States.

In this report, tabulations of births beginning with 1980 data are by race of mother; for years prior to 1980, tabulations are by race of child. Details of the differences in tabulation procedure are described in the [Technical notes](#). Race and ethnicity differentials in birth rates and characteristics of births reflect a variety of factors, including differences in income, educational levels, access to health care, and health insurance. Text references to black births and black mothers or white births and white mothers are used interchangeably.

U.S. and State-level birth and fertility rates in this report were computed on the basis of population denominators provided by the U.S. Bureau of the Census. Rates by State shown in this report may differ from rates computed on the basis of other population estimates. Additional information on the measurement of marital status, gestational age, and birth-weight; the computation of derived statistics and rates; population denominators; random variation and relative standard error; and the definitions of terms are presented in the [Technical notes](#).

Information on births by age, race, and marital status of mother is imputed if it is not reported on the birth certificate. These items were not reported for less than 1 percent of U.S. births in 1996. (See [Technical notes](#) for additional information.) Other maternal and infant characteristics are not imputed. Levels of nonreporting vary substantially by specific item. [Table I](#) in the [Technical notes](#) provides information on the percent of records with missing information for each item by State for 1996.

## Demographic characteristics

### Births and birth rates

Births in the United States declined very slightly in 1996, to 3,891,494, less than 1 percent fewer than in 1995 (3,899,589). Between 1990, the most recent high point in U.S. births, and 1996, total births dropped 6 percent ([table 1](#) and [figure 1](#)). The 1996 total is the lowest recorded in any year since 1987. According to provisional data for the first 11 months of 1997, births have continued to fall slightly. Prior to this recent decline, U.S. births had increased 11 percent between 1986 and 1990.

The birth rate in 1996 was 14.7 live births per 1,000 total population, slightly lower than the rate in 1995 (14.8), and 12 percent lower than in 1990 (16.7). The 1996 rate is the lowest reported in two decades (14.6 in 1976). Like the total number of births, the decline in the birth rate in the 1990's followed a steady increase of 7 percent overall between 1986 and 1990. Provisional data for the first 11 months of 1997 suggest a continued decline in the birth rate.

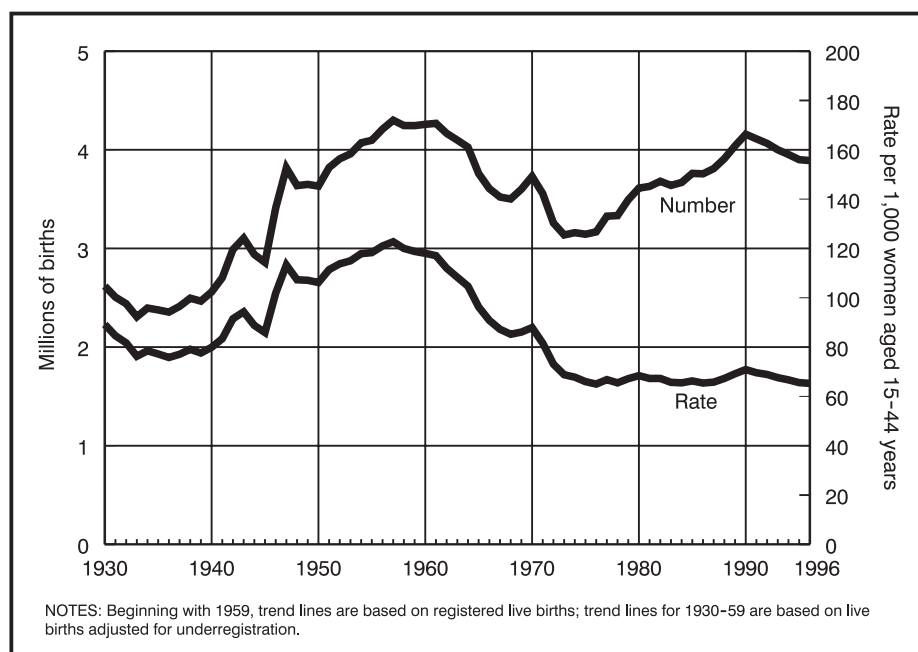


Figure 1. Live births and fertility rates: United States, 1930-96

The fertility rate, which relates births to the number of women in the childbearing ages, was 65.3 live births per 1,000 women aged 15-44 years in 1996, less than 1 percent below the 1995 rate (65.6). The fertility rate for 1996 was 8 percent below the rate in 1990 (70.9), and lower than for any year since 1976 (65.0). The decline in the fertility rate in the 1990's followed an 8 percent rise from 1986 to 1990. Provisional data for the first 11 months of 1997 indicate a continued decline in the fertility rate.

### Age of mother

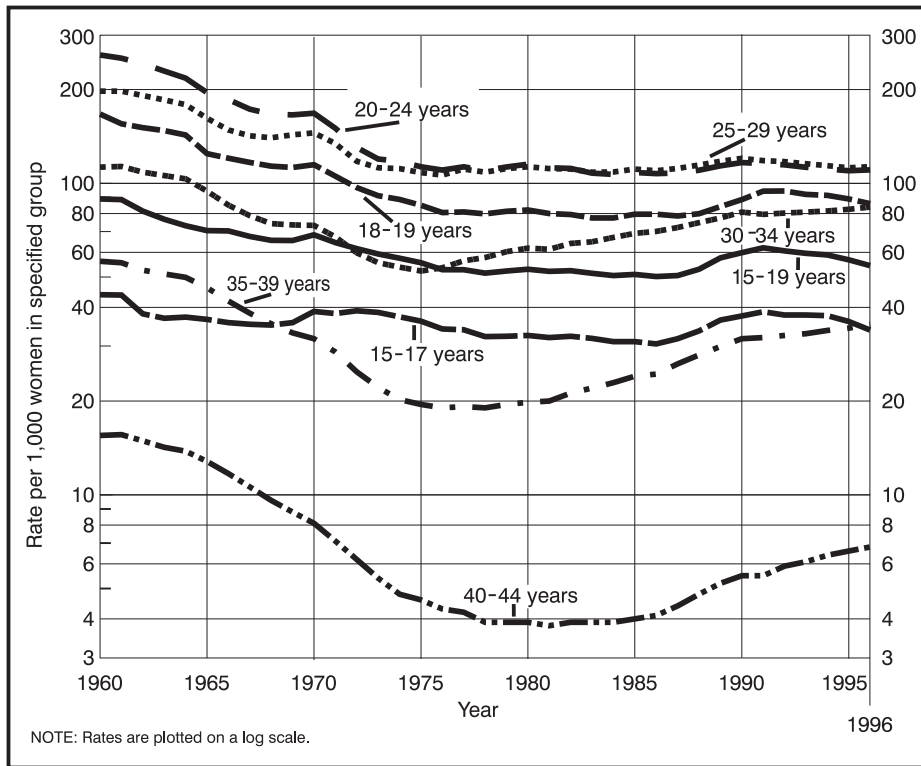
Birth rates by age of mother fell 3 to 8 percent for teenagers and increased 1 to 3 percent for women in age groups 20-44 years. The rate for women aged 45-49 years was unchanged. The peak ages for birth rates continue to be ages 20-24 and 25-29 years, followed by older teenagers 18-19 years and women in their early thirties. Rates for younger teens and women 35 years and older are considerably lower. (See [tables 2-9](#) and [figure 2](#) for births and birth rates by age of mother, live-birth order, race, and Hispanic origin.)

**Teenagers**—The birth rate for the youngest teenagers was 1.2 births per 1,000 females aged 10-14 years in 1996, compared with 1.3 per 1,000 in 1995 and 1.4 per 1,000 in 1994. Prior to 1994, this rate had held steady at 1.4 since 1989,

after rising slowly beginning in 1984. The number of births to 10-14 year-olds also fell in 1996, to 11,148 (9 percent fewer compared with 12,242 in 1995). The decline in the number of births to very young teenagers occurred solely as a result of the reduction in the birth rate; the number of female teenagers increased slightly between 1995 and 1996 (4.5).

The birth rate for teenagers 15-19 years fell 4 percent to 54.4 per 1,000. This rate was 12 percent lower than the rate in 1991 (62.1) ([table A](#)). Although the birth rate for teenagers has fallen steadily in the 1990's, it is still higher than it was during the years 1976-88, when the rate ranged from 50.2 to 53.0. The recent declines in the teenage birth rate follow a period of sharp increase from 1986 to 1991 when the rate rose 24 percent. State-specific birth rates for teenagers are discussed in the next section, "Births and birth rates by State."

Birth rates for teenage subgroups 15-17 and 18-19 years also fell between 1995 and 1996. The rate for teenagers 15-17 years declined 6 percent, from 36.0 to 33.8 per 1,000. This rate fell by 13 percent from 1991 to 1996, following a 27-percent rise from 1986 to 1991 ([table 4](#)). Despite the recent reductions, the rate for 15-17 year-olds in 1996 was higher than it was from 1978 to 1988. The number of births to teenagers 15-17



from 1976 through 1989 compared with 1996. The number of births to older teenagers dropped slightly in 1996 to 305,856 (compared with 307,365). The decline was modest because the 3 percent drop in the birth rate was concurrent with a 3 percent increase in the number of female teenagers aged 18–19 years (4). The number of births to teenagers will continue to decline over the next few years only so long as there are continued reductions in teenage birth rates which at least equal the projected increases of 5–10 percent in the number of female teenagers between 1996 and 2000 (6).

A number of demographic and behavioral factors may help to explain the recent declines in teenage birth rates. Changes have occurred in teenage sexual activity according to the 1995 National Survey of Family Growth (NSFG), a nationally representative sample survey of women aged 15–44 years conducted by the National Center for Health Statistics. Compared with findings from the 1988 NSFG, the 1995 NSFG showed that the proportion of teenagers who are sexually experienced has stabilized, reversing the steady increases over the past two decades. Moreover, those teenagers who are sexually experienced are more likely to be using contraceptives, especially condoms (7,8).

Teenage pregnancy rates have also declined in recent years. The recent decline in the birth rate has been accompanied by declines in the abortion rate (9). The pregnancy rate for teenagers 15–19 years fell 8 percent from 116.5 per 1,000 in 1991 to 107.6 in 1994, following an 11 percent rise from 1986 to 1991 (10,11). Further declines in the teenage pregnancy rate since 1994 are indicated by the steady decline in the teenage birth rate and declines in abortions among teenagers, according to preliminary data (12).

*Women aged 20 years and over:*  
*Women in their twenties*—Birth rates for women aged 20–24 and 25–29 years, the principal childbearing ages, increased in 1996 for the first time since 1990. The rate for women aged 20–24 years rose 1 percent to 110.4 per 1,000, while the rate for women aged 25–29 years rose 1 percent to 113.1 per 1,000. The rates for women in their twenties have been relatively stable, varying within a narrow range, over the past two decades. The rate

Figure 2. Birth rates by age of mother: United States, 1960–96

Table A. Birth rates for teenagers by age, race, and Hispanic origin of mother: United States, 1991, 1995, and 1996

[Rates per 1,000 women in specified group]

Year and age	Total <sup>1</sup>	Non-Hispanic		
		White	Black	Hispanic
<b>10–14 years</b>				
1996	1.2	0.4	3.8	2.6
1995	1.3	0.4	4.3	2.7
1991 <sup>2</sup>	1.4	0.5	4.9	2.4
<b>15–19 years</b>				
1996	54.4	37.6	94.2	101.8
1995	56.8	39.3	99.3	106.7
1991 <sup>2</sup>	62.1	43.4	118.9	106.7
<b>15–17 years</b>				
1996	33.8	20.6	66.6	69.0
1995	36.0	22.0	72.1	72.9
1991 <sup>2</sup>	38.7	23.6	86.7	70.6
<b>18–19 years</b>				
1996	86.0	63.7	136.6	151.1
1995	89.1	66.1	141.9	157.9
1991 <sup>2</sup>	94.4	70.5	163.1	158.5

<sup>1</sup>Includes races other than white and black and origin not stated.  
<sup>2</sup>See Technical notes for information on reporting areas in 1991.

years fell 4 percent from 1995 to 1996 to 185,721. This decline resulted from the 6 percent drop in the birth rate that was more than enough to compensate for the 3 percent rise in the number of female teenagers in this age group (4). The number of female teenagers 15–17 years is projected to increase by 5 percent between

1996 and 2000 (6).

The birth rate for older teenagers 18–19 years declined 3 percent, from 89.1 to 86.0 per 1,000. This rate fell 9 percent from 94.5 in 1992 (its recent high) to 1996. The birth rate for older teenagers rose 20 percent between 1987 and 1992. The rates for this age group were lower

for women aged 20–24 years varied from a low of 106.8 (1984) to a high of 116.5 (1990). Similarly, the rate for women aged 25–29 years ranged from a low of 106.2 (1976) to a high of 120.2 in 1990. As recently as 1970, the rates for women in their twenties were substantially higher than in 1996 (167.8 for ages 20–24 years and 145.1 for ages 25–29 years) (table 4).

*Women in their thirties and over*—Birth rates for women in age groups 30–44 years rose 2 to 3 percent in 1996. Rates for women in these age groups have generally increased steadily since the late 1970's, a pattern unlike any other age group (table 4). The rate for women aged 30–34 years rose 2 percent in 1996 to 83.9 per 1,000. Except for slight declines in 1981 and 1991, this rate has increased annually since 1975 (52.3), with an overall increase of 60 percent. Most of this increase (54 percent) occurred between 1975 and 1990; the increase since 1990 totaled just 4 percent. The number of births to women aged 30–34 years fell slightly for the second consecutive year, because the increase in the birth rate was not enough to compensate for the decline in the number of women (4). Continued declines are projected in the number of women in this age group over the next few years; therefore, without a larger increase in the birth rate, the number of births is likely to decline further (6).

The birth rate for women in their late thirties increased 3 percent to 35.3 per 1,000 women aged 35–39 years. This rate has increased without interruption since 1978 (19.0), with an overall increase of 86 percent, most of which occurred from 1978 to 1990. The pace of increase slowed in the 1990's; still the rate rose 11 percent from 1990 (31.7) to 1996. Because the birth rate and the number of women each increased, the number of births to women aged 35–39 years rose again in 1996, to a record high 399,510 (4).

The birth rate for women aged 40–44 years increased from 6.6 per 1,000 to 6.8 in 1996. This rate rose 24 percent from 1990 (5.5) to 1996. From 1981 to 1996, the rate increased by 79 percent; the 1996 rate is the highest recorded since 1971 (7.1). As a result of the increases in the birth rate and in the number of women aged 40–44 years (4), the number of

births in this age group rose 7 percent to 71,804, higher than in any year since 1966. The birth rate for women aged 45–49 years was unchanged in 1996 at 0.3 births per 1,000. The number of births to women in this age group rose 12 percent from 2,727 to 3,045.

Although sustained increases in birth rates have been most long-lasting for women aged 30 years and over (13), the pace of increase has slowed since 1990, especially for women aged 30–34 years (table 4). A number of factors have contributed to this moderated trend. One is that the proportion of women in their early thirties who are childless has stabilized in the 1990's at about 20 percent, after essentially doubling from the early 1970's to 1990 (3,14). Among currently married, childless women, the proportion reporting that they expect to have at least one child fell in the 1990's, possibly reflecting a more realistic perception as to whether their expectations can be achieved (15). About 40 percent of currently childless women aged 35–44 years have impaired fertility according to the 1995 NSFG (7,16). This fact may explain the recent changes in both birth expectations and birth rates.

*Births to women aged 50 years and over*—Over the last several years, a small number of women have given birth at age 50 years and over. Since 1964, mother's age has been edited for ages 10–49 years. Births reported to have occurred to women aged 50 years or over have had age imputed according to the age of the mother from the previous birth record with the same race and total birth order (sum of live births and fetal deaths). These procedures were based on the findings of a study of birth records for 1962, which found that the vast majority of the records with the mother's age reported as 50 years or over were coded in error (17). Because of the recent advances in fertility-enhancing therapies, an increasing number of women are giving birth at age 50 years and over. To estimate the number of these women, a limited analysis was conducted of unedited 1996 birth certificates with the mother's age reported or computed from her date of birth as 50 years or over. Although it was not possible to verify independently the reported age for these records, based on this analysis, there

were approximately 100 women in this category. It is anticipated that the procedures for editing age of mother will be modified for the 1997 data year to take into account these recent developments in childbearing among older women.

### Live-birth order

The first birth rate dropped 2 percent to 26.8 first births per 1,000 women aged 15–44 years (table 5). This was the lowest level ever recorded. The first birth rate dropped 8 percent compared with 1990 (29.0), its recent high point. Birth rates were unchanged for second, third, fifth, sixth, seventh, and eighth and higher order births. The rate for fourth births rose from 4.0 to 4.1 per 1,000.

While the first birth rate declined 2 percent overall, there were substantial differences in the trends by age of mother (tabular data not shown for 1995 and earlier years). Rates declined for teenage subgroups by 4 to 8 percent; reductions were larger for the youngest teenagers. The first birth rate declined 1 percent for women aged 20–24 years and was unchanged for women aged 25–29 years. In contrast, first birth rates rose 2 and 4 percent, respectively, for women aged 30–34 and 35–39 years. Reflecting these variations by age, the proportion of all first births occurring to women aged 30 years and over remained high in 1996, at 22 percent, compared with just 5 percent in 1975.

Although rates for second and third order births were unchanged overall, these rates fell for teenagers by 2–6 percent on average. Thus, rates for first-time as well as repeat childbearing declined for teenagers in 1996. Second and third order rates increased for women in age groups 20 years and over. There was no particular pattern in the changes in rates for fourth and higher order births for women aged 20 years and over; generally rates increased slightly or were unchanged.

### Race and Hispanic origin

The number of births to non-Hispanic white and black women declined by 1 and 2 percent, respectively, in 1996. Increases were reported for most other race/Hispanic origin groups (tables 1 and

6). American Indian births increased 2 percent while Asian or Pacific Islander (API) births rose 3 percent. Overall, Hispanic births increased 3 percent, with Mexican births rising 4 percent and Central and South American births increasing 3 percent. Cuban and Puerto Rican births increased up to 1 percent.

Fertility rates declined 1 percent for non-Hispanic white women (57.3 per 1,000) and 3 percent for non-Hispanic black women (72.5). Rates also fell by 1 percent each for American Indian (68.7 per 1,000) and API women (65.9). The overall fertility rate for Hispanic women declined very slightly to 104.9 per 1,000. Rates rose 2 percent for Mexican women (to 119.3) and 7 percent for Cuban women (to 58.9). The rate for Puerto Rican women declined 6 percent to 71.3 per 1,000. The rate for “other” Hispanic women (which includes all births to Central and South American and other and unknown Hispanic women) declined 5 percent to 90.2.

During the years 1990–96, the fertility rate for non-Hispanic white women declined 9 percent, and for non-Hispanic black women, it declined 19 percent. The rates for American Indian and API women declined 10 and 5 percent, respectively. Overall, the fertility rate for Hispanic women declined 3 percent between 1990 and 1996. The rates for Mexican and Cuban women generally increased whereas rates for Puerto Rican and “other” Hispanic women declined. Current trends in fertility for Hispanic women are presented in more detail in a recent report (2).

There is a distinctive pattern in the levels of the age-specific birth rates by race and Hispanic origin and the rates vary substantially (tables 3, 4, 8, and 9). Among teenagers 15–19 years, rates are highest for Mexican teenagers (120.7 per 1,000 in 1996), followed by non-Hispanic black (94.2), Puerto Rican (82.3), and American Indian teenagers (73.9 per 1,000). The rates for non-Hispanic white (37.6), Cuban (34.0), and API (24.6) teenagers are considerably lower. Among teenage subgroups 15–17 and 18–19 years, the patterns were generally similar to those for all teenagers 15–19 years. Rates were highest for Mexican teenagers and

lowest for API teenagers. These relationships were observed in each year, 1994–96. Prior to 1994, birth rates had been highest for non-Hispanic black teenagers.

Between 1995 and 1996, teenage birth rates declined for all groups except Cuban teenagers, for whom the rate increased from 29.2 to 34.0 per 1,000. The declines were 3 and 4 percent, respectively, for Mexican and non-Hispanic white teenagers. Other declines were 5 percent for non-Hispanic black and American Indian teenagers, 6 percent for API, 8 percent for Puerto Rican, and 10 percent for “other” Hispanic teenagers. From 1991, when rates for teenagers generally were at a peak, to 1996, birth rates fell 20 to 21 percent for non-Hispanic black, Puerto Rican, and “other” Hispanic teens. Declines were 10 to 13 percent in rates for non-Hispanic white, American Indian, and API teenagers.

Birth rates for women in age groups 20–24 and 25–29 years were consistently highest for Mexican women. For example, the rate for Mexican women aged 20–24 years, 206.3 per 1,000, was nearly 3 times the rate for API women in this age group (70.7). Differences between rates were smallest at ages 25–29 years, when the range was from 98.5 (American Indian) to 176.9 (Mexican). Among women aged 30–34 and 35–39 years, rates were highest for API women (109.2 and 52.2, respectively), followed closely by Mexican and “other” Hispanic women (tables 3 and 8).

The high birth rates for API women in their thirties, especially for first births, suggest a pattern of delayed childbearing. The first birth rates for API women aged 30–34 and 35–39 years were substantially higher than for any other group. More than one-third of first births to API women were to women aged 30 years and over, compared with 22 percent for all first births. Age-specific birth rates for API subgroups can be computed only in census years when the necessary populations are available. Rates computed for 1990 demonstrated the pattern of delayed childbearing among Chinese, Japanese, Filipino, and other API women (18). Limited data for API subgroups included in the “other API” category (Vietnamese, Asian

Indian, Korean, Samoan, Guamanian, and remaining API) suggest delayed childbearing among some subgroups, but also considerable variation in maternal age distributions as well (19).

With few exceptions, among women in age groups 20 years and over, birth rates increased between 1995 and 1996 for non-Hispanic white, Mexican, and American Indian women. There was no particular pattern in the age-specific rates for other racial/Hispanic origin groups.

### Total fertility rate

The total fertility rate (TFR) indicates the number of births that a hypothetical group of 1,000 women would have if they experienced throughout their childbearing years the age-specific birth rates observed in a given year. This measure shows the potential impact of current fertility patterns on completed family size. Because it is computed from age-specific birth rates, the TFR is age-adjusted; it assumes the same number of women in each age group.

The TFR in 1996 was 2,027.0, less than 1 percent higher than in 1995 (tables 4, 9, 13, and 14). The increase from 1995 to 1996 was the first in the TFR since 1990 (2,081.0), when the rate was 3 percent higher than in 1996. The increase in the TFR results from the rise in age-specific birth rates for all women in age groups 20–44 years, which more than compensated for the declines in the teenage birth rates.

The U.S. total fertility rate remains below “replacement” level (2,100), the rate at which a given generation can exactly replace itself. The TFR has been below “replacement” since 1971 (2,266.5). TFR’s vary substantially among racial and Hispanic origin groups. In 1996, as in recent years, the TFR was above “replacement” for Mexican (3,353.5), “other” Hispanic (2,762.0), non-Hispanic black (2,204.0), and Puerto Rican women (2,163.0). Rates were below replacement for American Indian (2,030.0), API (1,907.5), non-Hispanic white (1,795.5), and Cuban women (1,774.5) (tables 4, 9, 13, and 14). Between 1995 and 1996, TFR’s increased up to 4 percent for Mexican, Cuban, and

non-Hispanic white women, and declined for other groups. State-specific total fertility rates for 1996 are included in this report and discussed in the next section.

### Births and birth rates by State

Birth data by race and by Hispanic origin for 1996 are shown in [tables 10–12](#) for the 50 States and the District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The American Indian, Asian or Pacific Islander (API) and Hispanic populations (and Hispanic subgroups) are highly concentrated geographically. Half of American Indian births in the 50 States and the District of Columbia were to residents of just five States (Alaska, Arizona, California, New Mexico, and Oklahoma), while more than half of API births were to residents of California, Hawaii, and New York. Similarly, 57 percent of Hispanic births were to California and Texas residents. Births are also highly concentrated geographically for Hispanic subgroups: Mexican (California and Texas), Puerto Rican (New York, New Jersey, and Florida), and Cuban (Florida).

Births declined in 25 States and the District of Columbia, Puerto Rico, and the Virgin Islands, and increased in 25 States and Guam. Declines and increases were generally modest; they ranged up to 2 percent in 41 States, Puerto Rico, and Guam. The number increased 4 to 6 percent in Arizona, Nevada, and Utah, and declined 7 percent in the District of Columbia and 8 percent in the Virgin Islands.

Birth rates by State ranged from 11 births per 1,000 population (Maine and West Virginia) to 21 per 1,000 (Utah). Birth rates per 1,000 total population declined in 33 States, the District of Columbia, Puerto Rico, and the Virgin Islands, increased in 10 States and Guam, and were unchanged in 7 States; changes were no more than 3 percent in most States. Statistically significant declines of 4 to 6 percent were recorded for Montana and the District of Columbia and 9 percent in the Virgin Islands. However, the changes were not significant in 34 States and Guam.

Fertility rates per 1,000 women aged 15–44 years ranged from a low of 49.5 (Maine) to a high of 89.0 (Utah). Rates declined in 26 States, the District of

Columbia, Puerto Rico, and the Virgin Islands, increased in 21 States and Guam, and were unchanged in 3 States. Changes in most States were no more than 3 percent, with statistically significant declines of 5 and 8 percent, respectively, for the District of Columbia and the Virgin Islands. The changes were not significant in 37 States and Guam.

### Birth rates for teenagers

Birth rates for teenagers by age group and State are shown for 1996 in [table 10](#). Rates per 1,000 women aged 15–19 years ranged from 28.6 (New Hampshire) to 102.1 (District of Columbia). The highest rate was reported for Guam, 116.8. Birth rates for teenagers have been declining in the United States since 1991. Between 1991 and 1996, teenage birth rates fell in all States and the District of Columbia and the Virgin Islands; declines were statistically significant in all but 3 States (Delaware, North Dakota, and Rhode Island). More detailed information on current trends and variations in State-specific teenage birth rates is presented in a recent report (11).

### Total fertility rate

State-specific total fertility rates (TFR's) for 1996 are shown in [table 10](#). These rates provide a summary measure of lifetime fertility at the State level; rates for 1980 and 1990 have been published (20,21). Rates by State for 1996 vary substantially, from a low of 1,580.0 (or 1.58 births per woman) for Vermont to a high of 2,656.0 (2.66 births per woman) for Utah. Differences in the TFR by State are quite similar to differences in the general fertility rate.

### Sex ratio

There were 1,990,480 male live births in 1996 compared with 1,901,014 female live births. These numbers yielded a sex ratio of 1,047 male per 1,000 female live births ([tables 13 and 14](#)). The sex ratio has changed very little over the last 50 years and was 1,049 in 1995. Similar to previous years, Asian or Pacific Islander mothers had the highest sex ratio (1,061), followed by non-Hispanic white mothers (1,053), Hispanic mothers (1,041),

American Indian mothers (1,031), and non-Hispanic black mothers (1,027).

### Month of birth

Monthly birth rates and fertility rates in 7 months of 1996 were below the rates for the same month observed in 1995. The peak months of occurrence of births in 1996 as measured by birth rates were August and September ([table 15](#)). When the seasonal component is removed from the monthly birth and fertility rates, the underlying trends can be observed. Unlike the previous 6 years, seasonally adjusted birth and fertility rates for the first half of 1996 were, on average, lower than the rates for the second half of the year. All months except for April, July, October, and December had the lowest seasonally adjusted birth rates in at least 20 years. The rate for June 1996 was the lowest observed in the more than 60 years for which monthly seasonal adjustments are available (3,22).

### Day of the week of birth

Variation in the daily pattern of births can be measured by an index of occurrence. The index is defined as the ratio of the average number of births for a particular day of the week to the average daily number of births for the year, multiplied by 100. In 1996 the Sunday index was 74.8, an indication that there were over 25 percent fewer births on Sundays than the daily average, considered to be 100.0. The Saturday index was 82.5. As in past years, births occurred most frequently on Tuesdays with an index of 111.9 in 1996 ([table 16](#)).

A weekend deficit is apparent for both vaginal and cesarean deliveries, but is far larger for cesarean deliveries, particularly repeat cesareans. In 1996 the Sunday index for vaginal births was 79.7, compared with 66.2 for primary, and 39.0 for repeat cesareans ([table 16](#)).

The growing concentration of births on weekdays in the early and mid-1980's has been attributed to the increasing rate of cesarean deliveries because many cesareans are scheduled on weekdays (23). However, in the late 1980's, the cesarean rate stabilized (24), and since 1989 it has declined. The high weekend deficit can be partly explained by the growing



proportion of births that are induced. (See section on “[Obstetric procedures.](#)”)

### Births to unmarried women

The birth rate for unmarried women in 1996 was 44.8 births per 1,000 unmarried women aged 15–44 years, 1 percent lower than the rate of 45.1 in 1995, and 4 percent lower than its highest level, 46.9 in 1994. The number of births to unmarried women increased 1 percent, to 1,260,306 in 1996. The percent of all births occurring to unmarried women increased slightly, from 32.2 percent in 1995 to 32.4 percent in 1996. (See [table B](#) and [tables 17](#) and [18](#).) The procedures for reporting the mother’s marital status did not change in any State between 1995 and 1996; thus the changes measured between 1995 and 1996 reflect actual changes in nonmarital childbearing.

Birth rates for unmarried women vary considerably by race and Hispanic origin. In 1996 the rates per 1,000 unmarried women were 28.3 per 1,000 for non-Hispanic white women, 74.4 for black women, and 93.2 for Hispanic women.

The birth rate for unmarried non-Hispanic white women increased very slightly from 28.2 in 1995 to 28.3 per 1,000. The rate in 1996 was 1 percent lower than in 1994 (28.5), the first year for which rates could be computed for unmarried non-Hispanic white women. The birth rate for unmarried black women declined 2 percent from 75.9 per 1,000 in 1995 to 74.4 in 1996, a record low. This rate has declined steadily and

substantially—by 18 percent—since 1989 (90.7). The birth rate for unmarried Hispanic women in 1996, 93.2 per 1,000, was 2 percent lower than in 1995 (95.0). Except for a 1-year surge in the rate between 1993 and 1994, birth rates for unmarried Hispanic women ranged from 93 to 95 per 1,000 since 1991 ([table 18](#)) (2).

Birth rates for unmarried women by age continue to be highest for women aged 18–19 and 20–24 years (71 and 66 per 1,000, respectively), followed closely by women aged 25–29 years (57 per 1,000). Rates for younger teenagers and women in age groups 30 years and over are considerably lower ([tables 17](#) and [18](#)).

The birth rate for unmarried teenagers 15–19 years declined 3 percent to 42.9 per 1,000 ([figure 3](#)). The teenage rate dropped 8 percent from its high point in 1994 (46.4 per 1,000). The largest 1-year reduction was for young teenagers 15–17 years; their rate declined 5 percent from 30.5 per 1,000 to 29.0. The rate for older teenagers fell 3 percent to 65.9. Rates for women in their twenties increased 1 percent each, to 70.7 for women aged 20–24 years and to 56.8 for women aged 25–29 years. Rates for women in their thirties increased 3 to 4 percent, to 41.1 (ages 30–34 years) and 20.1 (ages 35–39 years), while the rate for women aged 40–44 years increased from 4.7 to 4.8 per 1,000.

The 1995–96 trends in age-specific birth rates by race and Hispanic origin were generally similar to those for all

women. Rates declined for unmarried non-Hispanic white, black, and Hispanic teenagers, with the largest reductions measured for young black teenagers. Their rate fell 7 percent to 64.0 per 1,000 teenagers 15–17 years; from 1991 to 1996, the rate for young black teenagers dropped 20 percent. Among unmarried women aged 20–24 years, the rate for non-Hispanic white women increased 2 percent from 1995 to 1996 while it declined 1 to 2 percent for black and Hispanic women. Birth rates for unmarried women in age groups 25 years and over generally rose for all groups.

There is a distinct pattern in the age-specific rates among the race and Hispanic origin groups. Among teenagers and women aged 20–24 years, rates for unmarried black and Hispanic teenagers on average were 3 to 4 times the rates for non-Hispanic white teenagers. Among age groups 25–29 years and over, rates were considerably higher for Hispanic women than for black or non-Hispanic white women.

It is the sharply higher nonmarital birth rates for older unmarried Hispanic women that is the principal factor accounting for their high overall birth rate. Part of this pattern is linked with the relatively high incidence of cohabitation among Hispanic couples. Birth certificate data provide evidence of this for Puerto Rican couples. In 1996, 44 percent of births to Puerto Rican women in Puerto Rico were nonmarital, but three-quarters of these nonmarital births were to women living with the father of the child. Other studies have documented increases in cohabitation in recent years in the United States and Puerto Rico (25,26).

The proportion of all births occurring to unmarried women increased slightly from 32.2 to 32.4 percent in 1996. The proportions for subgroups in 1996 were 21.5 percent, non-Hispanic white; 70.0 percent, non-Hispanic black; and 40.7 percent, Hispanic; each changed very little compared with 1995 ([tables 13](#), [14](#), [17](#), and [19](#)).

Changes in the proportion of births to unmarried women are affected by trends in birth rates for married as well as unmarried women, and the number of unmarried women. While the birth rate for unmarried women increased considerably over the last two decades and has

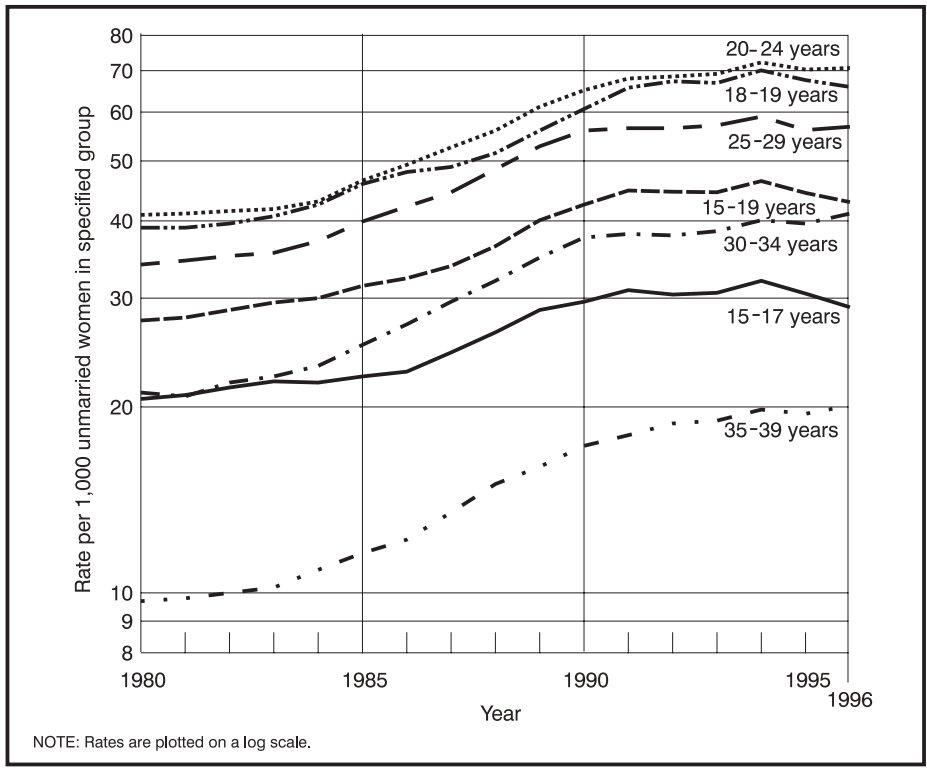
**Table B. Number, rate, and percent of births to unmarried women, and birth rate for married women: United States, 1980 and 1985–96**

Year	Births to unmarried women			Birth rate for married women <sup>3</sup>
	Number	Rate <sup>1</sup>	Percent <sup>2</sup>	
1996 . . . . .	1,260,306	44.8	32.4	83.7
1995 . . . . .	1,253,976	45.1	32.2	83.7
1994 . . . . .	1,289,592	46.9	32.6	83.8
1993 . . . . .	1,240,172	45.3	31.0	86.8
1992 . . . . .	1,224,876	45.2	30.1	89.0
1991 . . . . .	1,213,769	45.2	29.5	89.9
1990 . . . . .	1,165,384	43.8	28.0	93.2
1989 . . . . .	1,094,169	41.6	27.1	91.9
1988 . . . . .	1,005,299	38.5	25.7	90.8
1987 . . . . .	933,013	36.0	24.5	90.0
1986 . . . . .	878,477	34.2	23.4	90.7
1985 . . . . .	828,174	32.8	22.0	93.3
1980 . . . . .	665,747	29.4	18.4	97.0

<sup>1</sup>Births to unmarried women per 1,000 unmarried women aged 15–44 years.

<sup>2</sup>Percent of all births to unmarried women.

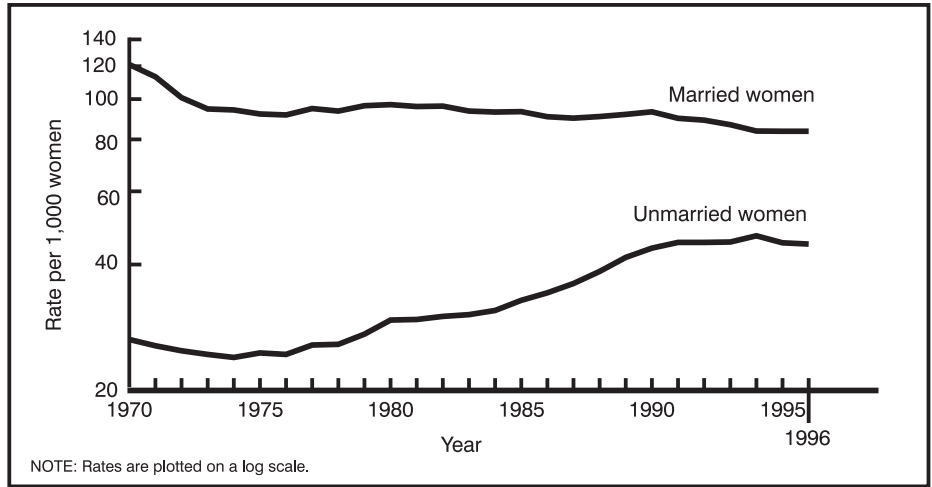
<sup>3</sup>Births to married women per 1,000 married women aged 15–44 years.



**Figure 3. Birth rates for unmarried women, by age of mother: United States, 1980–96**

declined only since 1994, the birth rate for married women has generally declined and dropped 10 percent from 93.2 per 1,000 in 1990 to a record low of 83.7 in 1995–96 (table B and figure 4). Moreover, the number of unmarried women in the childbearing ages rose 6 percent between 1990 and 1996 while the number of married women declined 2 percent during this period. The proportion of births to unmarried women increased slightly in 1996, because the number of nonmarital births rose while the number of births to married women declined. Because of the complex interrelationship of birth rates and populations by marital status, the proportion of births to unmarried women has important analytic limitations. The birth rate remains the best measure of the likelihood that an unmarried woman will give birth (27). However, the proportion is often the only available measure of nonmarital childbearing, in addition to the number of births, because the populations needed to compute birth rates are not available for States and cities except in census years. Rates by State for unmarried women by age, race, and Hispanic origin have been published for 1980 and 1990 (20, 21, and 27).

There are sizable variations in the proportions of births to unmarried women in racial and Hispanic origin subgroups (tables 13 and 14). In 1996, 38 percent or more of births to Mexican, Central and South American, Hawaiian, American Indian, and Puerto Rican women were nonmarital. Proportions were much lower for API subgroups (except Hawaiian), ranging from 9 to 19 percent, and for Cuban women, 25 percent. In addition to



**Figure 4. Birth rates by marital status of mother: United States, 1970–96**

these variations, there are also differences within groups according to the mother's place of birth. In general, the proportions of nonmarital births are higher for births to women born in the 50 States and the District of Columbia compared with births to women born elsewhere.

Future trends in nonmarital births will be affected by changes in the birth rates for unmarried women and changes in the number of unmarried women. An additional factor is the overall distribution by age of unmarried women in the childbearing years. Over the next few years, the population of teenagers will be among the fastest growing; teenagers account for 30 percent of nonmarital births (table 17) (6). If the birth rates for unmarried teenagers in particular continue to fall over the next several years as they have during 1994–96, this will help to moderate any increases in nonmarital births.

The numbers and proportions of births to unmarried women by race and Hispanic origin for 1996 are shown in table 19 for the 50 States and the District of Columbia, Puerto Rico, the Virgin Islands, and Guam. The numbers increased in 39 States, Puerto Rico, and Guam and declined in 11 States, the District of Columbia, and the Virgin Islands. Similarly, increases in the proportions exceeded declines: The proportion increased in 37 States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam, declined in 12 States, and was unchanged in one State.

## Age of father

The birth rate per 1,000 men aged 15–54 years declined for the sixth straight year in 1996 to 51.1 (table 20). This rate fell by 13 percent between 1990 and 1996, following a 7 percent increase during 1986–90. Information on age of father is often missing on birth certificates of children born to unmarried women, greatly inflating the number of “not stated” in all tabulations by age of father. In computing birth rates by age of father, births with age of father not stated are distributed in the same proportions as births with known age within each 5-year age classification of the mother. This procedure avoids the distortion in rates that would occur if the relationship between age of mother and age of father were disregarded. The procedures for computing birth rates by age of father are described in more detail in the [Technical notes](#).

Rates reached a 7-year low per 1,000 men aged 15–19 years declining by 5 percent from 1995 to 1996. Rates per 1,000 men 20–24 years of age declined by 2 percent, for those aged 45–49 years by 3 percent, and for those aged 50–54 years by 4 percent. Small increases were measured in rates per 1,000 men aged 25–44 years.

Birth rates per 1,000 white and black men have declined steadily since 1990. Between 1990 and 1996, the rate per 1,000 white men aged 15–54 years dropped 11 percent to 48.4, while the rate per 1,000 black men aged 15–54 years dropped 20 percent to 68.3.

## Educational attainment

The educational attainment of women who give birth is important because higher educational attainment is associated with more timely receipt of prenatal care and fewer lifestyle and health behaviors during pregnancy that are detrimental to birth outcome (discussed in later sections). Higher educational attainment has also been linked to delayed childbearing and, over time, to smaller families (28,29).

Data from the birth certificate show that the educational attainment of women who gave birth increased substantially over the last few decades, partly reflecting the increases in educational attainment of all women during the time period

(30). More than three-fourths of women who gave birth in 1996 had at least 12 years of schooling (78 percent) and 22 percent had at least 4 years of college (table C and table 21). The percent of mothers with at least a high school diploma increased with additional age, to about 90 percent for women who gave birth in their thirties, and then declined slightly for mothers 40 years of age and over (87 percent). The percent of mothers with at least 4 years of college was highest for mothers 40 years of age and over (42 percent). The median educational attainment for all mothers in 1996 was 12.8 years.

Non-Hispanic white mothers had more education than non-Hispanic black mothers—87 percent of non-Hispanic white mothers had at least 12 years of education compared with 72 percent of black mothers; 49 percent of Hispanic mothers had at least 12 years of education (table C). Twenty-nine percent of non-Hispanic white mothers had at least 4 years of college compared with 10 percent of non-Hispanic black mothers and 6 percent of Hispanic mothers. The proportion who had completed 12 years of education peaked for women in their thirties. Among women aged 30–34 years, for example, 96 percent of non-Hispanic white mothers, 88 percent of non-Hispanic black mothers, and 60 percent of Hispanic mothers had completed 12 years of education. Non-Hispanic mothers in their forties were most likely to have completed 4 years or more of

college—50 percent for white mothers and 26 percent for black mothers; among Hispanic mothers, those aged 35–39 years had the highest proportion in this category—15 percent.

Only two-thirds of American Indian mothers had 12 or more years of schooling, whereas 85 percent of Asian and Pacific Islander (API) mothers had attained this educational level, the highest of any group (table 13). In particular, nearly all of Japanese mothers (97 percent) had 12 or more years of schooling. Except for Chinese and “other” API mothers, a higher proportion of women in API subgroups who were born outside the 50 States and the District of Columbia had completed 12 or more years of schooling than their counterparts who were born inside these areas.

Although the overall proportion of Hispanic mothers with at least 12 years of education was low (49 percent), there was tremendous variation among Hispanic subgroups, ranging from 42 percent of Mexican mothers to 86 percent of Cuban mothers (table 14). A higher proportion of Hispanic women who were born in the 50 States and the District of Columbia had at least 12 years of education as compared with Hispanic women born elsewhere. This was especially evident for Mexican women for whom the proportion with 12 years or more of education was twice as high for those born in the 50 States and the District of Columbia as for those born outside these areas—62 percent

**Table C. Percent of mothers completing 12 years or more of school and percent completing 4 years or more of college, by age, race, and Hispanic origin of mother: United States, 1996**

Measure and race and Hispanic origin of mother	All ages	Age of mother			
		25–29 years	30–34 years	35–39 years	40 years and over
Percent completing 12 years or more of school					
All races <sup>1</sup> . . . . .	77.6	85.5	90.1	90.0	87.2
Non-Hispanic white . . . . .	87.0	93.2	96.1	96.4	96.0
Non-Hispanic black . . . . .	72.0	86.2	88.1	87.7	85.6
Hispanic <sup>2</sup> . . . . .	48.6	55.4	59.6	56.4	48.2
Percent completing 4 years or more of college					
All races <sup>1</sup> . . . . .	22.1	25.3	38.4	41.3	41.6
Non-Hispanic white . . . . .	28.8	31.2	44.6	47.9	50.2
Non-Hispanic black . . . . .	10.0	14.5	21.7	24.9	25.6
Hispanic <sup>2</sup> . . . . .	6.4	8.1	14.2	15.2	12.7

<sup>1</sup>Includes races other than white and black and origin not stated.  
<sup>2</sup>Persons of Hispanic origin may be of any race.

compared with 30 percent. The low educational attainment of Hispanic mothers in general and the variation among subgroups parallels the educational attainment of the Hispanic population in general (31).

## Maternal lifestyle and health characteristics

### Weight gain

Maternal weight gain is one of the components in the complex relationship between lifestyle characteristics of the mother and the development of the fetus (32). The total weight gained by the mother during pregnancy has been shown to have an independent, positive relationship with the weight of the newborn (33). Inadequate maternal weight gain along with low prepregnancy weight have been associated with intrauterine growth retardation and low birthweight (34,35).

In 1990 the National Academy of Sciences published weight-gain guidelines that varied according to women's body mass index (BMI), which is calculated from her prepregnancy weight and height. The guidelines recommend that women who are underweight (low BMI) gain 28–40 pounds, those who are of normal weight (average BMI) gain 25–35 pounds, those who are overweight (high BMI), 15–25 pounds, and obese women, not more than 15 pounds (36).

Beginning with 1989, information on maternal weight gain has been collected from the birth certificate, but information on the mother's prepregnancy weight and height is not collected. Therefore, it is not possible to determine whether the weight gain was within the recommendations for the mother's BMI. Differences between subgroups in maternal weight gain may reflect differences in the proportion of mothers who gained outside the recommended range but could also be the result of group differences in height and prepregnancy weight. Given the limitations of vital statistics data, the primary focus of this section is on the median weight gain (for descriptive purposes) and on weight gains that are for most women considered inadequate (less than 16 pounds).

In 1996 all States except California reported information on weight gain. Births to mothers residing in these States

accounted for 86 percent of all births in the United States. In 1996 the majority of women (63 percent) gained 26 pounds or more during pregnancy. (See [tables 22](#) and [23](#) for data on maternal weight gain and low birthweight by weight gain.) The median weight gain changed very little during the 1989–96 period and was 30.4 pounds in 1996. Despite the consistency in the median weight gain, the percent of mothers who gained at either end of the weight gain spectrum was higher in 1996 than in 1989—weight gains of less than 16 pounds increased from 9.4 percent in 1989 to 11.1 in 1996 while weight gains of 46 pounds or more increased from 9.1 percent in 1989 to 11.0 percent in 1996.

The weight gain of women during pregnancy varied considerably by period of gestation. Mothers who had preterm infants (gestations of under 37 completed weeks) gained nearly 4 pounds less during pregnancy (27.1 pounds) than mothers who had babies with gestations of 40 weeks and over (30.8 pounds). The percent of mothers who gained less than 16 pounds was nearly twice as high for gestations of under 37 weeks as for gestations of 40 weeks and over—18.2 compared with 9.7 percent.

The median weight gain for non-Hispanic white women (30.7 pounds) was higher than for either non-Hispanic black women (29.0 pounds) or Hispanic women (29.6 pounds). The greatest disparities in weight gains were for gestations of under 37 weeks where the median weight gain for non-Hispanic white women was 3.7 pounds heavier than for non-Hispanic black women and 2.9 pounds heavier than for Hispanic women. For gestations of 40 weeks and over, the disparity in weight gain between groups was less than a pound.

The percent of non-Hispanic black mothers who had weight gains of less than 16 pounds (16.9 percent) was much higher than for Asian or Pacific Islander (API) mothers (9.2 percent) and non-Hispanic white mothers (9.4 percent) while American Indian mothers were intermediate (15.1 percent) ([tables 24](#) and [25](#)). There was wide variation among API subgroups in the percent of mothers who gained less than 16 pounds, ranging from 6.3 percent of Chinese mothers to

10.6 percent of “other” API mothers. These differences in weight gain are reflected in differences among groups in the percent of births born preterm.

Within Hispanic subgroups, the percent of Mexican mothers who gained less than 16 pounds (14.7 percent) was twice as high as for Cuban mothers (7.2 percent) while the remaining groups were intermediate ([table 25](#)). A smaller proportion of Hispanic women who were born in the 50 States and the District of Columbia gained less than 16 pounds than Hispanic women born outside this area (except for other and unknown Hispanic women).

As mentioned above, maternal weight gain has been shown to have a positive correlation with the birthweight of the infant. This relationship is substantiated by the data in [table 23](#), which shows the percent of infants with low birthweight by the weight gain of the mother, according to the infant's gestational age. Overall, the percent of infants with low birthweight drops steadily with increasing weight gain through 45 pounds and then increases slightly for mothers who gained 46 pounds or more. This pattern is generally replicated when the data are examined according to the period of gestation. For example, among infants born after 37–39 completed weeks of gestation, the percent low birthweight for births to mothers gaining less than 16 pounds (7.1 percent) was double the percent low birthweight for births to mothers gaining 31 pounds or more (3.1–3.5 percent). Regardless of gestational period, the decline in low birthweight with additional maternal weight gain was present for all groups.

### Medical risk factors

Maternal medical risk factors can severely complicate pregnancy and result in poor birth outcomes, particularly when not adequately treated. For example, the hypertensive disorders (preeclampsia and pregnancy-associated and chronic hypertension) have been linked to inadequate birthweight, shortened gestations, and infant death; diabetes has been associated with hyaline membrane disease/respiratory distress syndrome, and developmental abnormalities (37–39).

Sixteen medical risk factors affecting pregnancy are separately identified on the

birth certificate. Although data for this item were missing from only 1.3 percent of records for 1996 (table 26), birth certificate data may underreport medical risk factor prevalence (40). Also, rates for less common medical risk factors and for smaller population groups can vary widely from year to year and should be interpreted with caution.

Pregnancy-associated hypertension, the most frequently reported medical risk factor, increased for the fifth consecutive year, rising from 34.1 to 35.9 per 1,000 for 1995–96. (See table 26 for 1996 data.) Pregnancy-associated hypertension has risen 32 percent since the early 1990's. However, the rate of chronic hypertension was largely unchanged (from 6.7 for 1995 to 6.8 per 1,000 for 1996), and the eclampsia rate was down slightly from 3.7 to 3.5 per 1,000 for 1995–96, lower than the levels reported for 1989–92.

Diabetes and anemia are the second and third most frequently reported complications of pregnancy. The diabetes rate for the current year was 26.3 per 1,000 compared with 25.2 for 1995. Diabetes prevalence rose between 1990 and 1992 (from 21.3 to 25.9), but has been basically stable since. The maternal anemia rate was 19.6 per 1,000 for 1996, compared with 20.5 for 1995. Only moderate change has been reported in anemia rates since 1990.

The prevalence of lung disease (e.g., asthma, tuberculosis) was 8.3 per 1,000 for 1996, higher than the 1995 rate of 6.9. Although still comparatively rare—reported for less than 1 percent of mothers—the level of acute or chronic lung disease has more than doubled since 1990 (3.0). Similarly, the rate of hydramnios/oligohydramnios (the excess or shortage of amniotic fluid) during pregnancy rose again for 1996 to 12.5 per 1,000, having more than doubled since 1990, from 5.9.

Most of the medical risk factors reported on the birth certificate vary quite widely by maternal age. For example, anemia is more common among younger than among older mothers. Conversely, chronic conditions such as cardiac disease, diabetes and chronic hypertension occur more frequently among mothers 30 years of age and over. Other risk factors, such as hydramnios/oligohydramnios and

pregnancy-associated hypertension, follow a U-shaped pattern, with the highest levels at the extremes of the maternal age distribution.

Rates for medical risk factors also differ by population subgroup. Anemia and chronic hypertension are twice as common among black compared with white mothers, and although overall levels are similar, older black mothers are much more likely than their white counterparts to suffer from diabetes and pregnancy-associated hypertension. Overall trends and differences for the current year in the medical risk factor rates discussed above generally were applicable for both groups. Two notable exceptions, however, are first, the more pronounced rise in the level of hemoglobinopathy (a blood disorder) among black mothers since 1990 (1.2–3.1 per 1,000), and second, the increase in black mothers reported with incompetent cervix over the same time period (3.2–4.2 per 1,000).

As in previous years, reported levels of anemia, diabetes and pregnancy-associated hypertension were higher for American Indian mothers than for mothers of other racial or ethnic groups. About 5 percent of American Indian mothers were reported with each of these risk factors for 1996 (table 27).

Among Asian or Pacific Islander subgroups maternal anemia rates ranged from 9.9 for Chinese mothers to 35.9 for Hawaiian mothers. Diabetes was more common among Chinese (43.6) and Filipino (41.1) women than among women of other racial or ethnic subgroups except American Indian.

Rates for the most prevalent medical risk factors—*anemia, diabetes, pregnancy-associated hypertension, and uterine bleeding*—among all Hispanic mothers were comparable to, or lower than those for non-Hispanic white women (table 28). Rates varied by Hispanic subgroup, however. For example, Mexican women were substantially less likely than Puerto Rican women to have diabetes (22.9 compared with 33.5).

### **Tobacco use during pregnancy**

Smoking during pregnancy continued to decline according to birth certificate data. In 1996, 13.6 percent of women

giving birth were reported to have smoked, down 2 percent compared with 1995 (13.9 percent) and 30 percent since 1989 (19.5 percent), when this information first became available on the birth certificate (41). Tobacco use was reported on the birth certificate in 1996 by 46 States, the District of Columbia, and New York City, comprising 80 percent of U.S. births. Information was not available for California, Indiana, South Dakota, and the remainder of New York State. (See tables 24, 25, and 29–32 for 1996 data.) Trends in maternal smoking based on the birth certificate are generally consistent with those reported for recent years from the National Survey of Family Growth (7, 42).

Tobacco use during pregnancy is associated with a variety of adverse outcomes, including low birthweight, intrauterine growth retardation, and infant mortality, as well as negative consequences for child health and development (43–45). The mechanisms through which tobacco adversely affects pregnancy and birth outcome have been described elsewhere (46,47).

Maternal smoking increased for Puerto Rican, Cuban, American Indian, and Filipino women, was unchanged for Mexican women, and declined for non-Hispanic white and black women and women in other racial groups. As in previous years, rates were highest for non-Hispanic white, American Indian, and Hawaiian women (16–21 percent), and lowest for Mexican, Cuban, Central and South American, and Asian or Pacific Islander women (API) (except Hawaiian), 1–5 percent. Puerto Rican and non-Hispanic black women had smoking rates of 10–11 percent. Mexican and Central and South American women as well as women in API subgroups are disproportionately underrepresented in the areas reporting tobacco use. However, their generally low smoking rates based on information from birth certificates have been confirmed by other studies (48,49). Women born in the 50 States and the District of Columbia had substantially higher smoking rates than women born elsewhere, a pattern that has been described elsewhere (tables 24 and 25) (50).

Maternal smoking among teenagers increased about 2 percent overall, but among young teenagers aged 15–17 years, the rate rose 5 percent to 15.4 percent, with an even greater relative increase for young non-Hispanic black teenagers, from 4.3 to 5.0 percent. (See table 30 for 1996 data.) The increase for non-Hispanic black teenagers was the second consecutive year of increase, following steady declines from 1989, when this information first became available (41,51). Despite these increases, smoking rates for non-Hispanic white teenagers are still 4–6 times the rates for non-Hispanic black teenagers. Smoking rates rose as well in 1996 for Mexican and Puerto Rican teenagers aged 15–17 years. Smoking during pregnancy generally declined for women in age groups 20–44 years.

Non-Hispanic white women aged 18–19 years had the highest smoking rate, 29 percent (table 30). Patterns of smoking rates by age differ considerably by race and Hispanic origin (figure 5). At ages under 30 years, rates for non-Hispanic white women are sharply higher than for non-Hispanic black or Hispanic women (table 29). At ages 30 years and over, rates are highest for non-Hispanic black women. Rates for Hispanic women are consistently low, regardless of age, ranging from 3 to 5 percent.

Among smokers, the proportion of women smoking at least half a pack of cigarettes daily has declined steadily in recent years—to 33 percent in 1996 (compared with 42 percent in 1989) (41). Non-Hispanic white mothers were about twice

as likely as non-Hispanic black mothers to smoke half a pack or more (37 percent compared with 19 percent). The number of cigarettes smoked increases steadily with age for both white and black mothers (table 29) as well as for non-Hispanic white and black mothers and Hispanic mothers (tabular data not shown).

Rates of maternal smoking vary in a distinct pattern according to maternal educational attainment (table 31). Smoking rates are persistently highest for women with 9–11 years of education, 26 percent in 1996, followed by those with 12 years of education, 18 percent. Rates were lower for women with a grade school education (12 percent) and women with some college (10 percent), with the lowest rate of all reported by women with 4 years or more of college, 3 percent. Even among women aged 20 years and over, smoking rates were highest for mothers who attended but did not graduate from high school—31 percent overall. About half of non-Hispanic white women in this age and educational category were reported to have smoked during pregnancy (tabular data not shown).

Smoking rates were highest for non-Hispanic white women in every educational attainment category, with the largest disparity for women with a grade school education. Among Hispanic mothers smoking rates by educational level were consistently lower than for non-Hispanic white and black mothers. Compared with 1995, smoking rates declined for women in all education categories.

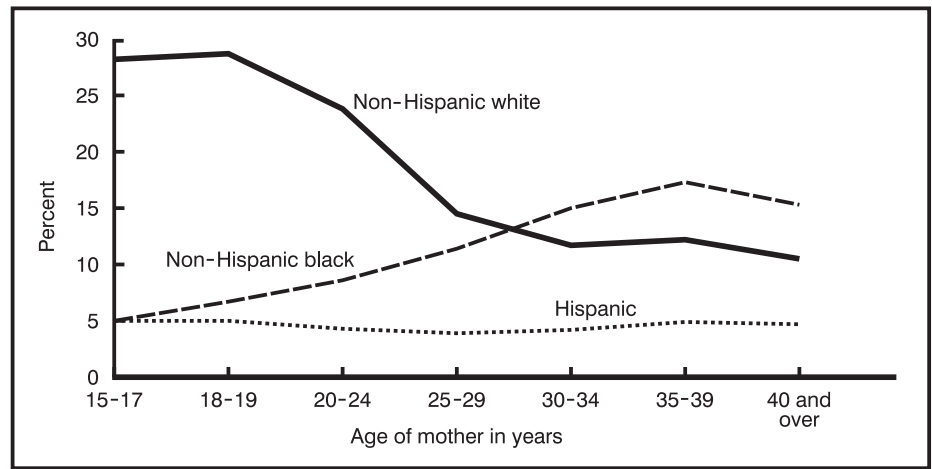


Figure 5. Percent of mothers who smoked during pregnancy by age and race/Hispanic origin of mother: United States, 1996

Babies born to mothers who smoke during pregnancy are at greatly elevated risk of low birthweight, a finding documented in birth certificate data as well as in numerous other studies (43, 46, and 52). In 1996, 12.1 percent of infants born to smokers weighed less than 2,500 grams (5 lb 8 oz) compared with 6.9 percent of births to nonsmokers (table 32). This nearly twofold differential has been observed since 1989 (41). The low birthweight (LBW) disparity by smoking status is nearly 2 times for non-Hispanic white and black infants and for Hispanic infants (tabular data not shown). Advancing maternal age exacerbates the risk; among women age 30 years and over, the LBW rate for births to smokers was at least 2.3 times that for births to nonsmokers. Some of this pattern is probably related to the much greater cigarette consumption among older women (table 29). Studies have shown that older mothers are more likely than younger mothers to continue smoking through pregnancy (53).

While LBW levels are consistently higher for births to women who smoke, regardless of how many cigarettes smoked, the risk is heightened as the number of cigarettes increases. Among the lightest smokers (1 to 5 cigarettes daily), the LBW rate was 11.1 percent, 61 percent higher than for nonsmokers. For mothers smoking more than a pack per day, the rate of LBW was 15.0 percent, one-third higher than that for light smokers and more than double the rate for nonsmokers (6.9 percent) (tabular data not shown).

**Alcohol use during pregnancy**

Pregnancy and birth outcome can be jeopardized by maternal alcohol use during pregnancy. While the most severe adverse effect of excessive drinking is fetal alcohol syndrome (FAS), even low-to-moderate alcohol use has been shown to negatively impact birth outcome, independent of other risk factors such as tobacco use and other maternal risk factors (54). All States except California and South Dakota included items on alcohol use on their birth certificates in 1996. This reporting area accounted for 86 percent of U.S. births.

Alcohol use during pregnancy is clearly substantially underreported on the birth certificate (40). A recent study

reported that about 19 percent of women used alcohol during pregnancy (48). According to birth certificate data, alcohol use declined again in 1996 to just 1.4 percent of mothers reporting any alcohol use compared with 1.5 percent in 1995 and 4.1 percent in 1989, the first year this information was reported on the birth certificates (41,51). Alcohol use varies considerably among racial and Hispanic origin populations (tables 24 and 25).

It is likely that the birth certificate questions on alcohol use have unintentionally affected the levels of reporting because they focus on the number of drinks per week, whereas other studies inquire about drinks per month. Women who drink one to two drinks per month may believe that their alcohol consumption is too little to report in response to the birth certificate questions. The stigma associated with alcohol use also contributes to the underreporting (32,55).

Even taking into account the severe underreporting of alcohol use on the birth certificate, these data do show a distinct pattern of elevated risk of low birthweight (LBW) among births to mothers reporting alcohol use, especially among women who also smoke. For example, in 1996, 22 percent of births to women aged 20 years and over who smoked and drank during pregnancy weighed less than 2,500 grams, compared with 7 percent of births to women who did not smoke or drink (tabular data not shown).

## Medical services utilization

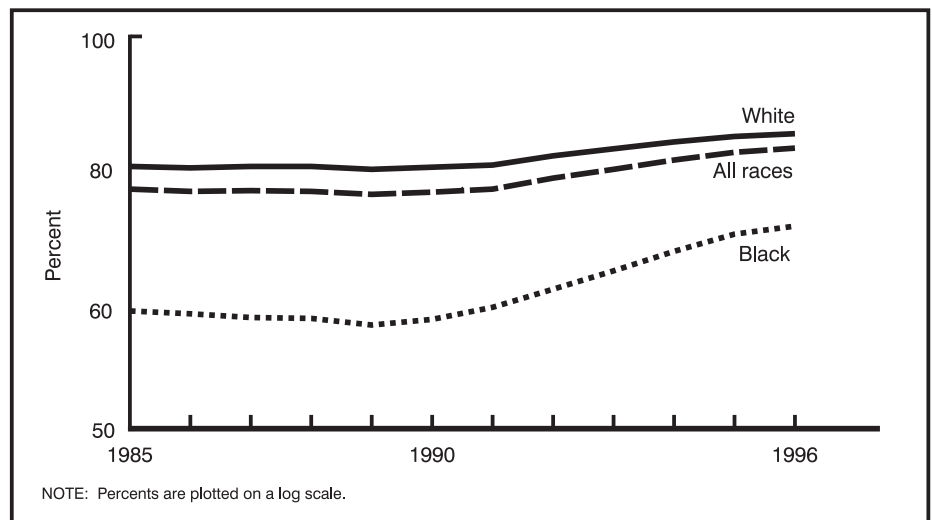
### Prenatal care

The proportion of mothers beginning prenatal care in the first trimester of pregnancy increased for the seventh consecutive year rising to 81.9 percent for 1996, from 81.3 percent for 1995. (See text table D and figure 6.) Essentially unchanged throughout the 1980's, the proportion of mothers with first trimester care has risen slowly but steadily since 1989, and includes quite a substantial improvement among some subgroups. Concurrent with the 1995–96 rise in timely care, the proportion of mothers with delayed (care beginning in the third trimester), or no care at all, declined

**Table D. First trimester prenatal care by race and Hispanic origin of mother: United States, 1980, 1985, and 1990–96**

Year	All races <sup>1</sup>	Non-Hispanic		Hispanic <sup>2</sup>
		White	Black	
1996	81.9	87.4	71.5	72.2
1995	81.3	87.1	70.4	70.8
1994	80.2	86.5	68.3	68.9
1993	78.9	85.6	66.1	66.6
1992	77.7	84.9	64.0	64.2
1991	76.2	83.7	61.9	61.0
1990	75.8	83.3	60.7	60.2
1989	75.5	82.7	59.9	59.5
1985	76.2	...	...	...
1980	76.3	...	...	...

... Data not available.  
<sup>1</sup>Includes races other than white and black and origin not stated.  
<sup>2</sup>Persons of Hispanic origin may be of any race.



**Figure 6. Percent of mothers with first trimester prenatal care by race of mother: United States, 1985–96**

slightly from 4.2 to 4.0 percent. The percent of mothers with late or no care has fallen by more than a third (from 6.4 percent) since 1989.

The effects of prenatal care are difficult to measure (56,57), but early, comprehensive care can promote healthier pregnancies by detecting and managing preexisting medical conditions, providing health behavior advice, and assessing the risk of pregnancy outcomes such as low birthweight and preterm birth (58). Prenatal care can also be vital to maternal health and can serve as a gateway into the health care system, especially for socially disadvantaged women (57).

Gains in the proportion of mothers beginning prenatal care in the first trimester were reported for mothers of all racial or ethnic groups, except Japanese and

Cuban for 1995–96. For 1996, levels ranged from 67.7 percent for American Indian to 89.2 percent for Cuban and 89.3 percent for Japanese mothers. (See tables 24 and 25 for 1996 data.)

Since 1989, prenatal care utilization, as measured by the proportion of women with care beginning in the first trimester, and the proportion with late or no care, has improved markedly for groups with the least favorable levels of care, i.e., non-Hispanic black, Hispanic (specifically, Mexican, Puerto Rican, and Central and South American), Hawaiian, and American Indian mothers (tables 24 and 25) (2).

Among non-Hispanic black women, first trimester care continued to rise between 1995 and 1996, from 70.4 to 71.5 percent, and the percent of women

with late or no care declined from 7.6 to 7.3 percent. Since 1989, the proportion of non-Hispanic black mothers who began care in the first trimester of pregnancy has risen 19 percent (from 59.9 percent). Between 1995 and 1996, prenatal care utilization among black non-Hispanic mothers improved for all age groups except for those less than 15 years of age. (See tables 33–35 for 1996 data.)

Among all Hispanic mothers, first trimester prenatal care rose from 70.8 to 72.2 percent, and late or no care declined from 7.4 to 6.7 percent for 1995–96. (See table 25 for 1996 data.) Since 1989, prenatal care utilization among Hispanic mothers has improved markedly; early care has risen 21 percent (from 59.5 percent) and late or no care has fallen by nearly half, from 13.0 to 6.7 percent. Over this time period, substantial gains in timely care have occurred among both Hispanic women born within the 50 States and the District of Columbia and those born outside. In 1989 only 63.2 percent of those born within the 50 States and the District of Columbia, and 57.0 percent of those born outside received first trimester care, compared with 75.4 and 70.3 percent, respectively, for 1996.

Mexican mothers registered the largest gains in prenatal care utilization between 1989 and 1996, rising 25 percent from 56.7 to 70.7 percent. Other Hispanic subgroups reporting pronounced gains over this period were Puerto Rican mothers with a 20 percent rise (from 62.7 to 75.0 percent) and Central and South American mothers with a 23 percent rise (from 60.8 to 75.0 percent). Despite these improvements, wide differences in prenatal care utilization continued among Hispanic subgroups, however. For 1996, 89.2 percent of Cuban women received care in the first trimester compared with 70.7 percent of Mexican women.

Among non-Hispanic white women, the percent of mothers receiving first trimester care rose slightly to 87.4 for 1996, from 87.1 percent for 1995. The proportion of women with late or no care was down very slightly from 2.5 to 2.4 percent. Since 1989, first trimester care has risen 6 percent (from 82.7 percent) for this group.

The proportion of American Indian mothers with timely care was 67.7 percent for 1996, a slight increase over the level reported for 1995 (66.7 percent), and 17 percent higher than that reported for 1989 (57.9 percent). The percent of American Indian mothers with late or no care declined to 8.6 percent for 1996, compared with 9.5 percent in 1995, and 13.4 percent for 1989. (See table 24 for 1996 data.)

Among Asian or Pacific Islander mothers, timely care increased for 1995–96 by 1 to 3 percent for Chinese (85.7 to 86.8 percent), Hawaiian (75.9 to 78.5 percent) and Filipino mothers (80.9 to 82.5 percent), but declined very slightly for Japanese mothers (from 89.7 to 89.3 percent). The percent of Hawaiian mothers with first trimester care has risen from 66.8 percent since 1989, an increase of 18 percent. (See table 24 for current year data.)

The proportion of women beginning care in the first trimester and the percent with late or no care by race and Hispanic origin by State are shown in table 34. The proportion of women with first trimester care in 1996 ranged from 64.6 percent for the District of Columbia, to 89.9 percent for Maine. The majority of States reported only slight or no improvement in timely prenatal care. One notable exception to this trend was the District of Columbia with a 1996 level 8 percent higher than that for 1995 (from 59.8).

The Adequacy of Prenatal Care Utilization Index (APNCU) was developed by Milton Kotelchuck, Ph.D., to correct for some of the weaknesses of the trimester care began and the Kessner Index as measures of prenatal care utilization (59). The APNCU compares the actual number of prenatal care visits to the expected number based on the full American College of Obstetricians and Gynecologists (ACOG) recommendations, adjusting for

the month care began and gestational age at delivery. The APNCU also includes a category for “intensive use” of prenatal care services that was developed to identify women for whom the number of visits exceeds ACOG recommendations by a ratio of observed to expected visits of at least 110 percent.

The APNCU indicates that in 1996, for 73.1 percent of all mothers, prenatal care utilization was at least adequate (including 29.3 percent with intensive use of care), and 26.9 percent of mothers received less than adequate care (including 9.8 percent with inadequate or no care) (table E). These figures represent an increase over 1995 in the proportion of mothers with intensive use (from 28.8 percent) and a decline for all other categories of prenatal care utilization. A recent study found that intensive prenatal care utilization has risen from 18.4 percent in 1981, while the proportion of women with adequate care remained essentially unchanged (60).

**Obstetric procedures**

The most prevalent obstetric procedure in 1996 was electronic fetal monitoring (EFM), reported for nearly 3.2 million births, or 83 percent of all live births (table 36). EFM usage in 1996 rose for the seventh consecutive year, reflecting continuing increases in all age groups. Non-Hispanic white mothers had the highest (85 percent) and Mexican mothers had the lowest (74 percent) rates in EFM usage in 1996 (tables 27 and 28). Six specific obstetric procedures are reported on the birth certificate. It has been shown that these procedures are underreported (61).

According to data from the birth certificate, 64 percent of mothers who had live births in 1996 received ultrasound, a 5 percent increase from 1995 and a 33 percent increase over 1989 (48 percent).

**Table E. Adequacy of Prenatal Care Utilization Index: United States, 1995–96**

	Intensive use	Adequate	Intermediate	Inadequate	No care
1996 . . . . .	29.3	43.8	17.1	8.7	1.1
1995 . . . . .	28.8	43.9	17.2	8.9	1.2

NOTE: See reference 59 for information on calculation of this measure.



The overall rates of stimulation of labor and induction of labor in 1996 were both 169 per 1,000 live births, 5 to 6 percent higher than in 1995. The rates of both of these procedures have been rising steadily every year since 1989 (62).

Amniocentesis, an invasive prenatal diagnostic procedure performed to detect genetic disorders, was reported for 32 of every 1,000 live births in 1996. The rate of amniocentesis for mothers in their forties was 21 times the rate for teenage mothers, 192 per 1,000 compared with 9 per 1,000.

### Complications of labor and/or delivery

Of the 15 reported complications of labor and/or delivery, 3 were reported at a rate greater than or equal to 30 per 1,000 live births in 1996: meconium, moderate/heavy (58 per 1,000), fetal distress (42 per 1,000), and breech/malpresentation (38 per 1,000) (table 37). Rates for these three complications varied by race and Hispanic origin (tables 27 and 28). It has been shown that levels of these complications may be underreported on the birth certificate (61).

Although not frequent, placenta previa is a serious complication that occurred in nearly 13,000 births in 1996. Data from birth certificates identify increasing age of mother and live-birth order as two risk factors for this complication (63).

### Attendant at birth and place of delivery

More than 9 out of 10 births in 1996 (92.9 percent) were attended by a physician in a hospital, making this arrangement by far the most typical (table 38). However, the percent of births with this arrangement was slightly lower in 1996 than in 1995 (93.4 percent) and has declined from 98.4 percent in 1975. For physician-attended births, only about 4 percent were by doctors of osteopathy (DO's) and the remaining were attended by doctors of medicine (MD's). Although small, the number and percent of births attended by DO's has grown steadily since 1989, the first year data on DO's were available from the birth certificate. The percent of births attended by midwives increased sharply between 1975

(1.0 percent) and 1996 (6.5 percent). About 95 percent of midwife-attended births in 1996 were by certified nurse midwives (CNM's), and the remaining 5 percent by "other" midwives. CNM-attended deliveries were almost universally in hospitals (96 percent) whereas deliveries by "other" midwives were most likely in a residence (61 percent). A recent article presents more detailed information on the trends and characteristics of midwife-attended births (64).

About 99 percent of births in 1996 were delivered in hospitals, almost unchanged from the 1975 level. The majority of out-of-hospital births were in a residence (64 percent) while 28 percent were in a freestanding birthing center.

About 94 percent of births to non-Hispanic white women were attended by a physician in a hospital compared with about 92 percent of births to non-Hispanic black women and 91 percent of births to Hispanic women. Non-Hispanic black women and Hispanic women were more likely to have midwife-attended hospital births, comprising 7 and 8 percent of all births in their respective groups, than were non-Hispanic white women (5 percent). Altogether, 99 percent of births to women in each group were in hospitals. For out-of-hospital births, the majority of Hispanic women gave birth in a freestanding birthing center (53 percent) whereas non-Hispanic white and black women giving birth out of the hospital were most likely to have a residence as the birth setting (68 and 73 percent, respectively).

### Method of delivery

The rate of cesarean delivery declined slightly between 1995 and 1996 (from 20.8 per 100 live births to 20.7), continuing a steady decline in the rate since 1989 (22.8), the first year this information was available on the birth certificate (table F and table 39). In total, the cesarean rate was 9 percent lower in 1996 than in 1989. Similarly, the primary cesarean rate (first cesareans per 100 live births to women who had no previous cesarean) also declined each year and was 9 percent lower in 1996 (14.6) than in 1989 (16.1). Concomitant with the decline in cesarean rates during this period was a 50-percent increase in the rate of vaginal birth after previous cesarean delivery (VBAC)—from 18.9 in 1989 to 28.3 in 1996.

Overall cesarean rates increased steadily by age of the mother and were more than twice as high for mothers 40–49 years of age (31.6) than for teenagers (14.5) (table 40). Primary cesarean rates increased with age after age 24 but the differences between age categories were smaller than for the overall cesarean rates. VBAC rates declined with increasing age—a third of teenagers who had a previous cesarean had a VBAC delivery compared with 22 percent of mothers 40–49 years of age. Compared with 1995, total and primary cesarean rates in 1996 were lower for all age groups under 30 years but remained unchanged for mothers in age groups 30 years and over. All age groups experienced increases in VBAC rates between 1995 and 1996.

Non-Hispanic black women had a higher cesarean rate in 1996 (21.7) than either non-Hispanic white women (20.8) or Hispanic women (20.0) (tables 39–40). Between 1989 and 1996 the cesarean rate for non-Hispanic black women declined only 2 percent while the declines for non-Hispanic white and Hispanic women were 12 and 7 percent, respectively. Similar to the total cesarean rate, the primary cesarean rate in 1996 was higher for non-Hispanic black women (15.7) than for non-Hispanic white (14.8) and Hispanic women (13.4) and the decline for non-Hispanic black mothers since 1989 was smaller. The VBAC rate in 1996 was highest for non-Hispanic white women (29.5), lowest for Hispanic women (24.8), and intermediate for non-Hispanic black women (26.9). A recent report provides a more detailed analysis of the changes in cesarean and VBAC rates between 1991 and 1995 (65).

American Indian and Asian and Pacific Islander (API) mothers had lower cesarean rates (18.1 and 18.6, respectively) than either non-Hispanic white or black mothers (20.8 and 21.7, respectively) (tables 24 and 25). With the exception of Filipino mothers, all specified API categories had lower rates of cesarean delivery than either non-Hispanic white or black mothers. The lowest cesarean rate of all API subgroups was for Hawaiian mothers (16.0). Japanese mothers who were born outside the 50 States and the District of Columbia had a much lower cesarean rate in 1996 (14.4) than their

**Table F. Total and primary cesarean rates and vaginal birth after previous cesarean delivery rates: United States, 1989–96**

Year	Cesarean rate		VBAC rate <sup>3</sup>
	Total <sup>1</sup>	Primary <sup>2</sup>	
1996	20.7	14.6	28.3
1995	20.8	14.7	27.5
1994	21.2	14.9	26.3
1993	21.8	15.3	24.3
1992	22.3	15.6	22.6
1991	22.6	15.9	21.3
1990	22.7	16.0	19.9
1989	22.8	16.1	18.9

<sup>1</sup>Percent of all live births by cesarean delivery.  
<sup>2</sup>Number of primary cesareans per 100 live births to women who have not had a previous cesarean.  
<sup>3</sup>Number of vaginal births after previous cesarean (VBAC) delivery per 100 live births to women with a previous cesarean delivery.

counterparts who were born in the 50 States and the District of Columbia (19.8). For the remaining API subgroups (except for Hawaiian), those born in the 50 States and the District of Columbia had lower cesarean rates than those born outside this area. The rate of cesarean delivery varied between 19.4 and 21.3 for all Hispanic subgroups except for Cuban mothers whose rate was much higher (30.3) (table 25). Except for Mexican mothers, Hispanic women who were born in the 50 States and the District of Columbia had lower cesarean rates than their counterparts who were born outside this area.

There was considerable variation in cesarean rates by State ranging from a high of 26.6 in Mississippi to a low of 15.1 in Colorado (table 41). Colorado was the only State in 1996 whose cesarean rate met the year 2000 national health objective of 15 percent or lower (66). VBAC rates ranged between 41.7 in Vermont to 12.9 in Louisiana with 14 States having VBAC rates that met the year 2000 goal of 35.0 or higher (66).

All of the selected medical risk factors in table 42 were associated with overall cesarean rates that were higher than the national average. Cesarean rates for the medical risk factors ranged from 21.5 for mothers with Rh sensitization to 47.8 for mothers with eclampsia. Other medical risk factors in which more than a third of births were by cesarean were chronic hypertension (38.6), hydramnios/oligohydramnios (37.0), pregnancy-associated hypertension (36.1), genital herpes (36.0) and diabetes (35.2). Certain complications of labor and/or delivery are also associated with high cesarean rates. Nearly

all births with cephalopelvic disproportion were cesarean deliveries (96.5) while the cesarean rates for breech/malpresentation (84.7) and placenta previa (81.6) were also very high. In addition, more than half of births with cord prolapse (66.4), dysfunctional labor (63.1), abruptio placenta (58.1), and fetal distress (54.5) were by cesarean delivery. Cesarean rates for most of the medical risk factors and complications of labor and/or delivery have declined since 1989.

During the 1989–96 period, the percent of births that were delivered by either forceps or vacuum extraction increased only slightly, from 9.0 to 9.4 percent. During that period, however, there was a shift as the number and percent of births delivered by forceps declined each year while the use of vacuum extraction consistently increased. In 1996, 3.2 percent of births were delivered by forceps compared with 5.5 percent in 1989—a 42 percent decline. Vacuum extraction was used in 6.2 percent of births in 1996, a 77 percent increase compared with 1989 (3.5). As in previous years, forceps and vacuum extraction deliveries were slightly more common in births to white than black mothers.

## Infant health characteristics

### Period of gestation

The preterm birth rate for 1996 was 11.0, unchanged from 1995. Since 1981, the proportion of preterm births (infants born prior to 37 completed weeks of

gestation) has risen 17 percent (from 9.4 percent). Put another way, the increase in the preterm rate over this time period represents at least 55,000 more preterm babies in 1996 than would have been born had the level remained stable. (See tables 43 and 44 and figure 7.) Preterm newborns are at greater risk than infants born at longer gestations of neurodevelopmental and respiratory disorders (67) and are nearly 7 times more likely to die within the first year of life (68).

The primary method used to determine the gestational age of the newborn from birth certificate data is the interval between the first day of the mother’s last normal menstrual period (LMP) and the date of birth. It is subject to error for several reasons including imperfect maternal recall or misidentification of the LMP because of postconception bleeding, delayed ovulation, or intervening early miscarriage. See Technical notes for additional information on procedures for measuring gestational age.

Preterm births are primarily the result of three nonmutually exclusive categories: spontaneous preterm labor, preterm premature rupture of the membranes (PROM), and medical induction. Birth certificate data indicate that the rate of PROM has declined slightly since 1989, but that the percent of preterm births that were medically induced has nearly doubled, rising from 6.7 to 11.8 percent (41, 62).

The proportion of preterm births to non-Hispanic white mothers rose from 9.4 to 9.5 percent between 1995 and 1996 (see table 25 for 1996 data). The percent preterm among this group has risen from 8.4 since 1989, and among births to all white mothers (i.e., including Hispanic), from 7.9 to 9.8 percent between 1981 and 1996. Much of the increase for 1995–96 among non-Hispanic white births was the result of an increase in multiple births that are more likely to be born preterm. The preterm rate among singleton non-Hispanic white births was unchanged at 8.1 percent.

The proportion preterm among births to black mothers fell from 17.7 to 17.4 percent for 1995–96 but remained substantially higher than that of any other racial and ethnic group. (Among non-Hispanic black births levels were very

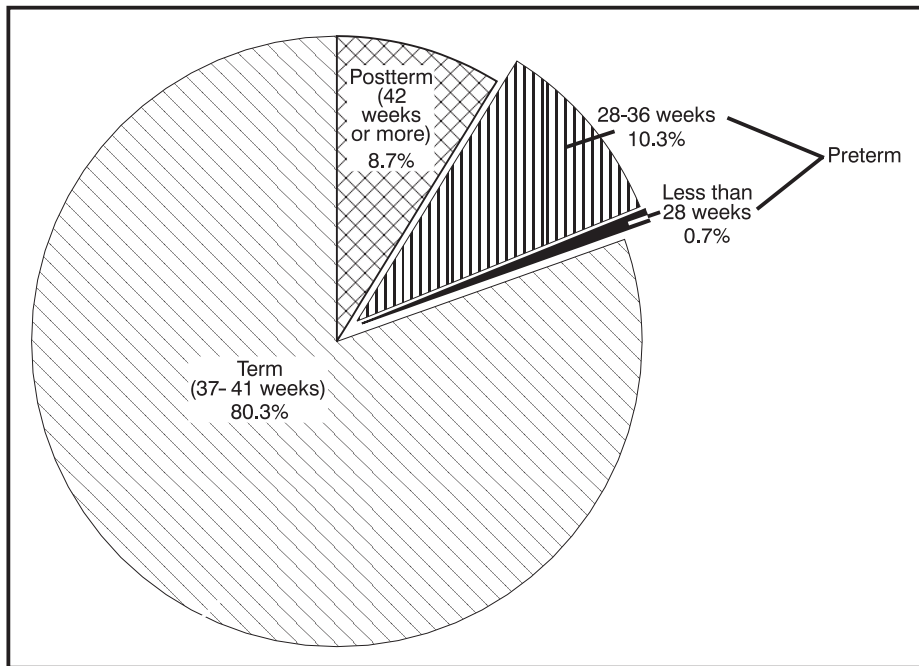


Figure 7. Gestation distribution: United States, 1996

similar, 17.8 and 17.5 percent.) The preterm rate among black infants had risen to a high of 18.9 percent during the late 1980's and early 1990's, but has been declining since 1993. The current level is the lowest reported since 1982. Declines for 1995-96 were noted for gestational ages below and equal to or over 32 completed weeks. Since 1993, preterm levels have dropped among infants born to black mothers of all age groups except those 40-44 years of age.

The level of preterm birth for Hispanic mothers was unchanged at 10.9 percent for 1996. Rates among the Hispanic subgroups ranged from 10.3 percent for births to Cuban women to 13.2 percent for Puerto Rican births. Mexican women born in the 50 States and the District of Columbia were more likely than their counterparts born elsewhere to have a preterm infant, but this pattern was reversed among Puerto Rican and Cuban women.

For 1996, 11.9 percent of births to American Indian mothers were born preterm, an improvement over the level reported for 1995 (12.4 percent). (See table 24 for 1996 data.) As in previous years, the lowest preterm birth rates of any racial or ethnic group were reported for births to Chinese (7.4) and Japanese mothers (8.2). Rates for Hawaiian and Filipino births were substantially higher at 11.5.

## Birthweight

The percent low birthweight (LBW) (less than 2,500 grams) was 7.4 for 1996, up from 7.3 percent for 1995. Low birthweight declined during the 1970's and early 1980's, but has risen 10 percent since 1984 (from 6.7 percent). (See table 44 and figure 8.) The percent very low birthweight (VLBW) (less than 1,500 grams) was 1.37 percent for 1996, compared with 1.35 for 1995 (table 44). This level has increased slightly since 1980, from 1.15 percent. Recent medical advances have greatly lessened the risk of death for smaller infants (69-71), but they continue to be at much greater risk than heavier infants. For 1995 the mortality rate (infant deaths under 1 year of age per 1,000 live births) for infants born VLBW was 268.4, compared with 18.2 for those weighing 1,500-2,499 grams, and 3.0 for heavier infants (68).

The rise in overall LBW for 1995-96 is primarily the result of the increase in LBW among infants born to non-Hispanic white women (6.2 to 6.4 percent). (See table 45 for 1996 data.) Most of the current year increase in LBW, and the very slight rise in VLBW for non-Hispanic white births (1.04 to 1.08 percent), is attributable to an increase in the proportion of multiple births among these mothers (multiple births are much more likely than singletons to be LBW), and to

a slight increase in LBW for multiple births; the LBW rate among singleton births to non-Hispanic white women was unchanged at 4.9 percent. Since 1992, however, non-Hispanic white singleton LBW has risen from 4.6 percent, and thus, increases in multiple births cannot account for all of the rise in total non-Hispanic white LBW over this period.

Among births to non-Hispanic black mothers, LBW declined from 13.2 to 13.1 percent between 1995 and 1996, but was still higher than that of any racial or ethnic group and more than twice that of non-Hispanic white births. LBW among non-Hispanic black births has decreased each year since 1993, from 13.4 percent. For 1996, the percent VLBW for black non-Hispanic births was 3.02 compared with 2.98 for 1995. Among births to all black mothers (including Hispanic, which account for less than 3 percent of all black births in 1996), LBW rose during the mid 1980's through the early 1990's, but has declined each year since 1993.

The comparatively high incidence of LBW for births to non-Hispanic black mothers can be largely attributed to their greater likelihood of being born preterm (17.5 percent compared with 11.0 percent of births to mothers of all races). Babies born preterm are much more likely to be LBW than babies born at longer gestations. (See table 43.) Non-Hispanic black births are also, however, more likely to be LBW when born preterm; 49.5 percent compared with 43.5 percent of white non-Hispanic, and 35.9 percent of Hispanic births, and are twice as likely as white non-Hispanic and Hispanic births to be LBW when born at term; 5.5 compared with 2.5, and 2.7 percent, respectively.

Overall Hispanic LBW was 6.3 percent, unchanged from 1995, but slightly higher than levels reported for the early 1990's (6.1 percent) (2). (See tables 25, 43, and 45 for 1996 data.) Despite a higher prevalence of risk factors for poor pregnancy outcome such as younger maternal age, lower education, and less utilization of prenatal care, the LBW level for all Hispanic births, and especially that for Mexican births (5.9 percent), compares favorably with that of non-Hispanic white births (6.4 percent), and most other racial or ethnic groups. Risk does vary widely by Hispanic subgroup, however,

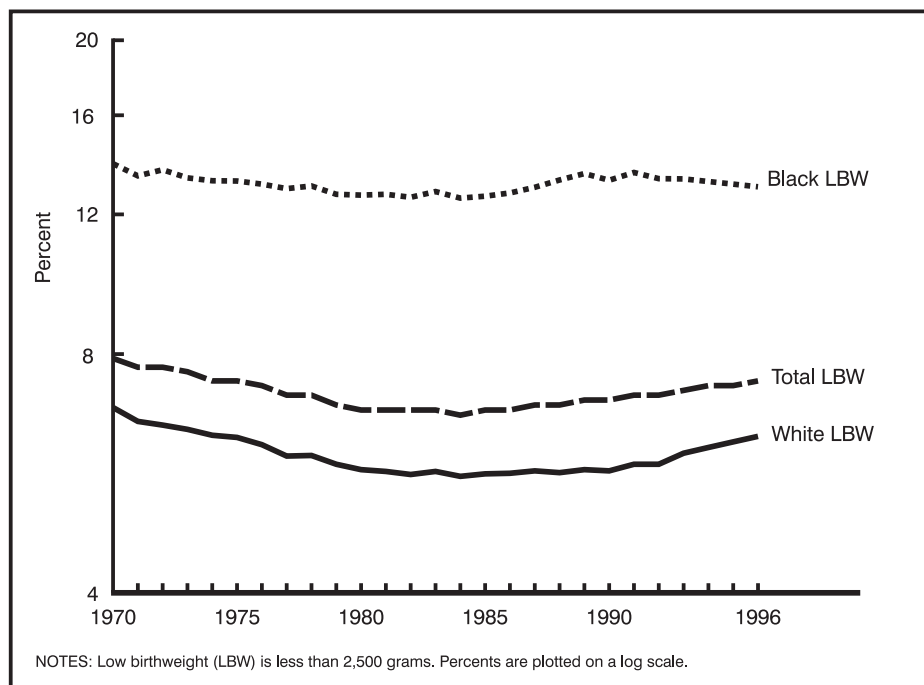


Figure 8. Percent low birthweight by race: United States, 1970–96

with rates ranging from 5.9 percent of Mexican to 9.2 percent of Puerto Rican births. Low birthweight rates also tend to be lower for births to Hispanic women born outside of the 50 States and the District of Columbia, but this pattern varies by subgroup (table 25).

For 1996, 6.5 percent of American Indian infants weighed less than 2,500 grams at birth (table 24), compared with 6.6 percent for 1995. Although the LBW proportion for American Indian infants is similar to that of white births, American Indian infants are much more likely to die within the first year of life (9.0 compared with 6.3 per thousand for 1995), the result of higher mortality among infants aged 28 days through 11 months (68).

No substantial change in low birthweight was noted among the Asian or Pacific Islander subgroups for 1996 (table 24). For the current year, levels ranged from 5.0 percent for births to Chinese women, to 7.9 percent of Filipino births.

The risk of LBW varies by maternal age with the lowest risk for mothers aged 25–34 years, and the highest for those under age 20, and 40 years of age and over (table 45). Although overall levels of LBW are slightly more elevated for births to mothers 40 years of age and over, singletons born to older mothers are less

likely than singletons born to mothers under 20 years of age to be LBW (7.8 compared with 8.5 percent) (tabular data not shown).

The median birthweight for 1996 was 3,350 grams (7 lb 7 oz) unchanged from 1995, the lowest figure reported since 1978. The percent macrosomia (birthweight of at least 4,000 grams) for 1996 was 10.2, compared with 10.3 percent for 1995. The proportion of macrosomic births has been decreasing since 1991, after peaking at about 11 percent in the 1980's.

For the majority of States LBW for non-Hispanic white births increased or was unchanged between 1995 and 1996. A decline of at least 5 percent occurred for only two States: Idaho and New Hampshire. Rates ranged from 4.6 percent in New Hampshire, to 8.4 percent in Colorado (table 46). Rates of VLBW for non-Hispanic white births ranged from 0.7 percent (Alaska) to 1.3 percent (Alabama, Arkansas, Delaware, North Carolina, and Tennessee) (table 47). Of the 35 areas reporting at least 1,000 non-Hispanic black births, LBW declined by 5 percent or more in 6 States: Arizona, Colorado, Missouri, Nebraska, Virginia, and Wisconsin. Low birthweight levels for non-Hispanic black infants ranged from 10.7 and 10.9 in Nebraska and Washington, to 16.7 percent for the District of Columbia;

VLBW levels ranged from 2.4 percent (Colorado) to 4.4 percent (District of Columbia).

### Apgar score

The Apgar score was developed by the late Virginia Apgar, M.D., as a means of evaluating the physical condition of newborns shortly after delivery (72). The score considers five characteristics of the baby that are easily identifiable—heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these characteristics is assessed and assigned a value of 0–2, with 2 being optimum. The total score is the sum of the scores of the five components and a score of 7 or greater indicates that the baby is in good-to-excellent physical condition. The Apgar score is assessed at 1 and 5 minutes after delivery and used to predict the newborn's chances of survival with the 5-minute score regarded as the better measure on which to make predictions.

In 1996 NCHS collected information on the 5-minute score only. All States except California and Texas collected information on the 5-minute Apgar score in 1996. Births to residents in these States accounted for 78 percent of all births in the United States. Only 1.4 percent of babies had Apgar scores that were considered low (less than 7) at 5 minutes after birth, unchanged from 1993–95 (table 24). The percent of infants with low 5-minute Apgar scores declined sharply between 1984–90, from 2.0 to 1.5 (data not shown), but has changed very little since then.

Of all racial groups, Asian or Pacific Islander babies were in the best physical condition shortly after delivery (tables 24 and 25). This was particularly true for Japanese and Chinese babies—only 0.7 percent had low 5-minute scores. The percent of babies with low scores was intermediate for non-Hispanic white and American Indian mothers, between 1.2 and 1.4, while 2.5 percent of non-Hispanic black babies had low 5-minute scores. Among Hispanic subgroups, the percent of babies with low 5-minute scores ranged from 0.8 for Cuban mothers to 1.4 percent for Puerto Rican and other and unknown Hispanic mothers.

In general, the variation among racial and ethnic groups in the percent of babies with low 5-minute Apgar scores was con-

sistent with the percent of babies that were born preterm or with low birth-weight (tables 24 and 25).

**Abnormal conditions of the newborn**

Of the eight specific abnormal conditions reported on the birth certificate, the rates per 1,000 live births in 1996 were highest for assisted ventilation less than 30 minutes (21 per 1,000), assisted ventilation 30 minutes or longer (9 per 1,000), and hyaline membrane disease/respiratory distress syndrome (RDS) (7 per 1,000) (table 48). Other studies have found that these conditions may be underreported on the birth certificate (61).

Rates of hyaline membrane disease/RDS were far higher for low birth-weight infants (less than 2,500 grams) than among infants weighing 2,500 grams or more (53 compared with 3 per 1,000 live births); there were similar large differences in rates by birthweight for assisted ventilation 30 minutes or longer (69 and 4 per 1,000 live births) (tabular data not shown).

**Congenital anomalies**

In 1996 congenital anomalies were reported on the birth certificates of the District of Columbia and all States except New Mexico. These areas included 99 percent of births in the United States. It has been shown that these anomalies are underreported on the birth certificate (61,73).

Because many of the congenital anomalies tracked on birth certificates occur infrequently, the rates shown in this report are calculated per 100,000 live births. Caution should be used in comparing yearly rates for a specific anomaly as a small change in the number of anomalies reported can result in a relatively large change in rates.

Rates for many of the anomalies reported on the birth certificates vary considerably by age of mother (table 49). As an example, the rate for Down’s syndrome for births to mothers aged 40–49 years, 350 per 100,000 live births, was 15 times the rate of 24 for mothers aged 20–24 years.

**Multiple births**

There were 106,689 live births in multiple deliveries in 1996; 100,750 twins, 5,298 triplets, 560 quadruplets, and 81 quintuplet and other higher order multiple births. (See table 50 and table G.) For 1996 the number of twin births rose 4 percent over the previous year, and the number of higher order multiple births (triplets, quadruplets, quintuplets, and other higher order multiple births) by 19 percent, the largest single year increase in higher order multiples in at least 25 years (74).

The multiple birth rate (the number of multiple births per 1,000 live births), which is primarily a measure of twin births, rose 5 percent, from 26.1 to 27.4 for 1995–96. The twinning rate (the number of twin births per 1,000 live births) grew 4 percent (from 24.8 to 25.9). Since 1980, the number of twins has risen 47 percent (from 68,339), and the twin birth rate by 37 percent (from 18.9). (See table 50 for 1996 data.)

The higher order multiple birth rate (the number of triplet, quadruplet, quintuplet, and other higher order multiples per 100,000 births), climbed 20 percent, from 127.5 to 152.6 per 100,000 between 1995 and 1996. This rate has doubled since 1990 (72.8), quadrupled since 1980 (37.0), and quintupled since 1971 (29.1) (figure 9). In the early 1970’s only about 1 of 3,500 births was a higher order multiple, but by 1996, this rate had lowered to 1 of 655 births (74). Triplets comprise the bulk (89 percent in 1996) of higher order multiple births, but the number of quadruplets and quintuplets and other higher order multiples have also risen markedly in recent years, and have at least doubled since the early 1990’s (table G).

It is estimated that about one-third of the increase in multiple births is the result of the shift towards older childbearing (the risk of multiple delivery generally increases with maternal age). Most of the rise in multiple births since the early 1980’s, however, has been attributed to the increased use of fertility enhancing therapies (ovulation-inducing drugs and assisted reproductive techniques (ART) such as in vitro fertilization) which are more likely to result in a multiple gestation (74–76). A recent study found that 37 percent of live births resulting from ART were multiple births (77).

Multiple births, and especially higher order multiple births, occur more frequently among certain racial or ethnic groups. For example, the Hispanic twinning rate (18.6) is substantially lower than the non-Hispanic white (27.8), and non-Hispanic black (29.2) rates, and the higher order multiple birth rate for non-Hispanic white women (207.1) is dramatically higher than that of other groups (73.5 for non-Hispanic black and 58.3 for Hispanic women). Indeed, in 1996 most all higher order births were born to non-Hispanic white women; 82 percent of all higher order multiples were born to white non-Hispanic women compared with 60 percent of singletons.

The greater likelihood of white non-Hispanic mothers to seek infertility services (16) likely accounts for much of the disparity in higher order multiple birth rates. In the 1970’s, before fertility therapies became widely available, the higher order multiple birth rate among white women was similar to, or lower than that of black women (74). Thus, although rates have risen among both white and black mothers, the increase from 1971 to 1996 is much more pronounced among white women, 513

**Table G. Numbers of twin, triplet, quadruplet and quintuplet and other higher order multiple births: United States, 1989–96**

Year	Twins	Triplets	Quadruplets	Quintuplets and other higher order multiples
1996 . . . . .	100,750	5,298	560	81
1995 . . . . .	96,736	4,551	365	57
1994 . . . . .	97,064	4,233	315	46
1993 . . . . .	96,445	3,834	277	57
1992 . . . . .	95,372	3,547	310	26
1991 . . . . .	94,779	3,121	203	22
1990 . . . . .	93,865	2,830	185	13
1989 . . . . .	90,118	2,529	229	40

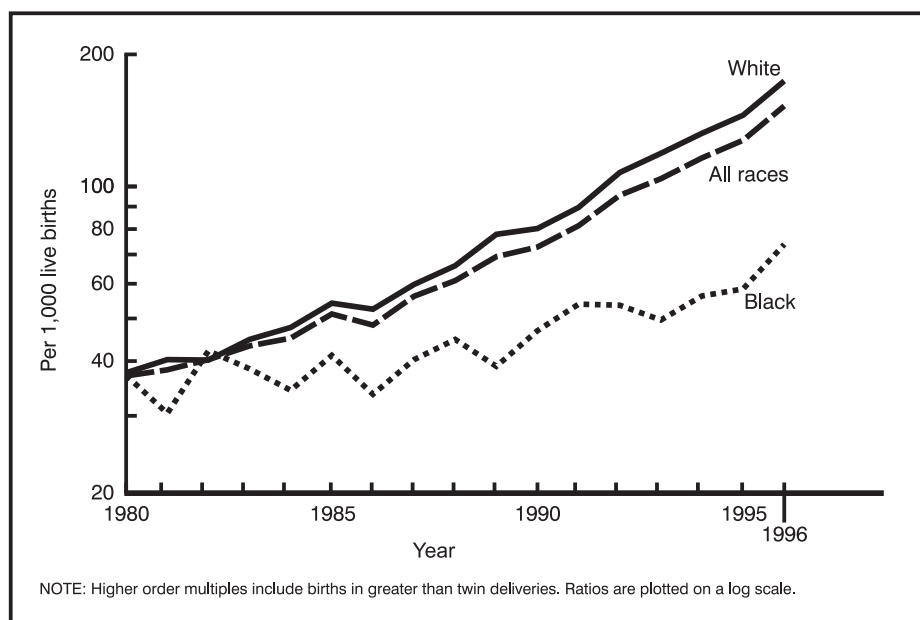


Figure 9. Higher order multiple birth ratios by race of mother, 1980–96

compared with 108 percent, respectively. (Comparable data by Hispanic origin are not available for much of this time period.)

Multiple birth rates increase with maternal age through the thirties, drop slightly for women aged 40–44 years, then rise sharply for the age group 45–49 years. In illustration, for 1996, 1 percent of all births to teenage non-Hispanic white mothers was a multiple compared with 4 percent of births to mothers aged 30–44 years, and 16 percent of births to mothers 45 years of age and over. (See table 50.)

State variation in rates of twins and higher order multiple births are often wide, and cannot be accounted for by State differences in maternal age distributions. For combined years 1992–94, Massachusetts reported both the highest proportion of twins and higher order multiple births with a twinning rate of 27.7 (compared with the U.S. rate of 25.5 per 1,000), and a higher order multiple birth rate of 215.9 (compared with 105.5 for the United States) (74,78).

Multiple births are more likely than singletons to be LBW and/or preterm. (For 1996, 53 percent of twins and 93 percent of triplets were LBW compared with 6 percent of singletons; 53 percent of twins and 92 percent of triplets were preterm compared with 8 percent of singletons.) There is evidence, however, for distinct differences in intrauterine growth patterns among twins, triplets, and singletons, and

even between twins and triplets; that is, that the optimum birthweight and gestational period for twins is lower and shorter than that of singletons, and that for triplets is lower, and shorter still. This difference underscores the importance of the use of plurality-specific growth curves to detect multiple gestations at risk of fetal growth retardation (79).

Both mother and child are at high risk of poor outcome in a multiple gestation. Maternal risks include higher rates of anemia, toxemia, and postpartum hemorrhage (80). Although holding a survival advantage at lower birthweights and shorter gestations (81,82), multiples are more likely than singletons to suffer early mortality. For 1995, multiples comprised less than 3 percent of births, but 16 percent of neonatal deaths (83). Largely as a result of their lower birthweights and shorter gestations, multiple births incur more health care dollars—the average cost at one Boston hospital for each birth in a twin delivery was 2 times and a triplet, 3½ times as high as that for a singleton (84).

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TABLE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Geographic area:																									
States <sup>1</sup> . . . . .										10	11	12							19						
United States or all reporting areas . . . . .	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Years:																									
Current year only . . . . .		2	3				7	8		10	11	12	13	14	15	16	17		19		21	22	23	24	25
Trend . . . . .	1			4	5	6			9									18		20					
Type of entry:																									
Number of births . . . . .	1	2				6	7			10	11	12	13	14	15	16	17		19		21	22			
Rates or other measures . . . . .	1		3	4	5	6		8	9	10			13	14	15	16	17	18	19	20	21	22	23	24	25
Characteristics:																									
Age of father . . . . .																				20					
Age of mother . . . . .		2	3	4			7		9								17	18			21				
Alcohol use . . . . .																								24	25
Apgar score . . . . .																								24	25
Birthweight . . . . .																							23	24	25
Day of week . . . . .																16									
Education . . . . .												13	14								21				
Gestational age . . . . .																						22	23	24	25
Hispanic origin of mother . . . . .						<sup>4</sup> 6	<sup>4</sup> 7	<sup>4</sup> 8	<sup>4</sup> 9		<sup>4</sup> 12		<sup>4</sup> 14			<sup>6</sup> 17	<sup>6</sup> 18	<sup>6</sup> 19			<sup>6</sup> 22	<sup>4</sup> 23		<sup>4</sup> 25	
Live-birth order . . . . .		2	3		5		7	8				13	14												
Method of delivery . . . . .																16								24	25
Month of birth . . . . .														15											
Nativity of mother . . . . .												13	14											24	25
Prenatal care . . . . .																								24	25
Race of father . . . . .																				<sup>3</sup> 20					
Race of mother . . . . .	<sup>2</sup> 1	<sup>2</sup> 2	<sup>2</sup> 3	<sup>2</sup> 4	<sup>3</sup> 5	<sup>4</sup> 6	<sup>4</sup> 7	<sup>4</sup> 8	<sup>4</sup> 9		<sup>2</sup> 11	<sup>4</sup> 12	<sup>5</sup> 13	<sup>4</sup> 14	<sup>3</sup> 15	<sup>3</sup> 16	<sup>6</sup> 17	<sup>6</sup> 18	<sup>6</sup> 19		<sup>3</sup> 21	<sup>6</sup> 22	<sup>4</sup> 23	<sup>5</sup> 24	<sup>4</sup> 25
Sex of child . . . . .													13	14											
Teenage mothers . . . . .										10			13	14											
Tobacco use . . . . .																								24	25
Unmarried mothers . . . . .													13	14			17	18	19						
Weight gain during pregnancy . . . . .																						22	23	24	25

TABLE:	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Geographic area:																									
States <sup>1</sup> . . . . .									34						41						46	47			
United States or all reporting areas . . . . .	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Years:																									
Current year only . . . . .	26	27	28	29	30	31	32	33	34	35	36	37	38		40	41	42			45	46	47	48	49	50
Trend . . . . .														39					44						
Type of entry:																									
Number of births . . . . .	26	27	28	29	30	31		33		35	36	37	38	39	40		42	43		45	46	47	48	49	50
Rates or other measures . . . . .	26	27	28	29	30	31	32	33	34	35	36	37		39	40	41	42	43	44	45	46	47	48	49	50
Characteristics:																									
Abnormal conditions of newborn . . . . .																							48		
Age of mother . . . . .	26			29	30		32	33			36	37			40					45			48	49	50
Attendant at birth . . . . .													38												
Birthweight . . . . .							32											43	44	45	46	47			
Complications of labor . . . . .		27	28									37					42								
Congenital anomalies . . . . .																								49	
Education . . . . .						31																			
Gestational age . . . . .																		43	44						
Hispanic origin of mother . . . . .			<sup>4</sup> 28		<sup>4</sup> 30		<sup>6</sup> 32	<sup>6</sup> 33	<sup>6</sup> 34	<sup>6</sup> 35			<sup>6</sup> 38	<sup>6</sup> 39	<sup>6</sup> 40	<sup>6</sup> 41		<sup>6</sup> 43		<sup>6</sup> 45	<sup>6</sup> 46	<sup>6</sup> 47			<sup>6</sup> 50
Medical risk factors . . . . .	26	27	28														42								
Method of delivery . . . . .															39	40	41	42							
Obstetric procedures . . . . .		27	28								36														
Place of delivery . . . . .													38												
Multiple births . . . . .																									50
Prenatal care . . . . .								33	34	35															
Race of mother . . . . .	<sup>3</sup> 26	<sup>5</sup> 27	<sup>4</sup> 28	<sup>3</sup> 29	<sup>4</sup> 30	<sup>3</sup> 31	<sup>6</sup> 32	<sup>6</sup> 33	<sup>6</sup> 34	<sup>6</sup> 35	<sup>3</sup> 36	<sup>3</sup> 37	<sup>6</sup> 38	<sup>6</sup> 39	<sup>6</sup> 40	<sup>6</sup> 41		<sup>6</sup> 43	<sup>3</sup> 44	<sup>6</sup> 45	<sup>6</sup> 46	<sup>6</sup> 47	<sup>3</sup> 48	<sup>3</sup> 49	<sup>6</sup> 50
Tobacco use . . . . .				29	30	31	32																		

<sup>1</sup>Includes data for Puerto Rico, Virgin Islands, and Guam.  
<sup>2</sup>Includes white, black, American Indian, and Asian or Pacific Islander.  
<sup>3</sup>Includes white and black  
<sup>4</sup>Includes Mexican, Puerto Rican, Cuban, Central and South American, other and unknown Hispanic, non-Hispanic white, and non-Hispanic black.  
<sup>5</sup>Includes white, black, American Indian, Chinese, Japanese, Hawaiian, Filipino, and other Asian or Pacific Islanders.  
<sup>6</sup>Includes Hispanic, total white, non-Hispanic white, total black, and non-Hispanic black.

**Table 1. Live births, birth rates, and fertility rates, by race: United States, specified years 1940-55 and each year, 1960-96**

[Birth rates are live births per 1,000 population in specified group. Fertility rates per 1,000 women aged 15-44 years in specified group. Population enumerated as of April 1 for census years and estimated as of July 1 for all other years. Beginning with 1970, excludes births to nonresidents of the United States]

Year	Number					Birth rate					Fertility rate				
	All races <sup>1</sup>	White	Black	American Indian <sup>2</sup>	Asian or Pacific Islander	All races <sup>1</sup>	White	Black	American Indian <sup>2</sup>	Asian or Pacific Islander	All races <sup>1</sup>	White	Black	American Indian <sup>2</sup>	Asian or Pacific Islander
<b>Registered births</b>															
<b>Race of mother:</b>															
1996	3,891,494	3,093,057	594,781	37,880	165,776	14.7	14.1	17.8	16.6	17.0	65.3	64.3	70.7	68.7	65.9
1995	3,899,589	3,098,885	603,139	37,278	160,287	14.8	14.2	18.2	16.6	17.3	65.6	64.4	72.3	69.1	66.4
1994	3,952,767	3,121,004	636,391	37,740	157,632	15.2	14.4	19.5	17.1	17.5	66.7	64.9	76.9	70.9	66.8
1993	4,000,240	3,149,833	658,875	38,732	152,800	15.5	14.7	20.5	17.8	17.7	67.6	65.4	80.5	73.4	66.7
1992	4,065,014	3,201,678	673,633	39,453	150,250	15.9	15.0	21.3	18.4	18.0	68.9	66.5	83.2	75.4	67.2
1991	4,110,907	3,241,273	682,602	38,841	145,372	16.3	15.4	21.9	18.3	18.2	69.6	67.0	85.2	75.1	67.6
1990	4,158,212	3,290,273	684,336	39,051	141,635	16.7	15.8	22.4	18.9	19.0	70.9	68.3	86.8	76.2	69.6
1989	4,040,958	3,192,355	673,124	39,478	133,075	16.4	15.4	22.3	19.7	18.7	69.2	66.4	86.2	79.0	68.2
1988	3,909,510	3,102,083	638,562	37,088	129,035	16.0	15.0	21.5	19.3	19.2	67.3	64.5	82.6	76.8	70.2
1987	3,809,394	3,043,828	611,173	35,322	116,560	15.7	14.9	20.8	19.1	18.4	65.8	63.3	80.1	75.6	67.1
1986	3,756,547	3,019,175	592,910	34,169	107,797	15.6	14.8	20.5	19.2	18.0	65.4	63.1	78.9	75.9	66.0
1985	3,760,561	3,037,913	581,824	34,037	104,606	15.8	15.0	20.4	19.8	18.7	66.3	64.1	78.8	78.6	68.4
1984 <sup>3</sup>	3,669,141	2,967,100	568,138	33,256	98,926	15.6	14.8	20.1	20.1	18.8	65.5	63.2	78.2	79.8	69.2
1983 <sup>3</sup>	3,638,933	2,946,468	562,624	32,881	95,713	15.6	14.8	20.2	20.6	19.5	65.7	63.4	78.7	81.8	71.7
1982 <sup>3</sup>	3,680,537	2,984,817	568,506	32,436	93,193	15.9	15.1	20.7	21.1	20.3	67.3	64.8	80.9	83.6	74.8
1981 <sup>3</sup>	3,629,238	2,947,679	564,955	29,688	84,553	15.8	15.0	20.8	20.0	20.1	67.3	64.8	82.0	79.6	73.7
1980 <sup>3</sup>	3,612,258	2,936,351	568,080	29,389	74,355	15.9	15.1	21.3	20.7	19.9	68.4	65.6	84.7	82.7	73.2
<b>Race of child:</b>															
1980 <sup>3</sup>	3,612,258	2,898,732	589,616	36,797	---	15.9	14.9	22.1	---	---	68.4	64.7	88.1	---	---
1979 <sup>3</sup>	3,494,398	2,808,420	577,855	34,269	---	15.6	14.5	22.0	---	---	67.2	63.4	88.3	---	---
1978 <sup>3</sup>	3,333,279	2,681,116	551,540	33,160	---	15.0	14.0	21.3	---	---	65.5	61.7	86.7	---	---
1977 <sup>3</sup>	3,326,632	2,691,070	544,221	30,500	---	15.1	14.1	21.4	---	---	66.8	63.2	88.1	---	---
1976 <sup>3</sup>	3,167,788	2,567,614	514,479	29,009	---	14.6	13.6	20.5	---	---	65.0	61.5	85.8	---	---
1975 <sup>3</sup>	3,144,198	2,551,996	511,581	27,546	---	14.6	13.6	20.7	---	---	66.0	62.5	87.9	---	---
1974 <sup>3</sup>	3,159,958	2,575,792	507,162	26,631	---	14.8	13.9	20.8	---	---	67.8	64.2	89.7	---	---
1973 <sup>3</sup>	3,136,965	2,551,030	512,597	26,464	---	14.8	13.8	21.4	---	---	68.8	64.9	93.6	---	---
1972 <sup>3</sup>	3,258,411	2,655,558	531,329	27,368	---	15.6	14.5	22.5	---	---	73.1	68.9	99.9	---	---
1971 <sup>4</sup>	3,555,970	2,919,746	564,960	27,148	---	17.2	16.1	24.4	---	---	81.6	77.3	109.7	---	---
1970 <sup>4</sup>	3,731,386	3,091,264	572,362	25,864	---	18.4	17.4	25.3	---	---	87.9	84.1	115.4	---	---
1969 <sup>4</sup>	3,600,206	2,993,614	543,132	24,008	---	17.9	16.9	24.4	---	---	86.1	82.2	112.1	---	---
1968 <sup>4</sup>	3,501,564	2,912,224	531,152	24,156	---	17.6	16.6	24.2	---	---	85.2	81.3	112.7	---	---
1967 <sup>5</sup>	3,520,959	2,922,502	543,976	22,665	---	17.8	16.8	25.1	---	---	87.2	82.8	118.5	---	---
1966 <sup>4</sup>	3,606,274	2,993,230	558,244	23,014	---	18.4	17.4	26.2	---	---	90.8	86.2	124.7	---	---
1965 <sup>4</sup>	3,760,358	3,123,860	581,126	24,066	---	19.4	18.3	27.7	---	---	96.3	91.3	133.2	---	---
1964 <sup>4</sup>	4,027,490	3,369,160	607,556	24,382	---	21.1	20.0	29.5	---	---	104.7	99.8	142.6	---	---
1963 <sup>4,6</sup>	4,098,020	3,326,344	580,658	22,358	---	21.7	20.7	---	---	---	108.3	103.6	---	---	---
1962 <sup>4,6</sup>	4,167,362	3,394,068	584,610	21,968	---	22.4	21.4	---	---	---	112.0	107.5	---	---	---
1961 <sup>4</sup>	4,268,326	3,600,864	611,072	21,464	---	23.3	22.2	---	---	---	117.1	112.3	---	---	---
1960 <sup>4</sup>	4,257,850	3,600,744	602,264	21,114	---	23.7	22.7	31.9	---	---	118.0	113.2	153.5	---	---
<b>Births adjusted for underregistration</b>															
<b>Race of child:</b>															
1955	4,097,000	3,485,000	---	---	---	25.0	23.8	---	---	---	118.3	113.7	---	---	---
1950	3,632,000	3,108,000	---	---	---	24.1	23.0	---	---	---	106.2	102.3	---	---	---
1945	2,858,000	2,471,000	---	---	---	20.4	19.7	---	---	---	85.9	83.4	---	---	---
1940	2,559,000	2,199,000	---	---	---	19.4	18.6	---	---	---	79.9	77.1	---	---	---

--- Data not available.

<sup>1</sup> For 1960-91 includes births to races not shown separately.

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

<sup>3</sup> Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

<sup>4</sup> Based on a 50-percent sample of births.

<sup>5</sup> Based on a 20- to 50-percent sample of births.

<sup>6</sup> Figures by race exclude New Jersey.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 2. Live births by age of mother, live-birth order, and race of mother: United States, 1996**

[Live-birth order refers to number of children born alive to mother]

Live-birth order and race of mother	All ages	Age of mother												
		Under 15 years	15-19 years						20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
			Total	15 years	16 years	17 years	18 years	19 years						
All races .....	3,891,494	11,148	491,577	28,540	60,287	96,894	135,059	170,797	945,210	1,071,287	897,913	399,510	71,804	3,045
First child .....	1,589,512	10,820	381,910	27,040	54,337	81,263	102,714	116,556	442,949	401,788	249,272	87,279	14,866	628
Second child .....	1,251,760	249	88,895	1,291	5,189	13,554	26,729	42,132	318,896	371,734	324,102	127,960	19,317	607
Third child .....	624,631	6	15,521	44	356	1,404	4,296	9,421	126,452	185,197	189,625	92,517	14,791	522
Fourth child .....	240,074	1	2,190	-	27	127	521	1,515	38,067	68,228	76,327	46,016	8,888	357
Fifth child .....	89,795	-	259	1	6	15	41	196	10,402	23,939	29,314	20,582	5,046	253
Sixth child .....	37,340	-	37	-	-	2	5	30	2,621	8,893	12,627	10,066	2,970	126
Seventh child .....	17,274	-	11	-	1	1	3	6	632	3,455	5,860	5,346	1,841	129
Eighth child and over .....	17,966	-	9	-	-	-	1	8	247	1,975	5,077	6,802	3,467	389
Not stated .....	23,142	72	2,745	164	371	528	749	933	4,944	6,078	5,709	2,942	618	34
White .....	3,093,057	5,526	344,685	16,978	39,401	66,997	96,246	125,063	726,669	878,449	747,436	329,782	58,062	2,448
First child .....	1,271,157	5,377	275,543	16,251	36,207	57,856	76,050	89,179	355,805	338,428	209,516	73,393	12,564	531
Second child .....	1,014,793	111	57,940	613	2,760	8,079	17,244	29,244	249,076	311,204	273,609	106,553	15,798	502
Third child .....	496,684	3	8,317	16	182	645	2,209	5,265	89,241	149,753	160,011	77,094	11,815	450
Fourth child .....	182,191	-	929	-	6	54	213	656	22,623	51,155	62,312	37,806	7,079	287
Fifth child .....	63,327	-	95	-	2	5	20	68	4,962	15,763	22,143	16,232	3,946	186
Sixth child .....	24,967	-	13	-	-	1	1	11	1,028	5,083	8,787	7,663	2,311	82
Seventh child .....	11,065	-	5	-	-	-	2	3	228	1,653	3,718	3,944	1,415	102
Eighth child and over .....	11,341	-	3	-	-	-	1	2	100	756	2,806	4,750	2,646	280
Not stated .....	17,532	35	1,840	98	244	357	506	635	3,606	4,654	4,534	2,347	488	28
Black .....	594,781	5,193	130,596	10,498	18,753	26,775	34,394	40,176	179,361	133,204	94,295	43,716	8,124	292
First child .....	230,370	5,037	93,631	9,800	16,225	20,796	23,270	23,540	66,830	35,718	20,391	7,535	1,184	44
Second child .....	171,424	117	28,159	609	2,238	5,053	8,677	11,582	58,271	42,034	29,060	11,890	1,830	63
Third child .....	100,149	2	6,633	24	154	696	1,921	3,838	32,607	28,014	21,028	10,055	1,778	32
Fourth child .....	47,035	1	1,138	-	16	63	272	787	13,751	14,035	10,821	6,039	1,203	47
Fifth child .....	21,555	-	153	1	4	8	19	121	4,833	6,720	5,687	3,358	762	42
Sixth child .....	9,981	-	20	-	-	-	3	17	1,408	3,138	3,045	1,882	463	25
Seventh child .....	4,843	-	4	-	1	1	-	2	359	1,456	1,667	1,060	291	6
Eighth child and over .....	4,864	-	6	-	-	-	-	6	133	974	1,748	1,458	516	29
Not stated .....	4,560	36	852	64	115	158	232	283	1,169	1,115	848	439	97	4
American Indian <sup>1</sup> .....	37,880	202	7,731	524	1,072	1,492	2,115	2,528	12,142	8,844	5,816	2,606	524	15
First child .....	13,654	194	6,010	500	976	1,271	1,599	1,664	4,469	1,787	856	285	51	2
Second child .....	10,131	7	1,411	21	84	196	430	680	4,298	2,502	1,320	510	81	2
Third child .....	6,526	-	253	1	6	17	76	153	2,187	2,101	1,353	530	100	2
Fourth child .....	3,677	-	35	-	-	1	8	26	828	1,272	976	475	86	5
Fifth child .....	1,916	-	2	-	-	-	1	1	238	689	627	296	64	-
Sixth child .....	950	-	1	-	-	1	-	-	65	282	353	197	51	1
Seventh child .....	459	-	-	-	-	-	-	-	12	108	178	126	33	2
Eighth child and over .....	429	-	-	-	-	-	-	-	2	63	135	171	57	1
Not stated .....	138	1	19	2	6	6	1	4	43	40	18	16	1	-
Asian or Pacific Islander ...	165,776	227	8,565	540	1,061	1,630	2,304	3,030	27,038	50,790	50,366	23,406	5,094	290
First child .....	74,331	212	6,726	489	929	1,340	1,795	2,173	15,845	25,855	18,509	6,066	1,067	51
Second child .....	55,412	14	1,385	48	107	226	378	626	7,251	15,994	20,113	9,007	1,608	40
Third child .....	21,272	1	318	3	14	46	90	165	2,417	5,329	7,233	4,838	1,098	38
Fourth child .....	7,171	-	88	-	5	9	28	46	865	1,766	2,218	1,696	520	18
Fifth child .....	2,997	-	9	-	-	2	1	6	369	767	857	696	274	25
Sixth child .....	1,442	-	3	-	-	-	1	2	120	390	442	324	145	18
Seventh child .....	907	-	2	-	-	-	1	1	33	238	297	216	102	19
Eighth child and over .....	1,332	-	-	-	-	-	-	-	12	182	388	423	248	79
Not stated .....	912	-	34	-	6	7	10	11	126	269	309	140	32	2

- Quantity zero.  
<sup>1</sup> Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 3. Fertility rates and birth rates by age of mother, live-birth order, and race of mother: United States, 1996**

[Rates are live births per 1,000 women in specified age and racial group. Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

Live-birth order and race of mother	15-44 years <sup>1</sup>	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
			Total	15-17 years	18-19 years						
All races .....	65.3	1.2	54.4	33.8	86.0	110.4	113.1	83.9	35.3	6.8	0.3
First child .....	26.8	1.2	42.5	29.8	62.0	52.0	42.7	23.4	7.8	1.4	0.1
Second child .....	21.1	0.0	9.9	3.7	19.5	37.4	39.5	30.5	11.4	1.9	0.1
Third child .....	10.5	*	1.7	0.3	3.9	14.8	19.7	17.8	8.2	1.4	0.1
Fourth child .....	4.1	*	0.2	0.0	0.6	4.5	7.2	7.2	4.1	0.9	0.0
Fifth child .....	1.5	*	0.0	0.0	0.1	1.2	2.5	2.8	1.8	0.5	0.0
Sixth and seventh child .....	0.9	*	0.0	*	0.0	0.4	1.3	1.7	1.4	0.5	0.0
Eighth child and over .....	0.3	*	*	*	*	0.0	0.2	0.5	0.6	0.3	0.0
White .....	64.3	0.8	48.1	28.4	78.4	107.2	116.1	86.3	35.6	6.7	0.3
First child .....	26.6	0.7	38.7	25.6	58.8	52.8	45.0	24.3	8.0	1.5	0.1
Second child .....	21.2	0.0	8.1	2.7	16.6	36.9	41.4	31.8	11.6	1.8	0.1
Third child .....	10.4	*	1.2	0.2	2.7	13.2	19.9	18.6	8.4	1.4	0.1
Fourth child .....	3.8	*	0.1	0.0	0.3	3.4	6.8	7.2	4.1	0.8	0.0
Fifth child .....	1.3	*	0.0	*	0.0	0.7	2.1	2.6	1.8	0.5	0.0
Sixth and seventh child .....	0.8	*	*	*	*	0.2	0.9	1.5	1.3	0.4	0.0
Eighth child and over .....	0.2	*	*	*	*	0.0	0.1	0.3	0.5	0.3	0.0
Black .....	70.7	3.6	91.4	64.7	132.5	136.8	98.2	63.3	29.1	6.1	0.3
First child .....	27.6	3.5	65.9	54.4	83.7	51.3	26.5	13.8	5.1	0.9	0.0
Second child .....	20.5	0.1	19.8	9.2	36.2	44.7	31.2	19.7	8.0	1.4	0.1
Third child .....	12.0	*	4.7	1.0	10.3	25.0	20.8	14.2	6.8	1.4	0.0
Fourth child .....	5.6	*	0.8	0.1	1.9	10.6	10.4	7.3	4.1	0.9	0.0
Fifth child .....	2.6	*	0.1	*	0.3	3.7	5.0	3.9	2.3	0.6	0.0
Sixth and seventh child .....	1.8	*	0.0	*	0.0	1.4	3.4	3.2	2.0	0.6	0.0
Eighth child and over .....	0.6	*	*	*	*	0.1	0.7	1.2	1.0	0.4	0.0
American Indian <sup>2</sup> .....	68.7	1.7	73.9	46.4	122.3	133.9	98.5	63.2	28.5	6.3	*
First child .....	24.9	1.7	57.6	41.4	86.1	49.5	20.0	9.3	3.1	0.6	*
Second child .....	18.4	*	13.5	4.5	29.3	47.6	28.0	14.4	5.6	1.0	*
Third child .....	11.9	*	2.4	0.4	6.0	24.2	23.5	14.7	5.8	1.2	*
Fourth child .....	6.7	*	0.3	*	0.9	9.2	14.2	10.6	5.2	1.0	*
Fifth child .....	3.5	*	*	*	*	2.6	7.7	6.8	3.3	0.8	*
Sixth and seventh child .....	2.6	*	*	*	*	0.8	4.4	5.8	3.6	1.0	*
Eighth child and over .....	0.8	*	*	*	*	*	0.7	1.5	1.9	0.7	*
Asian or Pacific Islander .....	65.9	0.6	24.6	14.9	40.4	70.7	111.2	109.2	52.2	12.2	0.8
First child .....	29.7	0.6	19.4	12.8	30.2	41.6	56.9	40.4	13.6	2.6	0.1
Second child .....	22.1	*	4.0	1.8	7.6	19.1	35.2	43.9	20.2	3.9	0.1
Third child .....	8.5	*	0.9	0.3	1.9	6.3	11.7	15.8	10.8	2.6	0.1
Fourth child .....	2.9	*	0.3	*	0.6	2.3	3.9	4.8	3.8	1.2	*
Fifth child .....	1.2	*	*	*	*	1.0	1.7	1.9	1.6	0.7	0.1
Sixth and seventh child .....	0.9	*	*	*	*	0.4	1.4	1.6	1.2	0.6	0.1
Eighth child and over .....	0.5	*	*	*	*	*	0.4	0.8	0.9	0.6	0.2

\* Figure does not meet standards of reliability or precision.

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup> Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

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

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 4. Total fertility rates and birth rates by age of mother: United States, 1970-96, and by age and race of mother: United States, 1980-96**

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1970, 1980, and 1990, and estimated as of July 1 for all other years]

Year and race	Total fertility rate	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
			Total	15-17 years	18-19 years						
<b>All races<sup>1</sup></b>											
1996	2,027.0	1.2	54.4	33.8	86.0	110.4	113.1	83.9	35.3	6.8	0.3
1995	2,019.0	1.3	56.8	36.0	89.1	109.8	112.2	82.5	34.3	6.6	0.3
1994	2,036.0	1.4	58.9	37.6	91.5	111.1	113.9	81.5	33.7	6.4	0.3
1993	2,046.0	1.4	59.6	37.8	92.1	112.6	115.5	80.8	32.9	6.1	0.3
1992	2,065.0	1.4	60.7	37.8	94.5	114.6	117.4	80.2	32.5	5.9	0.3
1991	2,073.0	1.4	62.1	38.7	94.4	115.7	118.2	79.5	32.0	5.5	0.2
1990	2,081.0	1.4	59.9	37.5	88.6	116.5	120.2	80.8	31.7	5.5	0.2
1989	2,014.0	1.4	57.3	36.4	84.2	113.8	117.6	77.4	29.9	5.2	0.2
1988	1,934.0	1.3	53.0	33.6	79.9	110.2	114.4	74.8	28.1	4.8	0.2
1987	1,872.0	1.3	50.6	31.7	78.5	107.9	111.6	72.1	26.3	4.4	0.2
1986	1,837.5	1.3	50.2	30.5	79.6	107.4	109.8	70.1	24.4	4.1	0.2
1985	1,844.0	1.2	51.0	31.0	79.6	108.3	111.0	69.1	24.0	4.0	0.2
1984 <sup>2</sup>	1,806.5	1.2	50.6	31.0	77.4	106.8	108.7	67.0	22.9	3.9	0.2
1983 <sup>2</sup>	1,799.0	1.1	51.4	31.8	77.4	107.8	108.5	64.9	22.0	3.9	0.2
1982 <sup>2</sup>	1,827.5	1.1	52.4	32.3	79.4	111.6	111.0	64.1	21.2	3.9	0.2
1981 <sup>2</sup>	1,812.0	1.1	52.2	32.0	80.0	112.2	111.5	61.4	20.0	3.8	0.2
1980 <sup>2</sup>	1,839.5	1.1	53.0	32.5	82.1	115.1	112.9	61.9	19.8	3.9	0.2
1979 <sup>2</sup>	1,808.0	1.2	52.3	32.3	81.3	112.8	111.4	60.3	19.5	3.9	0.2
1978 <sup>2</sup>	1,760.0	1.2	51.5	32.2	79.8	109.9	108.5	57.8	19.0	3.9	0.2
1977 <sup>2</sup>	1,789.5	1.2	52.8	33.9	80.9	112.9	111.0	56.4	19.2	4.2	0.2
1976 <sup>2</sup>	1,738.0	1.2	52.8	34.1	80.5	110.3	106.2	53.6	19.0	4.3	0.2
1975 <sup>2</sup>	1,774.0	1.3	55.6	36.1	85.0	113.0	108.2	52.3	19.5	4.6	0.3
1974 <sup>2</sup>	1,835.0	1.2	57.5	37.3	88.7	117.7	111.5	53.8	20.2	4.8	0.3
1973 <sup>2</sup>	1,879.0	1.2	59.3	38.5	91.2	119.7	112.2	55.6	22.1	5.4	0.3
1972 <sup>2</sup>	2,010.0	1.2	61.7	39.0	96.9	130.2	117.7	59.8	24.8	6.2	0.4
1971 <sup>3</sup>	2,266.5	1.1	64.5	38.2	105.3	150.1	134.1	67.3	28.7	7.1	0.4
1970 <sup>3</sup>	2,480.0	1.2	68.3	38.8	114.7	167.8	145.1	73.3	31.7	8.1	0.5
<b>White</b>											
1996	2,005.5	0.8	48.1	28.4	78.4	107.2	116.1	86.3	35.6	6.7	0.3
1995	1,989.0	0.8	50.1	30.0	81.2	106.3	114.8	84.6	34.5	6.4	0.3
1994	1,985.0	0.8	51.1	30.7	82.1	106.2	115.5	83.2	33.7	6.2	0.3
1993	1,982.0	0.8	51.1	30.3	82.1	106.9	116.6	82.1	32.7	5.9	0.3
1992	1,993.5	0.8	51.8	30.1	83.8	108.2	118.4	81.4	32.2	5.7	0.2
1991	1,995.5	0.8	52.8	30.7	83.5	109.0	118.8	80.5	31.8	5.2	0.2
1990	2,003.0	0.7	50.8	29.5	78.0	109.8	120.7	81.7	31.5	5.2	0.2
1989	1,931.0	0.7	47.9	28.1	72.9	106.9	117.8	78.1	29.7	4.9	0.2
1988	1,856.5	0.6	44.4	26.0	69.6	103.7	114.8	75.4	27.7	4.5	0.2
1987	1,804.5	0.6	42.5	24.6	68.9	102.3	112.3	73.0	25.9	4.1	0.2
1986	1,776.0	0.6	42.3	23.8	70.1	102.7	110.8	70.9	23.9	3.8	0.2
1985	1,787.0	0.6	43.3	24.4	70.4	104.1	112.3	69.9	23.3	3.7	0.2
1984 <sup>2</sup>	1,748.5	0.6	42.9	24.3	68.4	102.7	109.8	67.7	22.2	3.6	0.2
1983 <sup>2</sup>	1,740.5	0.6	43.9	25.0	68.8	103.8	109.4	65.3	21.3	3.6	0.2
1982 <sup>2</sup>	1,767.0	0.6	45.0	25.5	70.8	107.7	111.9	64.0	20.4	3.6	0.2
1981 <sup>2</sup>	1,748.0	0.5	44.9	25.4	71.5	108.3	112.3	61.0	19.0	3.4	0.2
1980 <sup>2</sup>	1,773.0	0.6	45.4	25.5	73.2	111.1	113.8	61.2	18.8	3.5	0.2
<b>Black</b>											
1996	2,144.0	3.6	91.4	64.7	132.5	136.8	98.2	63.3	29.1	6.1	0.3
1995	2,175.0	4.2	96.1	69.7	137.1	137.1	98.6	64.0	28.7	6.0	0.3
1994	2,300.0	4.6	104.5	76.3	148.3	146.0	104.0	65.8	28.9	5.9	0.3
1993	2,384.5	4.6	108.6	79.8	151.9	152.6	108.4	67.3	29.2	5.9	0.3
1992	2,442.0	4.7	112.4	81.3	157.9	158.0	111.2	67.5	28.8	5.6	0.2
1991	2,480.0	4.8	115.5	84.1	158.6	160.9	113.1	67.7	28.3	5.5	0.2
1990	2,480.0	4.9	112.8	82.3	152.9	160.2	115.5	68.7	28.1	5.5	0.3
1989	2,432.5	5.1	111.5	81.9	151.9	156.8	114.4	66.3	26.7	5.4	0.3
1988	2,298.0	4.9	102.7	75.7	142.7	149.7	108.2	63.1	25.6	5.1	0.3
1987	2,198.0	4.8	97.6	72.1	135.8	142.7	104.3	60.6	24.6	4.8	0.2
1986	2,135.5	4.7	95.8	69.3	135.1	137.3	101.1	59.3	23.8	4.8	0.3
1985	2,109.0	4.5	95.4	69.3	132.4	135.0	100.2	57.9	23.9	4.6	0.3
1984 <sup>2</sup>	2,070.5	4.4	94.1	69.2	128.1	132.2	98.4	56.7	23.3	4.8	0.2
1983 <sup>2</sup>	2,066.0	4.1	93.9	69.6	127.1	131.9	98.4	56.2	23.3	5.1	0.3
1982 <sup>2</sup>	2,106.5	4.0	94.3	69.7	128.9	135.4	101.3	57.5	23.3	5.1	0.4
1981 <sup>2</sup>	2,117.5	4.0	94.5	69.3	131.0	136.5	102.3	57.4	23.1	5.4	0.3
1980 <sup>2</sup>	2,176.5	4.3	97.8	72.5	135.1	140.0	103.9	59.9	23.5	5.6	0.3

See footnotes at end of table.



**Table 4. Total fertility rates and birth rates by age of mother: United States, 1970-96, and by age and race of mother: United States, 1980-96 --Con.**

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1970, 1980, and 1990, and estimated as of July 1 for all other years]

Year and race	Total fertility rate	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
			Total	15-17 years	18-19 years						
<b>American Indian <sup>4</sup></b>											
1996 .....	2,030.0	1.7	73.9	46.4	122.3	133.9	98.5	63.2	28.5	6.3	*
1995 .....	2,033.5	1.8	78.0	47.8	130.7	132.5	98.4	62.2	27.7	6.1	*
1994 .....	2,080.0	1.9	80.8	51.3	130.3	134.2	104.1	61.2	27.5	5.9	0.4
1993 .....	2,141.0	1.4	83.1	53.7	130.7	139.8	107.6	62.8	27.6	5.9	*
1992 .....	2,190.0	1.6	84.4	53.8	132.6	145.5	109.4	63.0	28.0	6.1	*
1991 .....	2,169.0	1.6	85.0	52.7	134.3	144.9	106.9	61.9	27.2	5.9	0.4
1990 .....	2,183.0	1.6	81.1	48.5	129.3	148.7	110.3	61.5	27.5	5.9	*
1989 .....	2,247.0	1.5	82.7	51.6	128.9	152.4	114.2	64.8	27.4	6.4	*
1988 .....	2,153.5	1.7	77.5	49.7	121.1	145.2	110.9	64.5	25.6	5.3	*
1987 .....	2,099.0	1.7	77.2	48.8	122.2	140.0	107.9	63.0	24.4	5.6	*
1986 .....	2,082.0	1.8	78.1	48.7	125.3	138.8	107.9	60.7	23.8	5.3	*
1985 .....	2,128.0	1.7	79.2	47.7	124.1	139.1	109.6	62.6	27.4	6.0	*
1984 <sup>2</sup> .....	2,136.0	1.7	81.5	50.7	124.7	142.4	109.2	60.5	26.3	5.6	*
1983 <sup>2</sup> .....	2,180.5	1.9	84.2	55.2	121.4	145.5	113.7	58.9	25.5	6.4	*
1982 <sup>2</sup> .....	2,213.0	1.4	83.5	52.6	127.6	148.1	115.8	60.9	26.9	6.0	*
1981 <sup>2</sup> .....	2,090.0	2.1	78.4	49.7	121.5	141.2	105.6	58.9	25.2	6.6	*
1980 <sup>2</sup> .....	2,162.5	1.9	82.2	51.5	129.5	143.7	106.6	61.8	28.1	8.2	*
<b>Asian or Pacific Islander</b>											
1996 .....	1,907.5	0.6	24.6	14.9	40.4	70.7	111.2	109.2	52.2	12.2	0.8
1995 .....	1,924.0	0.7	26.1	15.4	43.4	72.4	113.4	106.9	52.4	12.1	0.8
1994 .....	1,943.0	0.7	27.1	16.1	44.1	73.1	118.6	105.2	51.3	11.6	1.0
1993 .....	1,935.5	0.6	27.0	16.0	43.3	73.3	119.9	103.9	50.2	11.3	0.9
1992 .....	1,942.0	0.7	26.6	15.2	43.1	74.6	121.0	103.0	50.6	11.0	0.9
1991 .....	1,956.0	0.8	27.4	16.1	43.1	75.2	123.2	103.3	49.0	11.2	1.1
1990 .....	2,002.5	0.7	26.4	16.0	40.2	79.2	126.3	106.5	49.6	10.7	1.1
1989 .....	1,947.5	0.6	25.6	15.0	40.4	78.8	124.0	102.3	47.0	10.2	1.0
1988 .....	1,983.5	0.6	24.2	13.6	39.6	80.7	128.0	104.4	47.5	10.3	1.0
1987 .....	1,886.0	0.6	22.4	12.6	37.0	79.7	122.7	97.0	44.2	9.5	1.1
1986 .....	1,836.0	0.5	22.8	12.1	38.8	79.2	119.9	92.6	41.9	9.3	1.0
1985 .....	1,885.0	0.4	23.8	12.5	40.8	83.6	123.0	93.6	42.7	8.7	1.2
1984 <sup>2</sup> .....	1,892.0	0.5	24.2	12.6	40.7	86.7	124.3	92.4	40.6	8.7	1.0
1983 <sup>2</sup> .....	1,943.5	0.5	26.1	12.9	44.5	94.0	126.2	93.3	39.4	8.2	1.0
1982 <sup>2</sup> .....	2,015.5	0.4	29.4	14.0	50.8	98.9	130.9	94.4	39.2	8.8	1.1
1981 <sup>2</sup> .....	1,976.0	0.3	28.5	13.4	49.5	96.4	129.1	93.4	38.0	8.6	0.9
1980 <sup>2</sup> .....	1,953.5	0.3	26.2	12.0	46.2	93.3	127.4	96.0	38.3	8.5	0.7

\* Figure does not meet standards of reliability or precision.

<sup>1</sup> For 1970-91 includes births to races not shown separately.

<sup>2</sup> Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

<sup>3</sup> Based on a 50-percent sample of births.

<sup>4</sup> Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 5. Fertility rates and birth rates by live-birth order and race of mother: United States, 1980-96**

[Rates are live births per 1,000 women aged 15-44 years, enumerated as of April 1 for 1980 and 1990, and estimated as of July 1 for all other years. Figures for live-birth order not stated are distributed]

Year and race of mother	Fertility rate	Live-birth order						
		1	2	3	4	5	6 and 7	8 and over
<b>All races <sup>1</sup></b>								
1996	65.3	26.8	21.1	10.5	4.1	1.5	0.9	0.3
1995	65.6	27.3	21.1	10.5	4.0	1.5	0.9	0.3
1994	66.7	27.5	21.5	10.7	4.2	1.6	1.0	0.3
1993	67.6	27.5	21.9	11.0	4.3	1.6	1.0	0.3
1992	68.9	27.8	22.3	11.3	4.4	1.7	1.0	0.3
1991	69.6	28.3	22.4	11.4	4.5	1.7	1.0	0.3
1990	70.9	29.0	22.8	11.7	4.5	1.7	1.0	0.3
1989	69.2	28.4	22.4	11.3	4.3	1.6	0.9	0.3
1988	67.3	27.6	22.0	10.9	4.1	1.5	0.9	0.3
1987	65.8	27.2	21.6	10.5	3.9	1.4	0.8	0.3
1986	65.4	27.2	21.6	10.3	3.8	1.4	0.8	0.3
1985	66.3	27.6	22.0	10.4	3.8	1.4	0.8	0.3
1984 <sup>2</sup>	65.5	27.4	21.7	10.1	3.7	1.4	0.9	0.3
1983 <sup>2</sup>	65.7	27.8	21.5	10.1	3.7	1.4	0.9	0.3
1982 <sup>2</sup>	67.3	28.6	22.0	10.2	3.8	1.4	0.9	0.3
1981 <sup>2</sup>	67.3	29.0	21.6	10.1	3.8	1.5	0.9	0.4
1980 <sup>2</sup>	68.4	29.5	21.8	10.3	3.9	1.5	1.0	0.4
<b>White</b>								
1996	64.3	26.6	21.2	10.4	3.8	1.3	0.8	0.2
1995	64.4	26.9	21.1	10.3	3.8	1.3	0.7	0.2
1994	64.9	27.0	21.4	10.4	3.8	1.3	0.8	0.2
1993	65.4	27.0	21.7	10.5	3.9	1.4	0.8	0.2
1992	66.5	27.3	22.0	10.8	4.0	1.4	0.8	0.2
1991	67.0	27.8	22.0	10.8	4.0	1.4	0.8	0.2
1990	68.3	28.4	22.4	11.1	4.0	1.4	0.8	0.2
1989	66.4	27.6	21.9	10.7	3.8	1.3	0.7	0.2
1988	64.5	26.8	21.6	10.4	3.6	1.2	0.7	0.2
1987	63.3	26.5	21.3	10.0	3.5	1.2	0.7	0.2
1986	63.1	26.6	21.3	9.8	3.4	1.2	0.7	0.2
1985	64.1	27.0	21.8	9.9	3.4	1.2	0.7	0.2
1984 <sup>2</sup>	63.2	26.8	21.4	9.6	3.3	1.2	0.7	0.2
1983 <sup>2</sup>	63.4	27.2	21.2	9.5	3.3	1.2	0.7	0.2
1982 <sup>2</sup>	64.8	28.0	21.6	9.6	3.4	1.2	0.7	0.3
1981 <sup>2</sup>	64.8	28.4	21.1	9.5	3.4	1.2	0.8	0.3
1980 <sup>2</sup>	65.6	28.8	21.3	9.6	3.4	1.3	0.8	0.3
<b>Black</b>								
1996	70.7	27.6	20.5	12.0	5.6	2.6	1.8	0.6
1995	72.3	28.7	20.7	12.0	5.7	2.6	1.8	0.6
1994	76.9	29.8	22.2	13.1	6.3	2.9	2.0	0.6
1993	80.5	30.2	23.4	14.1	6.9	3.1	2.2	0.7
1992	83.2	30.6	24.3	15.0	7.2	3.3	2.2	0.6
1991	85.2	31.5	25.0	15.4	7.4	3.3	2.1	0.6
1990	86.8	32.4	25.6	15.6	7.4	3.2	2.0	0.6
1989	86.2	32.9	25.4	15.3	7.1	3.0	1.9	0.6
1988	82.6	31.8	24.6	14.4	6.6	2.8	1.8	0.5
1987	80.1	31.2	23.8	13.9	6.3	2.7	1.7	0.5
1986	78.9	31.0	23.4	13.5	6.1	2.6	1.7	0.5
1985	78.8	31.0	23.4	13.4	6.1	2.6	1.7	0.5
1984 <sup>2</sup>	78.1	30.9	23.0	13.2	6.0	2.6	1.7	0.6
1983 <sup>2</sup>	78.7	31.1	23.1	13.2	6.1	2.7	1.8	0.6
1982 <sup>2</sup>	80.9	31.7	23.9	13.8	6.3	2.7	1.8	0.7
1981 <sup>2</sup>	82.0	32.3	24.2	13.7	6.3	2.8	1.9	0.8
1980 <sup>2</sup>	84.9	33.7	24.7	14.0	6.5	2.9	2.1	0.9

<sup>1</sup> Includes races other than white and black.  
<sup>2</sup> Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 6. Live births, birth rates, and fertility rates by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1989-96**

Measure and year	Hispanic							Non-Hispanic		
	All origins <sup>1</sup>	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
<b>Number</b>										
1996 .....	3,891,494	701,339	489,666	54,863	12,613	97,888	46,309	3,133,484	2,358,989	578,099
1995 .....	3,899,589	679,768	469,615	54,824	12,473	94,996	47,860	3,160,495	2,382,638	587,781
1994 .....	3,952,767	665,026	454,536	57,240	11,889	93,485	47,876	3,245,115	2,438,855	619,198
1993 .....	4,000,240	654,418	443,733	58,102	11,916	92,371	48,296	3,295,345	2,472,031	641,273
1992 <sup>3</sup> .....	4,049,024	643,271	432,047	59,569	11,472	89,031	51,152	3,365,862	2,527,207	657,450
1991 <sup>3</sup> .....	4,094,566	623,085	411,233	59,833	11,058	86,908	54,053	3,434,464	2,589,878	666,758
1990 <sup>4</sup> .....	4,092,994	595,073	385,640	58,807	11,311	83,008	56,307	3,457,417	2,626,500	661,701
1989 <sup>5</sup> .....	3,903,012	532,249	327,233	56,229	10,842	72,443	65,502	3,297,493	2,526,367	611,269
<b>Birth rate <sup>6</sup></b>										
1996 .....	14.7	24.8	27.4	17.9	10.7	<sup>7</sup> 23.4		13.5	12.4	18.3
1995 .....	14.8	25.2	26.9	19.7	11.0	<sup>7</sup> 25.3		13.7	12.6	18.8
1994 .....	15.2	25.5	27.0	21.4	10.8	<sup>7</sup> 25.7		14.0	12.8	20.0
1993 .....	15.5	26.0	27.4	21.9	10.5	<sup>7</sup> 26.9		14.4	13.1	21.1
1992 <sup>3</sup> .....	15.9	26.5	27.8	23.2	10.1	<sup>7</sup> 27.9		14.8	13.5	21.9
1991 <sup>8</sup> .....	16.3	26.7	29.2	21.0	10.1	<sup>7</sup> 26.5		15.2	13.9	22.5
1990 <sup>4</sup> .....	16.7	26.7	28.7	21.6	10.9	<sup>7</sup> 27.5		15.7	14.4	23.0
1989 <sup>5</sup> .....	16.3	26.2	25.7	23.7	10.0	<sup>7</sup> 28.3		15.4	14.2	22.8
<b>Fertility rate <sup>9</sup></b>										
1996 .....	65.3	104.9	119.3	71.3	58.9	<sup>7</sup> 90.2		60.3	57.3	72.5
1995 .....	65.6	105.0	117.0	75.7	55.1	<sup>7</sup> 94.5		60.8	57.6	74.5
1994 .....	66.7	105.6	115.4	81.9	55.9	<sup>7</sup> 97.7		62.0	58.3	79.0
1993 .....	67.6	106.9	114.8	82.5	55.5	<sup>7</sup> 105.0		63.1	59.0	82.7
1992 <sup>3</sup> .....	68.9	108.6	116.0	89.9	50.3	<sup>7</sup> 107.0		64.4	60.2	85.5
1991 <sup>8</sup> .....	69.6	108.1	121.6	80.9	49.1	<sup>7</sup> 99.3		65.4	61.0	87.6
1990 <sup>4</sup> .....	71.0	107.7	118.9	82.9	52.6	<sup>7</sup> 102.7		67.1	62.8	89.0
1989 <sup>5</sup> .....	69.2	104.9	106.6	86.6	49.8	<sup>7</sup> 95.8		65.7	60.5	84.8

<sup>1</sup> Includes origin not stated.  
<sup>2</sup> Includes races other than white and black.  
<sup>3</sup> Excludes data for New Hampshire, which did not report Hispanic origin.  
<sup>4</sup> Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.  
<sup>5</sup> Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.  
<sup>6</sup> Live births per 1,000 population in specified group.  
<sup>7</sup> Includes Central and South American and other and unknown Hispanic.  
<sup>8</sup> Rates are estimated for the United States based on birth data for 49 States and the District of Columbia. Births for New Hampshire that did not report Hispanic origin, are included in the rates for non-Hispanic women; see Technical notes.  
<sup>9</sup> Live births per 1,000 women aged 15-44 years in specified group.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 7. Live births by age of mother, live-birth order, Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1996**

[Live-birth order refers to number of children born alive to mother]

Live-birth order and origin of mother <sup>1</sup>	All ages	Age of mother												
		Under 15 years	15-19 years					20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	
			Total	15 years	16 years	17 years	18 years							19 years
<b>Hispanic</b>														
Total .....	701,339	3,056	118,878	7,971	16,139	24,234	31,711	38,823	214,173	185,478	119,690	49,812	9,819	433
First child .....	265,986	2,961	89,249	7,475	14,272	19,565	22,896	25,041	93,352	49,769	22,387	6,977	1,244	47
Second child .....	209,983	74	23,932	420	1,601	4,045	7,220	10,646	75,151	62,973	34,555	11,490	1,746	62
Third child .....	124,529	2	4,109	11	128	391	1,179	2,400	31,609	43,255	31,308	12,173	2,012	61
Fourth child .....	55,839	-	547	-	3	33	140	371	9,388	18,329	17,277	8,686	1,545	67
Fifth child .....	22,618	-	57	-	2	3	10	42	2,389	6,445	7,676	4,828	1,172	51
Sixth child .....	9,495	-	4	-	-	-	1	3	584	2,287	3,253	2,537	808	22
Seventh child .....	4,196	-	2	-	-	-	1	1	115	813	1,400	1,369	460	37
Eighth child and over ..	3,815	-	1	-	-	-	-	1	47	375	1,091	1,442	777	82
Not stated .....	4,878	19	977	65	133	197	264	318	1,538	1,232	743	310	55	4
<b>Mexican</b>														
Total .....	489,666	2,241	86,524	5,815	11,820	17,624	22,982	28,283	157,857	129,621	76,400	30,600	6,151	272
First child .....	181,056	2,179	64,674	5,445	10,438	14,220	16,481	18,090	67,124	31,392	11,647	3,392	626	22
Second child .....	144,241	50	17,746	313	1,189	2,982	5,349	7,913	56,525	43,484	19,843	5,719	852	22
Third child .....	88,857	1	3,017	9	100	270	854	1,784	23,874	32,246	21,118	7,447	1,124	30
Fourth child .....	41,534	-	378	-	3	26	103	246	6,991	14,123	12,955	6,039	1,000	48
Fifth child .....	17,217	-	39	-	2	3	7	27	1,737	4,965	5,957	3,631	854	34
Sixth child .....	7,331	-	3	-	-	-	1	2	431	1,764	2,522	1,962	636	13
Seventh child .....	3,250	-	-	-	-	-	-	-	76	577	1,118	1,071	379	29
Eighth child and over ..	3,015	-	-	-	-	-	-	-	32	272	822	1,166	652	71
Not stated .....	3,165	11	667	48	88	123	187	221	1,067	798	418	173	28	3
<b>Puerto Rican</b>														
Total .....	54,863	337	12,363	916	1,724	2,603	3,334	3,786	16,592	13,075	8,392	3,468	617	19
First child .....	21,887	323	8,940	861	1,498	2,024	2,313	2,244	6,443	3,633	1,873	571	99	5
Second child .....	16,507	8	2,605	43	183	468	794	1,117	5,583	4,360	2,790	1,002	154	5
Third child .....	9,032	-	519	-	11	57	158	293	2,823	2,756	1,906	867	158	3
Fourth child .....	3,868	-	93	-	-	6	18	69	1,064	1,267	902	461	80	1
Fifth child .....	1,570	-	16	-	-	-	3	13	318	514	408	255	56	3
Sixth child .....	648	-	1	-	-	-	-	1	86	214	203	116	28	-
Seventh child .....	305	-	-	-	-	-	-	-	22	105	86	77	14	1
Eighth child and over ..	277	-	1	-	-	-	-	1	5	60	113	78	19	1
Not stated .....	769	6	188	12	32	48	48	48	248	166	111	41	9	-
<b>Cuban</b>														
Total .....	12,613	22	941	51	114	160	268	348	2,476	3,512	3,888	1,545	220	9
First child .....	5,559	22	767	49	109	133	211	265	1,489	1,619	1,254	355	53	-
Second child .....	4,454	-	153	2	5	24	50	72	729	1,318	1,586	591	72	5
Third child .....	1,856	-	18	-	-	3	5	10	199	437	769	376	54	3
Fourth child .....	476	-	1	-	-	-	-	1	34	97	170	149	24	1
Fifth child .....	123	-	-	-	-	-	-	-	11	20	44	39	9	-
Sixth child .....	50	-	-	-	-	-	-	-	-	6	26	14	4	-
Seventh child .....	27	-	-	-	-	-	-	-	-	4	13	9	1	-
Eighth child and over ..	23	-	-	-	-	-	-	-	-	3	13	6	1	-
Not stated .....	45	-	2	-	-	-	2	-	14	8	13	6	2	-
<b>Central and South American</b>														
Total .....	97,888	206	10,110	553	1,254	1,904	2,760	3,639	23,943	27,881	22,802	10,661	2,179	106
First child .....	38,437	198	8,068	522	1,137	1,604	2,164	2,641	12,597	9,660	5,573	1,971	356	14
Second child .....	30,607	5	1,703	30	102	265	501	805	7,607	9,944	7,677	3,138	512	21
Third child .....	17,199	1	259	-	9	25	74	151	2,749	5,405	5,592	2,642	530	21
Fourth child .....	6,788	-	26	-	-	-	8	18	666	1,835	2,365	1,539	343	14
Fifth child .....	2,545	-	-	-	-	-	-	-	158	587	901	690	196	13
Sixth child .....	1,000	-	-	-	-	-	-	-	33	186	345	320	107	9
Seventh child .....	396	-	-	-	-	-	-	-	7	61	124	153	45	6
Eighth child and over ..	330	-	-	-	-	-	-	-	6	18	79	143	77	7
Not stated .....	586	2	54	1	6	10	13	24	120	185	146	65	13	1
<b>Other and unknown Hispanic</b>														
Total .....	46,309	250	8,940	636	1,227	1,943	2,367	2,767	13,305	11,389	8,208	3,538	652	27
First child .....	19,047	239	6,800	598	1,090	1,584	1,727	1,801	5,699	3,465	2,040	688	110	6
Second child .....	14,174	11	1,725	32	122	306	526	739	4,707	3,867	2,659	1,040	156	9
Third child .....	7,585	-	296	2	8	36	88	162	1,964	2,411	1,923	841	146	4
Fourth child .....	3,173	-	49	-	-	1	11	37	633	1,007	885	498	98	3
Fifth child .....	1,163	-	2	-	-	-	-	2	165	359	366	213	57	1
Sixth child .....	466	-	-	-	-	-	-	-	34	117	157	125	33	-
Seventh child .....	218	-	2	-	-	-	1	1	10	66	59	59	21	1
Eighth child and over ..	170	-	-	-	-	-	-	-	4	22	64	49	28	3
Not stated .....	313	-	66	4	7	16	14	25	89	75	55	25	3	-

See footnotes at end of table.

**Table 7. Live births by age of mother, live-birth order, Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1996 --Con.**

[Live-birth order refers to number of children born alive to mother]

Live-birth order and origin of mother <sup>1</sup>	All ages	Age of mother												
		Under 15 years	15-19 years					20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	
			Total	15 years	16 years	17 years	18 years							19 years
Non-Hispanic														
Total <sup>2</sup> .....	3,133,484	8,007	367,800	20,332	43,614	71,687	101,963	130,204	720,228	870,250	762,064	342,061	60,540	2,534
First child .....	1,301,780	7,786	288,905	19,355	39,599	60,883	78,761	90,307	344,628	345,825	222,199	78,562	13,314	561
Second child .....	1,024,248	173	64,259	865	3,559	9,425	19,288	31,122	240,344	303,821	283,857	114,052	17,214	528
Third child .....	491,760	4	11,290	32	226	999	3,085	6,948	93,575	139,776	155,402	78,752	12,510	451
Fourth child .....	181,194	1	1,624	-	24	92	376	1,132	28,306	49,072	58,037	36,651	7,218	285
Fifth child .....	66,019	-	199	1	4	12	31	151	7,910	17,171	21,235	15,491	3,814	199
Sixth child .....	27,331	-	32	-	-	2	4	26	2,020	6,455	9,194	7,395	2,132	103
Seventh child .....	12,790	-	9	-	1	1	2	5	513	2,598	4,360	3,875	1,345	90
Eighth child and over ..	13,719	-	8	-	-	-	1	7	198	1,576	3,871	5,176	2,591	299
Not stated .....	14,643	43	1,474	79	201	273	415	506	2,734	3,956	3,909	2,107	402	18
White .....	2,358,989	2,532	225,197	9,071	23,312	42,686	64,290	85,838	508,056	683,376	616,224	274,431	47,215	1,958
First child .....	992,907	2,479	185,808	8,844	22,000	38,220	52,931	63,813	260,283	284,304	183,442	65,035	11,088	468
Second child .....	794,021	41	34,018	199	1,165	4,059	10,028	18,567	172,565	245,168	234,789	93,219	13,792	429
Third child .....	367,592	1	4,230	4	55	253	1,045	2,873	57,247	105,460	126,841	63,806	9,625	382
Fourth child .....	124,926	-	382	-	3	21	72	286	13,146	32,494	44,498	28,724	5,463	219
Fifth child .....	40,282	-	36	-	-	2	10	24	2,566	9,218	14,312	11,280	2,737	133
Sixth child .....	15,243	-	8	-	-	1	-	7	450	2,723	5,451	5,064	1,488	59
Seventh child .....	6,727	-	3	-	-	-	1	2	115	831	2,261	2,521	933	63
Eighth child and over ..	7,212	-	2	-	-	-	1	1	51	378	1,647	3,158	1,786	190
Not stated .....	10,079	11	710	24	89	130	202	265	1,633	2,800	2,983	1,624	303	15
Black .....	578,099	5,084	127,616	10,301	18,367	26,134	33,616	39,198	174,958	129,002	91,050	42,279	7,835	275
First child .....	223,941	4,937	91,388	9,621	15,872	20,271	22,714	22,910	64,915	34,460	19,760	7,300	1,140	41
Second child .....	166,731	113	27,664	601	2,216	4,974	8,518	11,355	56,838	40,706	28,075	11,513	1,764	58
Third child .....	97,467	2	6,527	24	152	684	1,886	3,781	32,022	27,209	20,245	9,721	1,711	30
Fourth child .....	45,881	1	1,124	-	16	63	270	775	13,550	13,695	10,470	5,831	1,167	43
Fifth child .....	21,040	-	153	1	4	8	19	121	4,767	6,559	5,509	3,265	746	41
Sixth child .....	9,779	-	20	-	-	-	3	17	1,392	3,083	2,977	1,830	452	25
Seventh child .....	4,737	-	4	-	1	1	-	2	357	1,430	1,632	1,025	283	6
Eighth child and over ..	4,774	-	6	-	-	-	-	6	133	958	1,712	1,434	502	29
Not stated .....	3,749	31	730	54	106	133	206	231	984	902	670	360	70	2

- Quantity zero.

<sup>1</sup> Includes only births with stated origin of mother.

<sup>2</sup> Includes races other than white and black.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 8. Fertility rates and birth rates by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1996**

[Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

Live-birth order and origin of mother	15-44 years <sup>1</sup>	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
			Total	15-17 years	18-19 years						
<b>Hispanic</b>											
Total .....	104.9	2.6	101.8	69.0	151.1	189.5	161.0	98.1	45.1	10.8	0.6
First child .....	40.1	2.5	77.1	59.4	103.5	83.2	43.5	18.5	6.4	1.4	0.1
Second child .....	31.6	0.1	20.7	8.7	38.6	67.0	55.0	28.5	10.5	1.9	0.1
Third child .....	18.8	*	3.5	0.8	7.7	28.2	37.8	25.8	11.1	2.2	0.1
Fourth child .....	8.4	*	0.5	0.1	1.1	8.4	16.0	14.2	7.9	1.7	0.1
Fifth child .....	3.4	*	0.0	*	0.1	2.1	5.6	6.3	4.4	1.3	0.1
Sixth and seventh child .....	2.1	*	*	*	*	0.6	2.7	3.8	3.6	1.4	0.1
Eighth child and over .....	0.6	*	*	*	*	0.0	0.3	0.9	1.3	0.9	0.1
Mexican .....	119.3	2.8	120.7	83.4	174.3	206.3	176.9	103.7	47.6	12.0	0.7
First child .....	44.4	2.7	90.9	71.7	118.5	88.3	43.1	15.9	5.3	1.2	0.1
Second child .....	35.4	0.1	25.0	10.7	45.5	74.4	59.7	27.1	9.0	1.7	0.1
Third child .....	21.8	*	4.2	0.9	9.0	31.4	44.3	28.8	11.7	2.2	0.1
Fourth child .....	10.2	*	0.5	0.1	1.2	9.2	19.4	17.7	9.4	2.0	0.1
Fifth child .....	4.2	*	0.1	*	0.1	2.3	6.8	8.1	5.7	1.7	0.1
Sixth and seventh child .....	2.6	*	*	*	*	0.7	3.2	5.0	4.7	2.0	0.1
Eighth child and over .....	0.7	*	*	*	*	0.0	0.4	1.1	1.8	1.3	0.2
Puerto Rican .....	71.3	2.1	82.3	52.2	143.2	148.8	109.4	58.3	25.9	5.6	*
First child .....	28.8	2.0	60.4	44.4	92.9	58.7	30.8	13.2	4.3	0.9	*
Second child .....	21.8	*	17.6	7.0	38.9	50.8	36.9	19.6	7.6	1.4	*
Third child .....	11.9	*	3.5	0.7	9.2	25.7	23.3	13.4	6.5	1.5	*
Fourth child .....	5.1	*	0.6	*	1.8	9.7	10.7	6.4	3.5	0.7	*
Fifth child .....	2.1	*	*	*	*	2.9	4.4	2.9	1.9	0.5	*
Sixth and seventh child .....	1.3	*	*	*	*	1.0	2.7	2.0	1.5	0.4	*
Eighth child and over .....	0.4	*	*	*	*	*	0.5	0.8	0.6	*	*
Cuban .....	58.9	0.9	34.0	19.8	54.5	82.5	110.7	85.9	34.3	6.4	*
First child .....	26.0	0.9	27.8	17.8	42.3	49.9	51.2	27.8	7.9	1.5	*
Second child .....	20.9	*	5.5	1.9	10.8	24.4	41.6	35.2	13.2	2.1	*
Third child .....	8.7	*	*	*	*	6.7	13.8	17.1	8.4	1.6	*
Fourth child .....	2.2	*	*	*	*	1.1	3.1	3.8	3.3	0.7	*
Fifth child .....	0.6	*	*	*	*	*	0.6	1.0	0.9	*	*
Sixth and seventh child .....	0.4	*	*	*	*	*	*	0.9	0.5	*	*
Eighth child and over .....	0.1	*	*	*	*	*	*	*	*	*	*
Other Hispanic <sup>2</sup> .....	90.2	2.4	69.8	46.6	103.1	166.5	146.3	105.3	50.4	11.0	0.7
First child .....	36.2	2.3	54.8	40.8	75.0	82.2	49.2	26.0	9.5	1.8	0.1
Second child .....	28.2	*	12.6	5.3	23.1	55.3	51.8	35.3	14.9	2.6	0.2
Third child .....	15.6	*	2.0	0.5	4.3	21.2	29.3	25.7	12.4	2.6	0.1
Fourth child .....	6.3	*	0.3	*	0.7	5.8	10.7	11.1	7.3	1.7	*
Fifth child .....	2.3	*	*	*	*	1.5	3.5	4.3	3.2	1.0	*
Sixth and seventh child .....	1.3	*	*	*	*	0.4	1.6	2.3	2.3	0.8	*
Eighth child and over .....	0.3	*	*	*	*	*	0.1	0.5	0.7	0.4	*

See footnotes at end of table.

**Table 8. Fertility rates and birth rates by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1996 --Con.**

[Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

Live-birth order and origin of mother	15-44 years <sup>1</sup>	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
			Total	15-17 years	18-19 years						
<b>Non-Hispanic<sup>3</sup></b>											
Total <sup>4</sup> .....	60.3	1.0	47.3	28.7	76.2	98.4	106.5	82.0	34.2	6.5	0.3
First child .....	25.2	1.0	37.3	25.5	55.7	47.3	42.6	24.1	7.9	1.4	0.1
Second child .....	19.8	0.0	8.3	2.9	16.6	33.0	37.3	30.7	11.5	1.8	0.1
Third child .....	9.5	*	1.5	0.3	3.3	12.8	17.2	16.8	7.9	1.3	0.1
Fourth child .....	3.5	*	0.2	0.0	0.5	3.9	6.0	6.3	3.7	0.8	0.0
Fifth child .....	1.3	*	0.0	*	0.1	1.1	2.1	2.3	1.6	0.4	0.0
Sixth and seventh child .....	0.8	*	0.0	*	0.0	0.3	1.1	1.5	1.1	0.4	0.0
Eighth child and over .....	0.3	*	*	*	*	0.0	0.2	0.4	0.5	0.3	0.0
White .....	57.3	0.4	37.6	20.6	63.7	90.1	107.0	83.5	34.0	6.2	0.3
First child .....	24.2	0.4	31.1	19.1	49.7	46.3	44.7	25.0	8.1	1.5	0.1
Second child .....	19.4	0.0	5.7	1.5	12.2	30.7	38.5	32.0	11.6	1.8	0.1
Third child .....	9.0	*	0.7	0.1	1.7	10.2	16.6	17.2	8.0	1.3	0.1
Fourth child .....	3.1	*	0.1	0.0	0.2	2.3	5.1	6.0	3.6	0.7	0.0
Fifth child .....	1.0	*	0.0	*	0.0	0.5	1.5	2.0	1.4	0.4	0.0
Sixth and seventh child .....	0.5	*	*	*	*	0.1	0.6	1.1	0.9	0.3	0.0
Eighth child and over .....	0.2	*	*	*	*	0.0	0.1	0.2	0.4	0.2	0.0
Black .....	72.5	3.8	94.2	66.6	136.6	140.9	100.8	64.9	29.7	6.2	0.3
First child .....	28.3	3.7	67.8	56.0	86.1	52.6	27.1	14.2	5.2	0.9	0.0
Second child .....	21.1	0.1	20.5	9.5	37.5	46.0	32.0	20.2	8.2	1.4	0.1
Third child .....	12.3	*	4.8	1.1	10.7	25.9	21.4	14.5	6.9	1.4	0.0
Fourth child .....	5.8	*	0.8	0.1	2.0	11.0	10.8	7.5	4.1	0.9	0.0
Fifth child .....	2.7	*	0.1	*	0.3	3.9	5.2	4.0	2.3	0.6	0.0
Sixth and seventh child .....	1.8	*	0.0	*	0.0	1.4	3.5	3.3	2.0	0.6	0.0
Eighth child and over .....	0.6	*	*	*	*	0.1	0.8	1.2	1.0	0.4	0.0

\* Figure does not meet standards of reliability or precision.

0.0 Quantity more than zero but less than 0.05.

1 Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

2 Includes Central and South American and other and unknown Hispanic.

3 Includes origin not stated.

4 Includes races other than white and black.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 9. Total fertility rates, fertility rates, and birth rates by age and Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1989-96**

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1990, and estimated as of July 1 for all other years]

Year and origin/race of mother	Total fertility rate	Fertility rate †	Age of mother									
			10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
				Total	15-17 years	18-19 years						
<b>All origins</b>												
1996	2,027.0	65.3	1.2	54.4	33.8	86.0	110.4	113.1	83.9	35.3	6.8	0.3
1995	2,019.0	65.6	1.3	56.8	36.0	89.1	109.8	112.2	82.5	34.3	6.6	0.3
1994	2,036.0	66.7	1.4	58.9	37.6	91.5	111.1	113.9	81.5	33.7	6.4	0.3
1993	2,046.0	67.6	1.4	59.6	37.8	92.1	112.6	115.5	80.8	32.9	6.1	0.3
1992	2,065.0	68.9	1.4	60.7	37.8	94.5	114.6	117.4	80.2	32.5	5.9	0.3
1991	2,073.0	69.6	1.4	62.1	38.7	94.4	115.7	118.2	79.5	32.0	5.5	0.2
1990	2,081.0	70.9	1.4	59.9	37.5	88.6	116.5	120.2	80.8	31.7	5.5	0.2
1989	2,014.0	69.2	1.4	57.3	36.4	84.2	113.8	117.6	77.4	29.9	5.2	0.2
<b>Hispanic</b>												
<b>Total</b>												
1996	3,047.5	104.9	2.6	101.8	69.0	151.1	189.5	161.0	98.1	45.1	10.8	0.6
1995	3,019.5	105.0	2.7	106.7	72.9	157.9	188.5	153.8	95.9	44.9	10.8	0.6
1994	3,014.0	105.6	2.7	107.7	74.0	158.0	188.2	153.2	95.4	44.3	10.7	0.6
1993	3,020.5	106.9	2.7	106.8	71.7	159.1	188.3	154.0	96.4	44.7	10.6	0.6
1992 <sup>2</sup>	3,043.0	108.6	2.6	107.1	71.4	159.7	190.6	154.4	96.8	45.6	10.9	0.6
1991 <sup>2</sup>	3,002.5	108.1	2.4	106.7	70.6	158.5	186.3	152.8	96.1	44.9	10.7	0.6
1990 <sup>3</sup>	2,959.5	107.7	2.4	100.3	65.9	147.7	181.0	153.0	98.3	45.3	10.9	0.7
1989 <sup>4</sup>	2,903.5	104.9	2.3	100.8	---	---	184.4	146.6	92.1	43.5	10.4	0.6
<b>Mexican</b>												
1996	3,353.5	119.3	2.8	120.7	83.4	174.3	206.3	176.9	103.7	47.6	12.0	0.7
1995	3,273.5	117.0	2.8	124.6	84.4	185.3	208.9	160.5	98.5	46.8	11.9	0.7
1994	3,211.5	115.4	2.8	116.2	78.0	175.0	202.6	165.2	96.9	46.2	11.7	0.7
1993	3,174.0	114.8	2.6	108.7	71.6	164.9	196.6	168.2	100.5	46.1	11.3	0.8
1992 <sup>2</sup>	3,196.5	116.0	2.5	108.8	---	---	202.3	166.3	99.1	47.7	11.8	0.8
1991 <sup>2</sup>	3,317.5	121.6	2.6	117.3	75.9	178.4	209.9	168.2	103.3	49.1	12.3	0.8
1990 <sup>3</sup>	3,214.0	118.9	2.5	108.0	69.7	162.2	200.3	165.3	104.4	49.1	12.4	0.8
1989 <sup>4</sup>	2,916.5	106.6	2.0	94.5	---	---	184.3	153.7	96.1	41.0	11.1	0.6
<b>Puerto Rican</b>												
1996	2,163.0	71.3	2.1	82.3	52.2	143.2	148.8	109.4	58.3	25.9	5.6	*
1995	2,245.5	75.7	3.0	89.0	61.2	139.2	151.5	107.2	64.8	27.7	5.6	0.3
1994	2,490.0	81.9	3.2	106.0	72.8	168.4	181.0	111.7	62.3	28.0	5.6	0.2
1993	2,523.5	82.5	3.1	110.0	73.4	181.0	193.1	108.4	56.3	27.1	6.2	0.5
1992 <sup>2</sup>	2,644.5	89.9	3.5	110.4	---	---	204.9	106.6	66.7	30.0	6.5	0.3
1991 <sup>2</sup>	2,276.0	80.9	2.5	102.7	75.2	143.0	149.4	107.5	61.4	25.7	5.7	0.3
1990 <sup>3</sup>	2,301.0	82.9	2.9	101.6	71.6	141.6	150.1	109.9	62.8	26.2	6.2	0.5
1989 <sup>4</sup>	2,421.0	86.6	3.8	112.7	---	---	171.0	98.0	65.2	26.9	6.3	0.3
<b>Cuban</b>												
1996	1,774.5	58.9	0.9	34.0	19.8	54.5	82.5	110.7	85.9	34.3	6.4	*
1995	1,705.5	55.1	*	29.2	16.6	51.2	77.0	110.6	88.0	29.8	6.0	*
1994	1,680.5	55.9	0.6	40.2	23.1	77.4	72.5	98.4	87.6	31.3	5.5	*
1993	1,632.5	55.5	*	33.0	20.4	49.7	68.9	102.0	86.9	31.0	4.7	*
1992 <sup>2</sup>	1,485.5	50.3	1.0	26.3	---	---	51.6	98.4	86.2	28.9	4.7	0.0
1991 <sup>2</sup>	1,385.5	49.1	*	27.7	17.5	41.3	61.2	88.8	68.2	26.7	4.0	*
1990 <sup>3</sup>	1,459.5	52.6	*	30.3	18.2	46.1	64.6	95.4	67.6	28.2	4.9	*
1989 <sup>4</sup>	1,479.0	49.8	0.5	25.1	---	---	64.2	101.8	73.7	27.2	3.0	0.3
<b>Other Hispanic<sup>5</sup></b>												
1996	2,762.0	90.2	2.4	69.8	46.6	103.1	166.5	146.3	105.3	50.4	11.0	0.7
1995	2,834.0	94.5	2.4	77.5	54.8	107.8	158.3	161.8	103.7	50.9	11.6	0.6
1994	2,855.5	97.7	2.6	87.9	66.4	112.4	162.0	147.4	109.3	49.4	11.9	0.6
1993	3,038.5	105.0	2.7	106.9	78.2	141.7	175.2	147.1	110.4	52.4	12.5	0.5
1992 <sup>2</sup>	3,076.0	107.0	2.5	112.1	---	---	172.9	157.8	106.6	50.3	12.5	0.5
1991 <sup>2</sup>	2,817.0	99.3	2.1	88.1	58.9	128.8	161.1	150.6	101.5	48.2	11.2	0.6
1990 <sup>3</sup>	2,877.0	102.7	2.1	86.0	57.2	123.8	162.9	155.8	106.9	49.4	11.6	0.7
1989 <sup>4</sup>	2,683.0	95.8	1.7	66.4	---	---	159.2	150.4	85.1	60.3	12.7	0.8

See footnotes at end of table.



**Table 9. Total fertility rates, fertility rates, and birth rates by age and Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1989-96 --Con.**

Year and race	Total fertility rate	Fertility rate <sup>1</sup>	Age of mother									
			10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
				Total	15-17 years	18-19 years						
<b>Non-Hispanic <sup>6</sup></b>												
<b>Total <sup>7</sup></b>												
1996 .....	1,881.0	60.3	1.0	47.3	28.7	76.2	98.4	106.5	82.0	34.2	6.5	0.3
1995 .....	1,881.0	60.8	1.1	49.6	30.7	79.0	98.5	106.4	80.9	33.2	6.2	0.3
1994 .....	1,905.0	62.0	1.2	52.0	32.5	81.8	100.4	108.6	79.9	32.6	6.0	0.3
1993 .....	1,918.5	63.1	1.2	52.9	33.1	82.6	102.5	110.4	79.0	31.7	5.7	0.3
1992 <sup>2</sup> .....	1,941.0	64.4	1.2	54.4	33.2	85.5	104.7	112.7	78.4	31.2	5.4	0.2
1991 <sup>2</sup> .....	1,959.5	65.4	1.3	56.1	34.4	86.1	106.6	114.0	77.8	30.8	5.1	0.2
1990 <sup>3</sup> .....	1,979.5	67.1	1.3	54.8	33.8	81.4	108.1	116.5	79.2	30.7	5.1	0.2
1989 <sup>4</sup> .....	1,921.0	65.7	1.3	53.4	---	---	107.8	113.4	74.7	28.6	4.8	0.2
<b>White</b>												
1996 .....	1,795.5	57.3	0.4	37.6	20.6	63.7	90.1	107.0	83.5	34.0	6.2	0.3
1995 .....	1,786.5	57.6	0.4	39.3	22.0	66.1	90.0	106.5	82.0	32.9	5.9	0.3
1994 .....	1,792.0	58.3	0.5	40.4	22.8	67.4	90.9	107.9	80.7	32.1	5.7	0.2
1993 .....	1,792.5	59.0	0.5	40.7	22.7	67.7	92.1	109.2	79.4	31.1	5.3	0.2
1992 <sup>2</sup> .....	1,810.5	60.2	0.5	41.7	22.7	69.8	93.9	111.5	78.7	30.5	5.1	0.2
1991 <sup>2</sup> .....	1,826.5	61.0	0.5	43.4	23.6	70.5	95.7	112.7	77.9	30.2	4.7	0.2
1990 <sup>3</sup> .....	1,850.5	62.8	0.5	42.5	23.2	66.6	97.5	115.3	79.4	30.0	4.7	0.2
1989 <sup>4</sup> .....	1,770.0	60.5	0.4	39.9	---	---	94.7	111.7	75.0	27.8	4.3	0.2
<b>Black</b>												
1996 .....	2,204.0	72.5	3.8	94.2	66.6	136.6	140.9	100.8	64.9	29.7	6.2	0.3
1995 .....	2,245.0	74.5	4.3	99.3	72.1	141.9	141.7	102.0	65.9	29.4	6.1	0.3
1994 .....	2,365.0	79.0	4.7	107.7	78.6	152.9	150.3	107.0	67.5	29.5	6.0	0.3
1993 .....	2,454.5	82.7	4.7	112.2	82.5	156.7	157.4	111.5	69.0	29.8	6.0	0.3
1992 <sup>2</sup> .....	2,514.0	85.5	4.8	116.0	83.9	162.9	163.0	114.6	69.1	29.4	5.7	0.2
1991 <sup>2</sup> .....	2,551.0	87.6	4.9	118.9	86.7	163.1	166.1	116.3	69.3	28.9	5.6	0.2
1990 <sup>3</sup> .....	2,547.5	89.0	5.0	116.2	84.9	157.5	165.1	118.4	70.2	28.7	5.6	0.3
1989 <sup>4</sup> .....	2,424.0	84.8	5.2	111.9	---	---	156.3	113.8	65.7	26.3	5.3	0.3

--- Data not available.

\* Figure does not meet standards of reliability or precision.

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup> Rates computed by relating total births, regardless of age of mother, to women 15-44 years.

<sup>2</sup> Excludes data for New Hampshire, which did not report Hispanic origin.

<sup>3</sup> Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.

<sup>4</sup> Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

<sup>5</sup> Includes Central and South American and other and unknown Hispanic.

<sup>6</sup> Includes origin not stated.

<sup>7</sup> Includes races other than white and black.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 10. Number of births, birth rates, fertility rates, total fertility rates, and birth rates for teenagers 15-19 years by age of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence. Birth rates per 1,000 estimated population in each area; fertility rates per 1,000 women aged 15-44 years estimated in each area; total fertility rates are sums of birth rates for 5-year age groups multiplied by 5: birth rates by age are live births per 1,000 women in specified age group estimated in each area]

State	Number of births	Birth rate	Fertility rate	Total fertility rate	Teenage birth rate		
					15-19 years		
					Total	15-17 years	18-19 years
United States <sup>1</sup>	3,891,494	14.7	65.3	2,027.0	54.4	33.8	86.0
Alabama	60,488	14.2	62.1	1,909.0	69.2	45.3	104.1
Alaska	10,037	16.5	71.7	2,359.5	46.4	26.5	75.2
Arizona	75,322	17.0	77.1	2,386.5	73.9	48.9	110.7
Arkansas	36,371	14.5	67.1	2,065.5	75.4	44.9	121.7
California	539,433	16.9	74.8	2,295.0	62.6	39.2	99.1
Colorado	55,807	14.6	63.6	2,036.0	49.5	30.2	79.7
Connecticut	44,469	13.6	61.7	1,870.5	37.4	24.4	58.3
Delaware	10,155	14.0	59.8	1,838.5	56.9	41.0	79.9
District of Columbia	8,390	15.4	62.3	1,998.0	102.1	79.0	132.5
Florida	189,392	13.2	64.5	2,035.0	58.9	36.7	94.1
Georgia	114,043	15.5	64.5	2,001.5	68.2	45.4	103.3
Hawaii	18,401	15.5	72.5	2,299.5	48.1	28.0	76.2
Idaho	18,625	15.7	71.3	2,272.0	47.2	26.5	77.7
Illinois	183,180	15.5	69.0	2,135.5	57.1	36.1	90.9
Indiana	83,513	14.3	62.8	1,956.5	56.1	32.9	91.4
Iowa	37,139	13.0	60.5	1,908.0	37.8	21.4	63.6
Kansas	36,651	14.2	65.1	2,050.5	49.6	27.8	84.2
Kentucky	52,706	13.6	59.4	1,847.5	61.5	36.9	97.9
Louisiana	65,204	15.0	65.1	1,997.5	66.7	42.9	102.3
Maine	13,774	11.1	49.5	1,587.5	31.4	16.8	54.5
Maryland	71,533	14.1	60.1	1,859.5	46.1	29.6	72.3
Massachusetts	80,276	13.2	57.1	1,668.0	32.2	19.9	50.6
Michigan	133,387	13.9	61.1	1,904.5	46.5	28.2	75.5
Minnesota	63,700	13.7	60.6	1,894.0	32.1	18.5	54.2
Mississippi	40,987	15.1	65.6	1,962.5	75.5	52.1	110.5
Missouri	73,832	13.8	62.2	1,959.5	53.7	31.0	89.7
Montana	10,856	12.3	58.5	1,939.5	38.6	21.2	65.8
Nebraska	23,286	14.1	64.2	2,027.5	38.7	22.2	63.7
Nevada	26,125	16.3	75.5	2,411.5	69.6	42.1	113.5
New Hampshire	14,520	12.5	53.3	1,654.0	28.6	15.1	50.9
New Jersey	114,306	14.3	64.9	1,981.5	35.4	22.9	55.3
New Mexico	27,228	15.9	71.6	2,276.5	70.9	45.8	110.7
New York	263,963	14.5	64.7	1,958.5	41.8	25.6	66.4
North Carolina	104,470	14.3	62.9	1,953.5	63.5	40.8	97.5
North Dakota	8,347	13.0	60.6	1,893.5	32.3	16.1	58.1
Ohio	151,692	13.6	60.3	1,884.5	50.4	29.5	82.6
Oklahoma	46,193	14.0	65.0	2,029.0	63.4	37.2	104.7
Oregon	43,658	13.6	62.7	2,031.0	50.8	29.4	84.7
Pennsylvania	148,338	12.3	57.0	1,776.0	39.3	24.5	62.5
Rhode Island	12,652	12.8	56.9	1,720.0	42.5	27.3	65.7
South Carolina	51,117	13.8	59.5	1,827.5	62.9	41.3	94.2
South Dakota	10,473	14.3	66.6	2,121.0	39.5	22.4	66.0
Tennessee	73,754	13.9	60.9	1,905.0	66.1	40.2	105.8
Texas	330,406	17.3	75.0	2,321.0	73.5	48.8	111.3
Utah	42,087	21.0	89.0	2,656.0	42.8	24.3	68.6
Vermont	6,767	11.5	50.2	1,580.0	30.1	15.2	54.1
Virginia	92,354	13.8	58.4	1,784.5	45.5	27.7	71.6
Washington	77,945	14.1	62.0	1,977.0	45.0	26.1	74.5
West Virginia	20,750	11.4	52.5	1,632.5	50.3	28.7	81.9
Wisconsin	67,106	13.0	58.3	1,821.0	36.8	21.7	60.7
Wyoming	6,286	13.1	59.8	1,960.0	44.0	24.9	74.9
Puerto Rico	63,141	16.7	70.8	2,023.5	74.8	55.6	102.7
Virgin Islands	1,905	16.8	76.1	2,328.5	54.9	35.0	84.9
Guam	4,259	29.4	135.1	3,983.5	116.8	69.5	191.5

<sup>1</sup> Excludes data for Puerto Rico, Virgin Islands, and Guam.

**Table 11. Live births by race of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence]

State	Number				
	All races	White	Black	American Indian <sup>1</sup>	Asian or Pacific Islander
United States <sup>2</sup> .....	3,891,494	3,093,057	594,781	37,880	165,776
Alabama .....	60,488	40,222	19,575	125	566
Alaska .....	10,037	6,781	422	2,403	431
Arizona .....	75,322	66,151	2,342	5,390	1,439
Arkansas .....	36,371	27,886	7,904	243	338
California .....	539,433	439,523	38,371	3,343	58,196
Colorado .....	55,807	51,070	2,577	586	1,574
Connecticut .....	44,469	37,885	5,243	106	1,235
Delaware .....	10,155	7,553	2,371	17	214
District of Columbia .....	8,390	2,057	6,179	4	150
Florida .....	189,392	142,618	42,275	631	3,868
Georgia .....	114,043	73,254	38,497	193	2,099
Hawaii .....	18,401	4,799	515	186	12,901
Idaho .....	18,625	18,020	75	285	245
Illinois .....	183,180	140,435	36,237	235	6,273
Indiana .....	83,513	73,646	8,827	121	919
Iowa .....	37,139	35,143	1,048	200	748
Kansas .....	36,651	32,769	2,766	292	824
Kentucky .....	52,706	47,318	4,860	77	451
Louisiana .....	65,204	37,366	26,517	260	1,061
Maine .....	13,774	13,460	85	84	145
Maryland .....	71,533	45,914	22,937	171	2,511
Massachusetts .....	80,276	69,171	7,377	157	3,571
Michigan .....	133,387	105,923	24,171	811	2,482
Minnesota .....	63,700	56,829	3,111	1,087	2,673
Mississippi .....	40,987	21,458	18,965	193	371
Missouri .....	73,832	61,296	11,119	271	1,146
Montana .....	10,856	9,500	38	1,208	110
Nebraska .....	23,286	21,322	1,205	333	426
Nevada .....	26,125	22,343	1,973	423	1,386
New Hampshire .....	14,520	14,226	112	23	159
New Jersey .....	114,306	86,386	20,517	224	7,179
New Mexico .....	27,228	23,195	467	3,174	392
New York .....	263,963	191,748	55,385	612	16,218
North Carolina .....	104,470	73,815	27,129	1,552	1,974
North Dakota .....	8,347	7,404	89	751	103
Ohio .....	151,692	127,435	22,051	256	1,950
Oklahoma .....	46,193	36,628	4,484	4,303	778
Oregon .....	43,658	40,436	893	672	1,657
Pennsylvania .....	148,338	124,262	20,581	219	3,276
Rhode Island .....	12,652	11,166	945	139	402
South Carolina .....	51,117	32,360	18,002	114	641
South Dakota .....	10,473	8,657	83	1,637	96
Tennessee .....	73,754	56,525	16,018	191	1,020
Texas .....	330,406	281,810	38,856	833	8,907
Utah .....	42,087	39,955	324	631	1,177
Vermont .....	6,767	6,685	19	9	54
Virginia .....	92,354	67,326	20,907	174	3,947
Washington .....	77,945	67,577	3,115	1,855	5,398
West Virginia .....	20,750	19,856	742	11	141
Wisconsin .....	67,106	57,934	6,431	849	1,892
Wyoming .....	6,286	5,959	49	216	62
Puerto Rico .....	63,141	58,079	5,003	---	---
Virgin Islands .....	1,905	350	1,503	46	6
Guam .....	4,259	427	48	7	3,777

--- Data not available.

<sup>1</sup> Includes births to Aleuts and Eskimos.

<sup>2</sup> Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 12. Live births by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence]

State	All origins	Origin of mother									Not stated
		Hispanic						Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>1</sup>	White	Black	
United States <sup>2</sup>	3,891,494	701,339	489,666	54,863	12,613	97,888	46,309	3,133,484	2,358,989	578,099	56,671
Alabama	60,488	936	605	125	18	141	47	59,524	39,326	19,536	28
Alaska	10,037	651	249	51	8	59	284	9,363	6,300	387	23
Arizona	75,322	27,901	26,746	289	38	507	321	47,246	38,602	2,249	175
Arkansas	36,371	1,315	1,080	31	5	149	50	35,010	26,572	7,871	46
California	539,433	254,895	218,625	1,974	770	26,370	7,156	282,499	185,659	37,133	2,039
Colorado	55,807	12,375	8,142	180	39	355	3,659	43,106	38,667	2,452	326
Connecticut	44,469	5,651	319	3,808	88	1,130	306	36,700	30,617	4,845	2,118
Delaware	10,155	660	292	249	2	90	27	9,475	6,899	2,348	20
District of Columbia	8,390	777	33	10	1	688	45	7,530	1,247	6,131	83
Florida	189,392	35,699	7,021	6,513	8,624	11,860	1,681	153,554	107,900	41,305	139
Georgia	114,043	6,266	4,697	438	88	778	265	106,725	66,346	38,167	1,052
Hawaii	18,401	2,164	417	628	11	86	1,022	16,220	4,118	489	17
Idaho	18,625	2,180	1,849	10	1	62	258	16,179	15,614	72	266
Illinois	183,180	32,849	27,067	2,885	192	858	1,847	150,222	107,706	36,014	109
Indiana	83,513	2,950	2,307	258	22	137	226	80,311	70,539	8,759	252
Iowa	37,139	1,481	1,164	32	7	164	114	35,171	33,311	981	487
Kansas	36,651	3,225	2,781	64	15	136	229	33,106	29,288	2,740	320
Kentucky	52,706	555	349	59	22	85	40	52,074	46,727	4,830	77
Louisiana	65,204	1,267	400	165	60	177	465	63,870	36,184	26,438	67
Maine	13,774	115	22	5	4	13	71	13,248	12,951	80	411
Maryland	71,533	3,234	558	231	44	1,704	697	67,308	42,214	22,497	991
Massachusetts	80,276	7,732	282	4,080	109	3,014	247	71,608	62,052	5,886	936
Michigan	133,387	5,050	3,636	367	62	288	697	121,873	94,990	23,792	6,464
Minnesota	63,700	2,324	1,768	83	18	232	223	57,385	50,726	3,049	3,991
Mississippi	40,987	278	136	17	11	21	93	40,677	21,156	18,958	32
Missouri	73,832	1,516	1,131	75	23	145	142	72,238	59,757	11,089	78
Montana	10,856	298	173	12	3	7	103	10,226	8,894	31	332
Nebraska	23,286	1,866	1,436	25	12	184	209	20,984	19,050	1,193	436
Nevada	26,125	6,966	5,695	134	138	725	274	19,038	15,386	1,941	121
New Hampshire	14,520	231	58	73	3	13	84	13,925	13,649	98	364
New Jersey	114,306	19,451	2,292	7,188	875	8,893	203	93,691	67,216	19,227	1,164
New Mexico	27,228	13,255	4,871	58	56	91	8,179	13,971	10,085	439	2
New York	263,963	52,684	6,299	15,314	475	24,690	5,906	183,837	119,291	48,096	27,442
North Carolina	104,470	5,433	3,867	445	91	799	231	99,001	68,481	27,029	36
North Dakota	8,347	137	78	7	2	14	36	8,067	7,135	86	143
Ohio	151,692	3,004	1,323	1,147	44	207	283	148,325	124,295	21,876	363
Oklahoma	46,193	2,881	2,104	111	11	104	551	43,252	33,772	4,459	60
Oregon	43,658	5,458	5,049	59	39	208	103	38,144	34,990	873	56
Pennsylvania	148,338	6,737	838	4,599	99	698	503	141,199	117,509	20,237	402
Rhode Island	12,652	1,667	79	564	16	895	113	9,447	8,210	750	1,538
South Carolina	51,117	973	567	113	21	149	123	50,111	31,427	17,973	33
South Dakota	10,473	146	101	5	1	14	25	10,313	8,520	80	14
Tennessee	73,754	1,425	877	130	32	150	236	72,289	55,120	15,985	40
Texas	330,406	142,831	128,180	913	246	6,955	6,537	187,002	138,925	38,497	573
Utah	42,087	3,944	2,985	68	41	465	385	38,036	36,006	252	107
Vermont	6,767	39	8	10	1	8	12	6,431	6,357	13	297
Virginia	92,354	5,150	1,023	463	90	2,956	618	87,075	62,192	20,808	129
Washington	77,945	8,930	7,296	198	20	237	1,179	66,585	56,950	2,886	2,430
West Virginia	20,750	125	51	9	3	10	52	20,610	19,757	738	15
Wisconsin	67,106	3,139	2,319	580	10	158	72	63,948	54,863	6,386	19
Wyoming	6,286	523	421	11	2	9	80	5,755	5,441	48	8
Puerto Rico	63,141	---	---	---	---	---	---	---	---	---	63,141
Virgin Islands	1,905	321	8	234	-	22	57	1,505	98	1,359	79
Guam	4,259	45	24	9	1	3	8	4,186	390	44	28

- Quantity zero.

--- Data not available.

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

<sup>2</sup> Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 13. Total number of births, rates, and percent of births with selected demographic characteristics, by specified race of mother and place of birth of mother: United States, 1996**

Characteristic	All races	White	Black	American Indian <sup>1</sup>	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
Number										
Births .....	3,891,494	3,093,057	594,781	37,880	165,776	28,500	8,902	5,907	31,106	91,361
Rate										
Birth rate <sup>2</sup> .....	14.7	14.1	17.8	16.6	17.0	---	---	---	---	---
Fertility rate <sup>3</sup> .....	65.3	64.3	70.7	68.7	65.9	---	---	---	---	---
Total fertility rate <sup>4</sup> .....	2,027.0	2,005.5	2,144.0	2,030.0	1,907.5	---	---	---	---	---
Sex Ratio <sup>5</sup> .....	1,047	1,050	1,028	1,031	1,061	1,090	1,053	1,062	1,061	1,053
Percent										
All births										
Births to mothers under 20 years .....	12.9	11.3	22.8	20.9	5.3	0.9	2.5	18.4	6.1	5.8
Fourth- and higher-order births .....	10.4	9.5	15.0	19.7	8.4	2.5	3.8	13.8	7.2	10.7
Births to unmarried mothers .....	32.4	25.7	69.8	58.0	16.7	9.2	11.4	49.9	19.4	16.5
Mothers completing 12 years or more of school .....	77.6	78.4	71.8	67.0	85.0	87.2	97.3	83.1	92.6	80.6
Mothers born in the 50 States and D.C. ....	80.8	82.4	89.8	96.6	15.5	9.5	45.7	98.3	17.1	8.6
Mothers born in the 50 States and D.C.										
Births to mothers under 20 years .....	13.9	11.5	24.6	21.4	14.9	3.9	4.7	18.5	18.0	19.1
Fourth- and higher-order births .....	9.8	8.5	15.1	20.0	7.9	4.0	4.2	13.8	7.7	6.8
Births to unmarried mothers .....	33.0	24.5	72.3	59.0	32.5	15.0	17.2	50.0	36.9	30.7
Mothers completing 12 years or more of school .....	82.0	84.5	71.0	66.8	87.5	96.2	96.3	83.1	87.1	83.3
Mothers born outside the 50 States and D.C.										
Births to mothers under 20 years .....	8.8	10.2	7.6	8.4	3.5	0.6	0.7	18.0	3.6	4.6
Fourth- and higher-order births .....	13.0	14.1	13.7	11.6	8.5	2.3	3.4	14.1	7.1	11.1
Births to unmarried mothers .....	29.2	31.2	47.1	29.6	13.7	8.6	6.5	44.0	15.8	15.1
Mothers completing 12 years or more of school .....	58.7	49.8	79.4	74.3	84.5	86.2	98.2	83.8	93.7	80.3

--- Data not available.  
<sup>1</sup> Includes births to Aleuts and Eskimos.  
<sup>2</sup> Rate per 1,000 population.  
<sup>3</sup> Rate per 1,000 women aged 15-44 years.  
<sup>4</sup> Rates are sums of birth rates for 5-year age groups multiplied by 5.  
<sup>5</sup> Male live births per 1,000 female live births.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 14. Total number of births, rates, and percent of births with selected demographic characteristics, by Hispanic origin of mother and by race for mothers of non-Hispanic origin and by place of birth of mother: United States, 1996**

Characteristic	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
Number										
Births .....	3,891,494	701,339	489,666	54,863	12,613	97,888	46,309	3,133,484	2,358,989	578,099
Rate										
Birth rate <sup>3</sup> .....	14.7	24.8	27.4	17.9	10.7	<sup>7</sup> 23.4		13.5	12.4	18.3
Fertility rate <sup>4</sup> .....	65.3	104.9	119.3	71.3	58.9	<sup>7</sup> 90.2		60.3	57.3	72.5
Total fertility rate <sup>5</sup> .....	2,027.0	3,047.5	3,353.5	2,163.0	1,774.5	<sup>7</sup> 2,762.0		1,881.0	1,795.5	2,204.0
Sex Ratio <sup>6</sup> .....	1,047	1,041	1,039	1,037	1,044	1,046	1,058	1,048	1,053	1,027
Percent										
All births										
Births to mothers under 20 years .....	12.9	17.4	18.1	23.1	7.6	10.5	19.8	12.0	9.7	23.0
Fourth- and higher-order births .....	10.4	13.8	14.9	12.3	5.6	11.4	11.3	9.7	8.3	15.0
Births to unmarried mothers .....	32.4	40.7	37.9	60.7	24.7	44.1	43.5	30.6	21.5	70.0
Mothers completing 12 years or more of school .....	77.6	48.6	42.3	61.9	85.5	59.2	67.0	83.9	87.0	72.0
Mothers born in the 50 States and D.C. ....	80.8	38.2	38.2	61.5	36.9	8.1	74.6	90.2	95.1	91.0
Mothers born in the 50 States and D.C.										
Births to mothers under 20 years .....	13.9	26.1	27.2	25.3	12.1	23.5	23.2	12.8	9.9	24.5
Fourth- and higher-order births .....	9.8	11.3	11.9	11.0	4.7	5.0	11.0	9.6	8.2	15.1
Births to unmarried mothers .....	33.0	47.3	45.3	62.7	24.8	46.7	46.3	31.8	21.9	72.4
Mothers completing 12 years or more of school .....	82.0	63.6	61.7	62.1	86.9	77.4	68.9	83.7	86.8	71.1
Mothers born outside the 50 States and D.C.										
Births to mothers under 20 years .....	8.8	12.0	12.5	19.8	5.0	9.4	10.1	4.2	3.9	6.9
Fourth- and higher-order births .....	13.0	15.3	16.7	14.4	6.1	11.9	12.1	9.8	9.6	13.9
Births to unmarried mothers .....	29.2	36.6	33.3	57.4	24.7	43.8	34.0	19.0	13.6	45.2
Mothers completing 12 years or more of school .....	58.7	39.2	30.2	61.7	84.7	57.6	61.7	86.1	89.9	81.6

<sup>1</sup> Includes origin not stated.  
<sup>2</sup> Includes races other than white and black.  
<sup>3</sup> Rate per 1,000 population.  
<sup>4</sup> Rate per 1,000 women aged 15-44 years.  
<sup>5</sup> Rates are sums of birth rates for 5-year age groups multiplied by 5.  
<sup>6</sup> Male live births per 1,000 female live births.  
<sup>7</sup> Includes Central and South American and other and unknown Hispanic.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 15. Live births by race of mother and observed and seasonally adjusted birth and fertility rates, by month: United States, 1996**

[Rates on an annual basis per 1,000 population for specified month. Birth rates based on the total population. Fertility rates based on women aged 15-44 years]

Month	Number			Observed		Seasonally adjusted <sup>1</sup>	
	All races <sup>2</sup>	White	Black	Birth rate	Fertility rate	Birth rate	Fertility rate
Total .....	3,891,494	3,093,057	594,781	14.7	65.3	...	...
January .....	314,283	246,948	50,605	14.0	62.2	14.8	65.2
February .....	301,763	239,049	46,953	14.9	66.1	14.6	65.1
March .....	322,581	257,722	48,139	14.4	63.8	14.5	65.1
April .....	312,595	251,404	44,914	14.4	63.8	14.7	65.1
May .....	325,708	262,378	46,232	14.5	64.4	14.7	65.1
June .....	318,525	254,966	47,090	14.6	65.0	14.4	65.2
July .....	345,162	274,643	53,053	15.3	68.2	14.8	65.2
August .....	346,317	274,797	53,834	15.4	68.4	14.7	65.3
September .....	336,348	266,722	51,935	15.4	68.6	14.7	65.3
October .....	336,346	267,413	51,224	14.9	66.4	15.1	65.3
November .....	309,397	243,861	48,790	14.1	63.1	14.6	65.3
December .....	322,469	253,154	52,012	14.3	63.6	14.6	65.3

... Category not applicable.

<sup>1</sup> The method of seasonal adjustment, developed by the U.S. Bureau of the Census, is described in *The X11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15 (1967 revision).

<sup>2</sup> Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 16. Live births by day of week and index of occurrence by method of delivery, day of week, and race of mother: United States, 1996**

Day of week and race of mother	Average number of births	Index of occurrence <sup>1</sup>				
		Total <sup>2</sup>	Vaginal	Method of delivery		
				Total	Primary	Repeat
All races <sup>3</sup>	10,632	100.0	100.0	100.0	100.0	100.0
Sunday	7,949	74.8	79.7	56.2	66.2	39.0
Monday	10,742	101.0	100.2	104.1	97.1	116.1
Tuesday	11,903	111.9	110.0	119.1	115.8	124.8
Wednesday	11,712	110.2	108.4	116.8	114.8	120.3
Thursday	11,631	109.4	107.9	115.0	112.6	119.1
Friday	11,690	109.9	106.5	122.1	115.6	133.2
Saturday	8,774	82.5	86.9	66.3	77.7	46.7
White	8,451	100.0	100.0	100.0	100.0	100.0
Sunday	6,154	72.8	77.9	53.7	64.1	36.2
Monday	8,583	101.6	100.7	105.0	97.6	117.3
Tuesday	9,537	112.8	110.9	120.1	116.8	125.7
Wednesday	9,377	111.0	109.2	117.8	115.7	121.4
Thursday	9,303	110.1	108.6	115.5	113.1	119.6
Friday	9,349	110.6	107.0	123.4	116.4	135.1
Saturday	6,830	80.8	85.3	64.0	75.9	43.9
Black	1,625	100.0	100.0	100.0	100.0	100.0
Sunday	1,334	82.1	86.6	66.0	74.3	50.9
Monday	1,605	98.8	98.3	100.5	94.8	110.7
Tuesday	1,769	108.9	107.0	115.5	112.2	121.4
Wednesday	1,745	107.4	105.7	113.3	111.6	116.4
Thursday	1,735	106.8	105.2	112.7	110.5	116.5
Friday	1,739	107.0	104.1	116.4	111.8	124.6
Saturday	1,446	89.0	92.8	75.4	84.6	58.9

<sup>1</sup> Index is the ratio of the average number of births by a specified method of delivery on a given day of the week to the average daily number of births by a specified method of delivery for the year, multiplied by 100.

<sup>2</sup> Includes method of delivery not stated.

<sup>3</sup> Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.



**Table 17. Number, rate, and percent of births to unmarried women by age, race, and Hispanic origin of mother: United States, 1996**

Measure and age of mother	All races <sup>1</sup>	White		Black		Hispanic <sup>2</sup>
		Total	Non-Hispanic	Total	Non-Hispanic	
<b>Number</b>						
All ages .....	1,260,306	795,432	508,157	415,213	404,575	285,501
Under 15 years .....	10,460	4,959	2,378	5,147	5,044	2,639
15-19 years .....	373,289	236,815	156,073	124,602	121,926	80,501
15 years .....	25,776	14,510	8,123	10,359	10,169	6,444
16 years .....	51,901	31,831	19,535	18,377	18,012	12,345
17 years .....	79,161	50,652	33,128	26,068	25,469	17,484
18 years .....	101,731	65,706	44,571	32,835	32,136	20,989
19 years .....	114,720	74,116	50,716	36,963	36,140	23,239
20-24 years .....	431,462	272,673	174,880	142,903	139,710	96,904
25-29 years .....	235,651	148,498	90,385	76,489	74,164	57,872
30-34 years .....	133,048	83,108	51,820	43,057	41,526	31,160
35-39 years .....	62,656	40,109	26,478	19,353	18,687	13,392
40 years and over .....	13,740	9,270	6,143	3,662	3,518	3,033
<b>Rate per 1,000 unmarried women in specified group</b>						
15-44 years <sup>3</sup> .....	44.8	37.6	28.3	74.4	---	93.2
15-19 years .....	42.9	34.5	27.0	89.2	---	74.5
15-17 years .....	29.0	22.7	16.9	64.0	---	53.4
18-19 years .....	65.9	54.1	43.8	129.2	---	110.4
20-24 years .....	70.7	59.0	44.5	125.8	---	146.5
25-29 years .....	56.8	49.9	35.7	84.5	---	139.1
30-34 years .....	41.1	36.1	26.6	54.5	---	90.8
35-39 years .....	20.1	17.8	13.9	25.5	---	42.3
40-44 years <sup>4</sup> .....	4.8	4.3	3.3	6.1	---	12.3
<b>Percent of births to unmarried women</b>						
All ages .....	32.4	25.7	21.5	69.8	70.0	40.7
Under 15 years .....	93.8	89.7	93.9	99.1	99.2	86.4
15-19 years .....	75.9	68.7	69.3	95.4	95.5	67.7
15 years .....	90.3	85.5	89.5	98.7	98.7	80.8
16 years .....	86.1	80.8	83.8	98.0	98.1	76.5
17 years .....	81.7	75.6	77.6	97.4	97.5	72.1
18 years .....	75.3	68.3	69.3	95.5	95.6	66.2
19 years .....	67.2	59.3	59.1	92.0	92.2	59.9
20-24 years .....	45.6	37.5	34.4	79.7	79.9	45.2
25-29 years .....	22.0	16.9	13.2	57.4	57.5	31.2
30-34 years .....	14.8	11.1	8.4	45.7	45.6	26.0
35-39 years .....	15.7	12.2	9.6	44.3	44.2	26.9
40 years and over .....	18.4	15.3	12.5	43.5	43.4	29.6

--- Data not available.

<sup>1</sup> Includes races other than white and black and origin not stated.

<sup>2</sup> Persons of Hispanic origin may be of any race.

<sup>3</sup> Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.

<sup>4</sup> Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

NOTES: For 45 States and the District of Columbia, marital status of mother is reported on the birth certificate; for 5 States, mother's marital status is inferred; see Technical notes. Rates cannot be computed for unmarried non-Hispanic black women because the necessary populations are not available.

**Table 18. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980-96, and by age, race and Hispanic origin of mother: United States, 1980-96**

[Rates are live births to unmarried women per 1,000 unmarried women in specified group, estimated as of July 1]

Year and race and Hispanic origin	Age of Mother								
	15-44 years <sup>1</sup>	15-19 years		20-24 years	25-29 years	30-34 years	35-39 years	40-44 years <sup>2</sup>	
		Total	15-17 years						18-19 years
All races <sup>3</sup>									
1996 <sup>4</sup>	44.8	42.9	29.0	65.9	70.7	56.8	41.1	20.1	4.8
1995 <sup>4</sup>	45.1	44.4	30.5	67.6	70.3	56.1	39.6	19.5	4.7
1994 <sup>4</sup>	46.9	46.4	32.0	70.1	72.2	59.0	40.1	19.8	4.7
1993 <sup>4</sup>	45.3	44.5	30.6	66.9	69.2	57.1	38.5	19.0	4.4
1992 <sup>4</sup>	45.2	44.6	30.4	67.3	68.5	56.5	37.9	18.8	4.1
1991 <sup>4</sup>	45.2	44.8	30.9	65.7	68.0	56.5	38.1	18.0	3.8
1990 <sup>4</sup>	43.8	42.5	29.6	60.7	65.1	56.0	37.6	17.3	3.6
1989 <sup>4</sup>	41.6	40.1	28.7	56.0	61.2	52.8	34.9	16.0	3.4
1988 <sup>4</sup>	38.5	36.4	26.4	51.5	56.0	48.5	32.0	15.0	3.2
1987 <sup>4</sup>	36.0	33.8	24.5	48.9	52.6	44.5	29.6	13.5	2.9
1986 <sup>4</sup>	34.2	32.3	22.8	48.0	49.3	42.2	27.2	12.2	2.7
1985 <sup>4</sup>	32.8	31.4	22.4	45.9	46.5	39.9	25.2	11.6	2.5
1984 <sup>4,5</sup>	31.0	30.0	21.9	42.5	43.0	37.1	23.3	10.9	2.5
1983 <sup>4,5</sup>	30.3	29.5	22.0	40.7	41.8	35.5	22.4	10.2	2.6
1982 <sup>4,5</sup>	30.0	28.7	21.5	39.6	41.5	35.1	21.9	10.0	2.7
1981 <sup>4,5</sup>	29.5	27.9	20.9	39.0	41.1	34.5	20.8	9.8	2.6
1980 <sup>4,5</sup>	29.4	27.6	20.6	39.0	40.9	34.0	21.1	9.7	2.6
1980 <sup>5,6</sup>	28.4	27.5	20.7	38.7	39.7	31.4	18.5	8.4	2.3
1975 <sup>5,6</sup>	24.5	23.9	19.3	32.5	31.2	27.5	17.9	9.1	2.6
1970 <sup>6,7</sup>	26.4	22.4	17.1	32.9	38.4	37.0	27.1	13.6	3.5
White, total									
1996 <sup>4</sup>	37.6	34.5	22.7	54.1	59.0	49.9	36.1	17.8	4.3
1995 <sup>4</sup>	37.5	35.5	23.6	55.4	58.0	48.7	34.2	16.9	4.2
1994 <sup>4</sup>	38.3	36.2	24.1	56.4	58.1	49.7	34.2	17.3	4.3
1993 <sup>4</sup>	35.9	33.6	22.1	52.4	54.2	46.7	32.2	16.4	3.9
1992 <sup>4</sup>	35.2	33.0	21.6	51.5	52.7	45.4	31.5	16.2	3.6
1991 <sup>4</sup>	34.6	32.8	21.8	49.6	51.5	44.6	31.1	15.2	3.2
1990 <sup>4</sup>	32.9	30.6	20.4	44.9	48.2	43.0	29.9	14.5	3.2
1989 <sup>4</sup>	30.2	28.0	19.3	40.2	43.8	39.1	26.8	13.1	2.9
1988 <sup>4</sup>	27.4	25.3	17.6	36.8	39.2	35.4	24.2	12.1	2.7
1987 <sup>4</sup>	25.3	23.2	16.2	34.5	36.6	32.0	22.3	10.7	2.4
1986 <sup>4</sup>	23.9	21.8	14.9	33.5	34.2	30.5	20.1	9.7	2.2
1985 <sup>4</sup>	22.5	20.8	14.5	31.2	31.7	28.5	18.4	9.0	2.0
1984 <sup>4,5</sup>	20.6	19.3	13.7	27.9	28.5	25.5	16.8	8.4	2.0
1983 <sup>4,5</sup>	19.8	18.7	13.6	26.4	27.1	23.8	15.9	7.8	2.0
1982 <sup>4,5</sup>	19.3	18.0	13.1	25.3	26.5	23.1	15.3	7.4	2.1
1981 <sup>4,5</sup>	18.6	17.2	12.6	24.6	25.8	22.3	14.2	7.2	1.9
1980 <sup>4,5</sup>	18.1	16.5	12.0	24.1	25.1	21.5	14.1	7.1	1.8
White, non-Hispanic									
1996 <sup>4</sup>	28.3	27.0	16.9	43.8	44.5	35.7	26.6	13.9	3.3
1995 <sup>4</sup>	28.2	27.7	17.6	44.5	43.8	34.9	25.3	13.0	3.2
1994 <sup>4</sup>	28.5	28.1	18.0	45.0	43.8	35.0	24.8	12.9	3.1
1993 <sup>4</sup>	---	---	---	---	---	---	---	---	---
1992 <sup>4</sup>	---	---	---	---	---	---	---	---	---
1991 <sup>4</sup>	---	---	---	---	---	---	---	---	---
1990 <sup>4,8</sup>	24.4	25.0	16.2	37.0	36.4	30.3	20.5	6.1	---

See footnotes at end of table.

**Table 18. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980-96, and by age, race and Hispanic origin of mother: United States, 1980-96--Con.**

[Rates are live births to unmarried women per 1,000 unmarried women in specified group, estimated as of July 1]

Year and race	Age of Mother								
	15-44 years <sup>1</sup>	15-19 years		20-24 years	25-29 years	30-34 years	35-39 years	40-44 years <sup>2</sup>	
		Total	15-17 years						18-19 years
<b>Black</b>									
1996 <sup>4</sup>	74.4	89.2	64.0	129.2	125.8	84.5	54.5	25.5	6.1
1995 <sup>4</sup>	75.9	92.8	68.6	131.2	127.7	84.8	54.3	25.6	6.0
1994 <sup>4</sup>	82.1	100.9	75.1	141.6	138.1	93.6	57.2	26.3	5.9
1993 <sup>4</sup>	84.0	102.4	76.8	141.6	142.2	94.5	57.3	25.9	5.8
1992 <sup>4</sup>	86.5	105.9	78.0	147.8	144.3	98.2	57.7	25.8	5.4
1991 <sup>4</sup>	89.5	108.5	80.4	148.7	147.5	100.9	60.1	25.6	5.4
1990 <sup>4</sup>	90.5	106.0	78.8	143.7	144.8	105.3	61.5	25.5	5.1
1989 <sup>4</sup>	90.7	104.5	78.9	140.9	142.4	102.9	60.5	24.9	5.0
1988 <sup>4</sup>	86.5	96.1	73.5	130.5	133.6	97.2	57.4	24.1	5.0
1987 <sup>4</sup>	82.6	90.9	69.9	123.0	126.1	91.6	53.1	22.4	4.7
1986 <sup>4</sup>	79.0	88.5	67.0	121.1	118.0	84.6	50.0	20.6	4.4
1985 <sup>4</sup>	77.0	87.6	66.8	117.9	113.1	79.3	47.5	20.4	4.3
1984 <sup>4,5</sup>	75.2	86.1	66.5	113.6	107.9	77.8	43.8	19.4	4.3
1983 <sup>4,5</sup>	76.2	85.5	66.8	111.9	107.2	79.7	43.8	19.4	4.8
1982 <sup>4,5</sup>	77.9	85.1	66.3	112.7	109.3	82.7	44.1	19.5	5.2
1981 <sup>4,5</sup>	79.4	85.0	65.9	114.2	110.7	83.1	45.5	19.6	5.6
1980 <sup>4,5</sup>	81.1	87.9	68.8	118.2	112.3	81.4	46.7	19.0	5.5
<b>Hispanic<sup>9</sup></b>									
1996 <sup>4</sup>	93.2	74.5	53.4	110.4	146.5	139.1	90.8	42.3	12.3
1995 <sup>4</sup>	95.0	78.7	56.3	117.9	148.9	133.8	89.2	43.4	12.2
1994 <sup>4</sup>	101.2	82.6	59.0	123.6	154.8	141.6	95.5	48.4	14.0
1993 <sup>4</sup>	95.2	74.6	51.9	114.6	140.5	137.7	90.9	47.8	14.1
1992 <sup>4</sup>	95.3	72.9	51.0	110.5	142.2	138.3	91.8	48.1	14.5
1991 <sup>4</sup>	93.7	72.4	50.5	109.6	135.4	137.5	89.1	47.7	14.2
1990 <sup>4</sup>	89.6	65.9	45.9	98.9	129.8	131.7	88.1	50.8	13.7

--- Data not available.

1 Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.

2 Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

3 Includes races other than white and black.

4 Data for States in which marital status was not reported have been inferred and included with data from the remaining States; see Technical notes.

5 Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

6 Births to unmarried women are estimated for the United States from data for registration areas in which marital status of mother was reported; see Technical notes.

7 Based on a 50-percent sample of births.

8 Rates for 1990 based on data for 48 States and the District of Columbia which reported Hispanic origin on the birth certificate. Rate shown for ages 35-39 years is based on births to unmarried women aged 35-44 years.

9 Persons of Hispanic origin may be of any race.

NOTE: Rates cannot be computed for unmarried non-Hispanic black women because the necessary populations are not available.

**Table 19. Number and percent of births to unmarried women by race and Hispanic origin of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence]

State	Births to unmarried women						Percent unmarried					
	All races <sup>1</sup>	White		Black		Hispanic <sup>2</sup>	All races <sup>1</sup>	White		Black		Hispanic <sup>2</sup>
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States <sup>3</sup>	1,260,306	795,432	508,157	415,213	404,575	285,501	32.4	25.7	21.5	69.8	70.0	40.7
Alabama	20,366	6,597	6,385	13,651	13,634	232	33.7	16.4	16.2	69.7	69.8	24.8
Alaska	3,110	1,520	1,371	170	152	207	31.0	22.4	21.8	40.3	39.3	31.8
Arizona	29,243	23,818	10,032	1,503	1,437	14,051	38.8	36.0	26.0	64.2	63.9	50.4
Arkansas	12,335	6,321	5,898	5,859	5,832	436	33.9	22.7	22.2	74.1	74.1	33.2
California	169,313	137,061	41,910	23,201	22,509	95,897	31.4	31.2	22.6	60.5	60.6	37.6
Colorado	13,863	11,826	6,888	1,496	1,410	5,013	24.8	23.2	17.8	58.1	57.5	40.5
Connecticut	13,940	9,709	5,792	3,706	3,423	3,659	31.3	25.6	18.9	70.7	70.7	64.7
Delaware	3,603	1,840	1,505	1,731	1,713	346	35.5	24.4	21.8	73.0	73.0	52.4
District of Columbia	5,547	574	150	4,933	4,908	430	66.1	27.9	12.0	79.8	80.1	55.3
Florida	68,077	38,571	26,716	28,669	28,119	12,413	35.9	27.0	24.8	67.8	68.1	34.8
Georgia	39,928	13,983	12,223	25,640	25,484	1,634	35.0	19.1	18.4	66.6	66.8	26.1
Hawaii	5,569	817	630	111	99	980	30.3	17.0	15.3	21.6	20.2	45.3
Idaho	3,969	3,754	3,068	24	22	632	21.3	20.8	19.6	32.0	30.6	29.0
Illinois	61,743	32,994	20,135	28,193	28,053	12,974	33.7	23.5	18.7	77.8	77.9	39.5
Indiana	27,002	20,049	18,775	6,806	6,757	1,223	32.3	27.2	26.6	77.1	77.1	41.5
Iowa	9,760	8,734	8,062	754	707	565	26.3	24.9	24.2	71.9	72.1	38.1
Kansas	9,847	7,670	6,425	1,889	1,869	1,229	26.9	23.4	21.9	68.3	68.2	38.1
Kentucky	15,693	11,996	11,829	3,581	3,563	159	29.8	25.4	25.3	73.7	73.8	28.6
Louisiana	28,320	8,548	8,195	19,460	19,429	395	43.4	22.9	22.6	73.4	73.5	31.2
Maine	3,959	3,851	3,681	37	35	29	28.7	28.6	28.4	43.5	43.8	25.2
Maryland	23,977	9,299	7,958	14,408	14,203	1,234	33.5	20.3	18.9	62.8	63.1	38.2
Massachusetts	20,458	15,371	11,297	4,344	3,493	4,651	25.5	22.2	18.2	58.9	59.3	60.2
Michigan	45,052	25,878	21,768	18,487	18,230	2,109	33.8	24.4	22.9	76.5	76.6	41.8
Minnesota	15,798	12,182	10,701	2,105	2,067	1,087	24.8	21.4	21.1	67.7	67.8	46.8
Mississippi	18,463	4,000	3,915	14,262	14,258	84	45.0	18.6	18.5	75.2	75.2	30.2
Missouri	24,483	15,470	14,909	8,685	8,668	563	33.2	25.2	24.9	78.1	78.2	37.1
Montana	3,026	2,180	1,976	16	14	106	27.9	22.9	22.2	*	*	35.6
Nebraska	5,765	4,594	3,765	861	854	741	24.8	21.5	19.8	71.5	71.6	39.7
Nevada	11,145	8,819	4,998	1,515	1,495	3,827	42.7	39.5	32.5	76.8	77.0	54.9
New Hampshire	3,400	3,330	3,105	44	40	103	23.4	23.4	22.7	39.3	40.8	44.6
New Jersey	31,959	17,624	8,476	13,712	12,997	9,621	28.0	20.4	12.6	66.8	67.6	49.5
New Mexico	11,470	8,832	2,431	286	272	6,491	42.1	38.1	24.1	61.2	62.0	49.0
New York	104,416	60,106	25,149	39,480	34,251	33,292	39.6	31.3	21.1	71.3	71.2	63.2
North Carolina	33,419	14,069	12,173	18,252	18,200	1,942	32.0	19.1	17.8	67.3	67.3	35.7
North Dakota	2,099	1,528	1,437	22	21	46	25.1	20.6	20.1	24.7	24.4	33.6
Ohio	50,265	33,098	31,571	16,862	16,734	1,507	33.1	26.0	25.4	76.5	76.5	50.2
Oklahoma	14,267	9,074	8,139	3,109	3,095	955	30.9	24.8	24.1	69.3	69.4	33.1
Oregon	12,959	11,618	9,640	623	609	2,006	29.7	28.7	27.6	69.8	69.8	36.8
Pennsylvania	47,976	31,163	27,050	16,160	15,920	4,213	32.3	25.1	23.0	78.5	78.7	62.5
Rhode Island	4,208	3,318	2,018	646	516	1,001	33.3	29.7	24.6	68.4	68.8	60.0
South Carolina	19,075	6,491	6,218	12,453	12,439	285	37.3	20.1	19.8	69.2	69.2	29.3
South Dakota	3,091	1,837	1,791	25	23	59	29.5	21.2	21.0	30.1	28.8	40.4
Tennessee	24,645	12,601	12,178	11,769	11,743	443	33.4	22.3	22.1	73.5	73.5	31.1
Texas	100,573	74,748	26,585	24,609	24,408	48,256	30.4	26.5	19.1	63.3	63.4	33.8
Utah	6,809	6,108	4,709	156	136	1,419	16.2	15.3	13.1	48.1	54.0	36.0
Vermont	1,786	1,759	1,646	11	10	7	26.4	26.3	25.9	*	*	*
Virginia	26,634	12,920	10,999	13,255	13,224	1,939	28.8	19.2	17.7	63.4	63.6	37.7
Washington	21,287	17,432	13,744	1,743	1,641	3,339	27.3	25.8	24.1	56.0	56.9	37.4
West Virginia	6,504	5,935	5,908	549	545	30	31.3	29.9	29.9	74.0	73.8	24.0
Wisconsin	18,413	12,292	10,920	5,328	5,293	1,424	27.4	21.2	19.9	82.8	82.9	45.4
Wyoming	1,697	1,523	1,313	22	21	217	27.0	25.6	24.1	44.9	43.8	41.5
Puerto Rico	27,886	24,821	---	3,055	---	---	44.2	42.7	---	61.1	---	---
Virgin Islands	1,224	171	35	1,045	952	188	64.3	48.9	35.7	69.5	70.1	58.6
Guam	2,066	73	66	10	10	9	48.5	17.1	16.9	*	*	*

\* Figure does not meet standards of reliability or precision.  
 --- Data not available.  
<sup>1</sup> Includes races other than white and black and origin not stated.  
<sup>2</sup> Persons of Hispanic origin may be of any race.  
<sup>3</sup> Excludes data for Puerto Rico, Virgin Islands, and Guam.

**Table 20. Birth rates by age and race of father: United States, 1980-96**

[Rates are live births per 1,000 men in specified group, enumerated as of April 1 for 1980 and 1990 and estimated as of July 1 for all other years. Figures for age of father not stated are distributed]

Year and race of father	15-54 years <sup>1</sup>	Age of father								
		15-19 years <sup>2</sup>	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55 years and over
All races <sup>3</sup>										
1996	51.1	23.0	84.4	107.7	94.3	51.5	20.4	6.9	2.5	0.3
1995	52.0	24.3	86.0	107.2	93.3	51.0	20.3	7.1	2.6	0.3
1994	53.2	25.0	87.3	108.8	93.3	50.9	20.2	7.2	2.6	0.3
1993	54.4	24.8	87.1	110.8	93.5	51.1	20.2	7.3	2.7	0.4
1992	55.8	24.6	87.7	113.1	94.2	51.3	20.4	7.3	2.7	0.4
1991	57.1	24.8	88.0	114.7	95.1	51.8	20.2	7.5	2.7	0.4
1990	58.4	23.5	88.0	116.4	97.8	53.0	21.0	7.5	2.8	0.4
1989	57.2	21.9	85.4	114.3	94.8	51.3	20.4	7.4	2.7	0.6
1988	55.8	19.6	82.4	111.6	93.2	49.9	19.9	7.1	2.7	0.4
1987	55.0	18.3	80.5	109.9	91.2	48.6	19.0	6.9	2.6	0.4
1986	54.8	17.9	80.3	109.6	90.3	46.8	18.3	6.7	2.6	0.4
1985	55.6	18.0	81.2	112.3	91.1	47.3	18.1	6.6	2.5	0.4
1984 <sup>4</sup>	55.0	17.8	80.7	111.4	89.9	46.0	17.8	6.3	2.4	0.4
1983 <sup>4</sup>	55.1	18.2	82.6	113.0	89.1	45.2	17.4	6.4	2.3	0.4
1982 <sup>4</sup>	56.4	18.6	86.5	117.3	90.3	44.5	17.5	6.4	2.3	0.4
1981 <sup>4</sup>	56.3	18.4	88.4	119.1	88.7	43.3	17.0	6.2	2.3	0.4
1980 <sup>4</sup>	57.0	18.8	92.0	123.1	91.0	42.8	17.1	6.1	2.2	0.3
White										
1996	48.4	18.8	77.2	106.4	94.0	50.2	19.0	6.2	2.1	0.2
1995	49.2	19.7	78.5	105.7	92.9	49.6	19.0	6.3	2.2	0.2
1994	50.0	19.8	78.5	106.4	92.5	49.3	18.9	6.3	2.2	0.3
1993	50.9	19.2	77.9	108.0	92.4	49.2	18.6	6.4	2.2	0.2
1992	52.2	18.9	78.2	110.1	93.2	49.3	18.8	6.4	2.2	0.3
1991	53.3	19.1	78.4	111.5	93.6	49.7	18.5	6.5	2.2	0.3
1990	54.6	18.1	78.3	113.2	96.1	50.9	19.2	6.5	2.2	0.3
1989	53.3	16.7	75.9	110.8	93.0	49.1	18.7	6.3	2.1	0.4
1988	52.2	14.8	73.7	108.3	91.2	47.6	18.1	6.1	2.1	0.3
1987	51.6	13.9	72.8	107.0	89.5	46.2	17.3	5.9	2.0	0.3
1986	51.7	13.8	73.3	107.0	88.7	44.4	16.6	5.7	2.0	0.3
1985	52.6	14.0	74.7	109.9	89.5	44.8	16.3	5.6	1.9	0.3
1984 <sup>4</sup>	51.8	14.0	74.3	108.8	87.9	43.5	16.0	5.3	1.9	0.3
1983 <sup>4</sup>	52.0	14.4	76.3	110.2	86.8	42.6	15.5	5.3	1.8	0.3
1982 <sup>4</sup>	53.1	14.9	80.1	114.2	87.5	41.7	15.6	5.3	1.9	0.3
1981 <sup>4</sup>	52.9	15.0	81.7	115.8	85.8	40.3	15.0	5.2	1.8	0.3
1980 <sup>4</sup>	53.4	15.4	84.9	119.4	87.8	39.7	15.0	5.1	1.8	0.3
Black										
1996	68.3	47.2	138.0	127.2	89.3	52.3	25.7	11.6	5.5	1.1
1995	70.1	50.5	140.5	126.6	89.6	52.6	25.7	12.1	5.6	1.1
1994	74.9	54.6	150.5	131.9	92.9	54.2	26.4	13.0	6.0	1.1
1993	78.3	56.6	153.8	136.0	95.3	56.6	27.7	13.5	6.4	1.3
1992	81.0	57.4	158.0	140.1	96.8	56.9	28.4	13.9	6.2	1.4
1991	83.4	58.0	158.5	143.3	100.1	58.8	29.4	14.2	6.7	1.4
1990	84.9	55.2	158.2	144.9	103.2	60.4	31.1	15.0	7.1	1.4
1989	84.1	52.9	153.4	143.5	101.4	59.9	31.1	14.9	6.9	2.7
1988	80.7	48.1	144.1	137.9	100.0	58.0	30.6	14.3	6.9	1.4
1987	78.3	44.6	136.1	133.9	97.4	58.0	30.0	13.8	6.6	1.3
1986	77.2	42.6	131.4	131.6	97.4	58.0	29.1	13.5	6.7	1.3
1985	77.2	41.8	129.5	132.7	97.3	59.4	29.5	13.3	6.5	1.2
1984 <sup>4</sup>	76.7	40.9	128.0	132.2	98.3	58.4	29.3	13.3	6.1	1.2
1983 <sup>4</sup>	77.2	40.7	129.1	134.4	99.0	59.6	29.6	13.5	6.0	1.2
1982 <sup>4</sup>	79.5	40.3	133.4	141.2	103.6	61.1	29.6	13.9	6.0	1.2
1981 <sup>4</sup>	80.4	38.9	138.4	145.6	104.3	61.3	29.7	13.3	5.7	1.2
1980 <sup>4</sup>	83.0	40.1	145.3	152.8	109.6	62.0	31.2	13.6	5.9	1.1

<sup>1</sup> Rates computed by relating total births, regardless of age of father, to men aged 15-54 years.

<sup>2</sup> Rates computed by relating births of fathers under 20 years of age to men aged 15-19 years.

<sup>3</sup> Includes races other than white and black.

<sup>4</sup> Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the father's reported race; see Technical notes.

**Table 21. Live births by educational attainment, and percent of mothers completing 12 years or more and 16 years or more of school, by age and race of mother: United States, 1996**

Age and race of mother	Total	Years of school completed by mother						Percent 12 years or more	Percent 16 years or more
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated		
<b>All races<sup>1</sup></b>									
All ages .....	3,891,494	233,596	626,175	1,281,198	847,139	847,824	55,562	77.6	22.1
Under 15 years .....	11,148	8,455	2,317	-	-	-	376	-	-
15-19 years .....	491,577	45,535	261,949	153,821	22,254	-	8,018	36.4	-
15 years .....	28,540	9,440	18,342	-	-	-	758	-	-
16 years .....	60,287	8,316	49,260	1,555	-	-	1,156	2.6	-
17 years .....	96,894	8,150	72,782	14,000	323	-	1,639	15.0	-
18 years .....	135,059	9,102	65,114	54,853	3,949	-	2,041	44.2	-
19 years .....	170,797	10,527	56,451	83,413	17,982	-	2,424	60.2	-
20-24 years .....	945,210	63,020	187,992	414,079	219,077	47,694	13,348	73.1	5.1
25-29 years .....	1,071,287	53,792	99,745	357,007	279,400	267,152	14,191	85.5	25.3
30-34 years .....	897,913	37,532	50,607	238,990	218,714	340,048	12,022	90.1	38.4
35-39 years .....	399,510	19,576	19,830	100,150	91,401	162,427	6,126	90.0	41.3
40 years and over .....	74,849	5,686	3,735	17,151	16,293	30,503	1,481	87.2	41.6
<b>White</b>									
All ages .....	3,093,057	202,837	456,141	992,327	673,793	728,558	39,401	78.4	23.9
Under 15 years .....	5,526	4,195	1,133	-	-	-	198	-	-
15-19 years .....	344,685	37,168	178,776	108,439	15,050	-	5,252	36.4	-
15 years .....	16,978	5,980	10,566	-	-	-	432	-	-
16 years .....	39,401	6,385	31,228	1,052	-	-	736	2.7	-
17 years .....	66,997	6,980	49,296	9,445	227	-	1,049	14.7	-
18 years .....	96,246	8,187	46,154	37,887	2,656	-	1,362	42.7	-
19 years .....	125,063	9,636	41,532	60,055	12,167	-	1,673	58.5	-
20-24 years .....	726,669	58,273	143,121	313,425	164,541	37,759	9,550	71.9	5.3
25-29 years .....	878,449	48,504	78,562	284,959	226,946	229,276	10,202	85.4	26.4
30-34 years .....	747,436	33,179	37,850	192,765	179,995	294,919	8,728	90.4	39.9
35-39 years .....	329,782	16,931	14,164	79,655	74,209	140,416	4,407	90.4	43.2
40 years and over .....	60,510	4,587	2,535	13,084	13,052	26,188	1,064	88.0	44.1
<b>Black</b>									
All ages .....	594,781	18,573	145,688	229,655	131,046	58,299	11,520	71.8	10.0
Under 15 years .....	5,193	3,961	1,084	-	-	-	148	-	-
15-19 years .....	130,596	7,224	74,679	40,008	6,306	-	2,379	36.1	-
15 years .....	10,498	3,145	7,066	-	-	-	287	-	-
16 years .....	18,753	1,719	16,232	441	-	-	361	2.4	-
17 years .....	26,775	994	21,175	4,025	79	-	502	15.6	-
18 years .....	34,394	711	16,982	15,005	1,124	-	572	47.7	-
19 years .....	40,176	655	13,224	20,537	5,103	-	657	64.9	-
20-24 years .....	179,361	2,486	38,471	84,024	44,520	6,974	2,886	76.8	4.0
25-29 years .....	133,204	1,913	16,592	54,729	38,536	18,781	2,653	85.8	14.4
30-34 years .....	94,295	1,584	9,680	33,483	27,524	19,898	2,126	87.8	21.6
35-39 years .....	43,716	1,067	4,303	14,635	12,044	10,570	1,097	87.4	24.8
40 years and over .....	8,416	338	879	2,776	2,116	2,076	231	85.1	25.4

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

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 22. Number of live births and percent distribution by weight gain of mother during pregnancy and median weight gain, according to period of gestation, race and Hispanic origin of mother: Total of 49 reporting States and the District of Columbia, 1996**

Period of gestation <sup>1</sup> and race and Hispanic origin of mother	All births	Weight gain during pregnancy									Median weight gain in pounds
		Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated	
		Number									
All gestation periods <sup>2</sup>											
All races <sup>3</sup> .....	3,352,061	340,578	336,239	443,745	579,778	438,917	386,286	202,425	337,382	286,711	...
White, total .....	2,653,534	244,006	255,287	354,491	472,052	364,556	317,408	167,131	270,370	208,233	...
White, non-Hispanic .....	2,173,330	191,046	203,177	294,212	395,718	310,927	270,774	143,279	231,818	132,379	...
Black, total .....	556,410	83,217	65,462	68,946	82,549	55,849	54,003	28,093	56,603	61,688	...
Black, non-Hispanic .....	540,966	81,529	63,881	67,007	80,361	54,098	52,450	27,181	54,894	59,565	...
Hispanic <sup>4</sup> .....	136,689	12,868	14,971	19,643	24,317	17,872	14,367	6,899	9,911	15,841	...
Under 37 weeks											
All races <sup>3</sup> .....	372,057	59,672	46,998	49,258	55,691	36,926	32,380	16,608	30,636	43,888	...
White, total .....	260,087	36,344	31,628	35,308	40,873	28,076	24,229	12,680	22,854	28,095	...
White, non-Hispanic .....	207,134	28,002	25,099	28,896	33,349	23,424	20,243	10,775	19,376	17,970	...
Black, total .....	97,106	21,172	13,491	11,809	12,536	7,382	6,946	3,352	6,814	13,604	...
Black, non-Hispanic .....	95,108	20,816	13,244	11,551	12,287	7,228	6,782	3,263	6,657	13,280	...
Hispanic <sup>4</sup> .....	14,303	2,081	1,820	2,060	2,205	1,415	1,159	562	930	2,071	...
37-39 weeks											
All races <sup>3</sup> .....	1,500,905	148,525	153,852	207,836	269,887	200,848	171,833	87,729	141,101	119,294	...
White, total .....	1,185,674	107,547	116,784	165,941	218,926	165,736	140,192	71,796	111,992	86,760	...
White, non-Hispanic .....	971,227	83,992	92,818	137,633	183,525	141,312	119,377	61,271	95,699	55,600	...
Black, total .....	247,197	34,803	29,279	31,731	38,440	26,043	24,632	12,637	24,594	25,038	...
Black, non-Hispanic .....	240,587	34,096	28,584	30,850	37,454	25,277	23,965	12,246	23,890	24,225	...
Hispanic <sup>4</sup> .....	65,544	5,936	7,522	9,856	12,081	8,776	6,811	3,149	4,302	7,111	...
40 weeks and over											
All races <sup>3</sup> .....	1,464,334	131,407	134,630	185,804	253,158	200,385	181,423	97,781	165,092	114,654	...
White, total .....	1,197,570	99,523	106,401	152,736	211,538	170,258	152,540	82,429	135,161	86,984	...
White, non-Hispanic .....	988,195	78,656	84,917	127,279	178,280	145,813	130,779	71,050	116,465	54,956	...
Black, total .....	209,193	26,951	22,522	25,279	31,407	22,323	22,340	12,060	25,087	21,224	...
Black, non-Hispanic .....	202,668	26,336	21,886	24,481	30,462	21,495	21,621	11,631	24,244	20,512	...
Hispanic <sup>4</sup> .....	55,386	4,767	5,525	7,534	9,883	7,531	6,290	3,160	4,605	6,091	...
Percent distribution											
All gestation periods <sup>2</sup>											
All races <sup>3</sup> .....	100.0	11.1	11.0	14.5	18.9	14.3	12.6	6.6	11.0	...	30.4
White, total .....	100.0	10.0	10.4	14.5	19.3	14.9	13.0	6.8	11.1	...	30.6
White, non-Hispanic .....	100.0	9.4	10.0	14.4	19.4	15.2	13.3	7.0	11.4	...	30.7
Black, total .....	100.0	16.8	13.2	13.9	16.7	11.3	10.9	5.7	11.4	...	29.1
Black, non-Hispanic .....	100.0	16.9	13.3	13.9	16.7	11.2	10.9	5.6	11.4	...	29.0
Hispanic <sup>4</sup> .....	100.0	10.6	12.4	16.3	20.1	14.8	11.9	5.7	8.2	...	29.6
Under 37 weeks											
All races <sup>3</sup> .....	100.0	18.2	14.3	15.0	17.0	11.3	9.9	5.1	9.3	...	27.1
White, total .....	100.0	15.7	13.6	15.2	17.6	12.1	10.4	5.5	9.9	...	28.3
White, non-Hispanic .....	100.0	14.8	13.3	15.3	17.6	12.4	10.7	5.7	10.2	...	28.8
Black, total .....	100.0	25.4	16.2	14.1	15.0	8.8	8.3	4.0	8.2	...	25.2
Black, non-Hispanic .....	100.0	25.4	16.2	14.1	15.0	8.8	8.3	4.0	8.1	...	25.1
Hispanic <sup>4</sup> .....	100.0	17.0	14.9	16.8	18.0	11.6	9.5	4.6	7.6	...	25.9
37-39 weeks											
All races <sup>3</sup> .....	100.0	10.8	11.1	15.0	19.5	14.5	12.4	6.3	10.2	...	30.3
White, total .....	100.0	9.8	10.6	15.1	19.9	15.1	12.8	6.5	10.2	...	30.5
White, non-Hispanic .....	100.0	9.2	10.1	15.0	20.0	15.4	13.0	6.7	10.5	...	30.6
Black, total .....	100.0	15.7	13.2	14.3	17.3	11.7	11.1	5.7	11.1	...	29.5
Black, non-Hispanic .....	100.0	15.8	13.2	14.3	17.3	11.7	11.1	5.7	11.0	...	29.4
Hispanic <sup>4</sup> .....	100.0	10.2	12.9	16.9	20.7	15.0	11.7	5.4	7.4	...	29.2
40 weeks and over											
All races <sup>3</sup> .....	100.0	9.7	10.0	13.8	18.8	14.8	13.4	7.2	12.2	...	30.8
White, total .....	100.0	9.0	9.6	13.8	19.0	15.3	13.7	7.4	12.2	...	30.9
White, non-Hispanic .....	100.0	8.4	9.1	13.6	19.1	15.6	14.0	7.6	12.5	...	31.0
Black, total .....	100.0	14.3	12.0	13.4	16.7	11.9	11.9	6.4	13.3	...	30.3
Black, non-Hispanic .....	100.0	14.5	12.0	13.4	16.7	11.8	11.9	6.4	13.3	...	30.3
Hispanic <sup>4</sup> .....	100.0	9.7	11.2	15.3	20.0	15.3	12.8	6.4	9.3	...	30.2

... Category not applicable.  
<sup>1</sup> Expressed in completed weeks.  
<sup>2</sup> Includes births with period of gestation not stated.  
<sup>3</sup> Includes races other than white and black and origin not stated.  
<sup>4</sup> Persons of Hispanic origin may be of any race.

NOTE: Excludes data for California, which did not require reporting of weight gain during pregnancy.

**Table 23. Percent low birthweight by weight gain of mother during pregnancy, period of gestation, and race and Hispanic origin of mother: Total of 49 reporting States and the District of Columbia, 1996**

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

Period of gestation <sup>1</sup> and race and Hispanic origin of mother	Total	Weight gain during pregnancy								
		Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated
All gestation periods <sup>2</sup>										
All races <sup>3</sup> .....	7.6	14.5	10.5	7.7	6.0	5.1	4.8	4.7	5.1	11.7
White, total .....	6.5	12.0	9.2	6.7	5.3	4.5	4.3	4.3	4.7	9.9
White, non-Hispanic .....	6.4	12.1	9.4	6.8	5.2	4.5	4.3	4.3	4.8	10.4
Black, total .....	13.1	22.2	16.2	12.7	10.4	8.7	7.9	7.3	7.1	18.4
Black, non-Hispanic .....	13.2	22.3	16.3	12.8	10.5	8.8	7.9	7.4	7.1	18.5
Hispanic, total <sup>4</sup> .....	6.8	11.5	8.0	6.7	5.4	4.6	4.4	4.1	4.4	8.9
Mexican <sup>4</sup> .....	6.3	10.2	7.0	5.9	5.0	4.2	3.9	3.7	4.1	8.2
Puerto Rican <sup>4</sup> .....	9.3	17.0	12.5	9.5	7.5	6.5	6.0	5.1	5.3	14.4
Cuban <sup>4</sup> .....	6.5	12.8	11.1	7.3	6.7	3.9	3.9	4.3	5.1	9.9
Central and South American <sup>4</sup> .....	6.1	11.6	8.0	6.4	4.5	4.4	4.6	3.9	4.2	7.6
Other and unknown Hispanic <sup>4</sup> .....	8.0	13.4	9.3	8.1	6.4	5.4	5.3	4.4	4.6	12.8
Under 37 weeks										
All races <sup>3</sup> .....	44.2	58.5	48.9	42.5	37.9	35.6	34.9	34.3	35.2	53.6
White, total .....	42.5	56.5	47.9	41.5	36.9	35.0	34.4	34.3	35.5	51.7
White, non-Hispanic .....	43.6	58.6	49.9	42.6	38.0	35.9	35.3	35.3	36.7	55.8
Black, total .....	49.5	62.7	52.1	46.5	41.8	39.0	37.4	36.0	34.9	58.6
Black, non-Hispanic .....	49.5	62.8	52.2	46.5	41.9	39.1	37.4	36.3	34.9	58.5
Hispanic <sup>4</sup> .....	37.4	48.8	39.5	36.2	31.3	29.9	29.7	26.7	28.4	43.3
37-39 weeks										
All races <sup>3</sup> .....	4.4	7.1	6.0	4.8	3.9	3.5	3.1	3.3	3.4	5.5
White, total .....	3.8	6.0	5.3	4.2	3.4	3.1	2.8	3.0	3.1	4.6
White, non-Hispanic .....	3.8	6.0	5.4	4.2	3.4	3.1	2.8	2.9	3.1	4.4
Black, total .....	7.2	10.7	9.0	7.6	6.5	5.6	4.9	5.1	4.8	8.5
Black, non-Hispanic .....	7.3	10.7	9.1	7.7	6.6	5.6	4.9	5.1	4.8	8.6
Hispanic <sup>4</sup> .....	4.1	6.0	4.9	4.2	3.6	3.3	2.9	3.2	3.1	4.9
40 weeks and over										
All races <sup>3</sup> .....	1.5	2.9	2.3	1.7	1.3	1.1	1.0	0.9	1.0	2.2
White, total .....	1.3	2.3	2.0	1.5	1.1	0.9	0.9	0.8	0.8	1.7
White, non-Hispanic .....	1.2	2.2	2.0	1.4	1.1	0.9	0.8	0.8	0.8	1.6
Black, total .....	3.1	5.2	4.0	3.4	2.7	2.3	2.0	1.8	1.7	4.1
Black, non-Hispanic .....	3.1	5.3	4.1	3.4	2.7	2.3	2.0	1.7	1.7	4.1
Hispanic <sup>4</sup> .....	1.5	2.5	1.9	1.7	1.3	1.1	1.1	0.9	1.0	1.9

1 Expressed in completed weeks.  
 2 Includes births with period of gestation not stated.  
 3 Includes races other than white and black and origin not stated.  
 4 Persons of Hispanic origin may be of any race.

NOTE: Excludes data for California, which did not require reporting of weight gain during pregnancy.



**Table 24. Percent of births with selected medical or health characteristics, by specified race of mother, by place of birth of mother: United States, 1996**

Characteristic	All races	White	Black	American Indian <sup>1</sup>	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
<b>All Births</b>										
<b>Mother</b>										
Prenatal care beginning in the first trimester .....	81.9	84.0	71.4	67.7	81.2	86.8	89.3	78.5	82.5	78.4
Late or no prenatal care .....	4.0	3.3	7.3	8.6	3.9	2.5	2.2	5.0	3.3	4.6
Smoker <sup>2</sup> .....	13.6	14.7	10.2	21.3	3.3	0.7	4.8	15.3	3.5	2.7
Drinker <sup>3</sup> .....	1.4	1.3	2.0	4.0	0.4	0.2	0.8	1.3	0.4	0.4
Weight gain of less than 16 lbs <sup>4</sup> .....	11.1	10.0	16.8	15.1	9.2	6.3	9.6	8.4	7.0	10.6
Median weight gain <sup>4</sup> .....	30.4	30.6	29.1	30.1	30.0	30.2	27.0	32.0	30.5	29.2
Cesarean delivery rate .....	20.7	20.6	21.7	18.1	18.6	19.0	16.9	16.0	22.3	17.5
<b>Infant</b>										
Preterm births <sup>5</sup> .....	11.0	9.8	17.4	11.9	10.0	7.4	8.2	11.5	11.5	10.4
<b>Birthweight</b>										
Very low birthweight <sup>6</sup> .....	1.4	1.1	3.0	1.2	1.0	0.6	0.8	1.0	1.2	1.0
Low birthweight <sup>7</sup> .....	7.4	6.3	13.0	6.5	7.1	5.0	7.3	6.8	7.9	7.4
4,000 grams or more <sup>8</sup> .....	10.2	11.4	5.4	12.3	6.0	6.6	5.3	8.4	6.3	5.7
5-minute Apgar score of less than 7 <sup>9</sup> ..	1.4	1.2	2.5	1.4	1.0	0.7	0.7	1.2	1.1	1.1
<b>Births to mothers born in the 50 States and D.C.</b>										
<b>Mother</b>										
Prenatal care beginning in the first trimester .....	83.5	86.3	71.2	67.5	82.4	91.7	91.2	78.5	81.1	78.4
Late or no prenatal care .....	3.5	2.6	7.4	8.6	3.8	1.6	1.9	5.0	3.5	4.8
Smoker <sup>2</sup> .....	15.5	16.5	11.1	21.8	10.5	4.2	6.2	15.5	8.6	10.1
Drinker <sup>3</sup> .....	1.5	1.4	2.1	4.1	1.1	*	*	1.3	*	1.5
Weight gain of less than 16 lbs <sup>4</sup> .....	11.0	9.7	17.2	15.2	8.2	6.4	8.2	8.5	7.6	8.8
Median weight gain <sup>4</sup> .....	30.5	30.7	29.0	30.2	30.7	30.4	29.8	32.0	30.8	30.7
Cesarean delivery rate .....	20.9	20.8	21.6	18.0	17.0	17.6	19.8	16.1	16.2	16.6
<b>Infant</b>										
Preterm births <sup>5</sup> .....	11.1	9.7	17.8	11.9	10.7	9.2	9.3	11.5	11.1	11.0
<b>Birthweight</b>										
Very low birthweight <sup>6</sup> .....	1.4	1.1	3.0	1.2	1.1	1.1	0.7	1.0	1.5	1.2
Low birthweight <sup>7</sup> .....	7.6	6.5	13.4	6.4	7.8	7.3	8.3	6.9	8.6	7.8
4,000 grams or more <sup>8</sup> .....	10.5	11.7	5.0	12.5	7.4	7.1	6.3	8.5	5.9	8.4
5-minute Apgar score of less than 7 <sup>9</sup> ..	1.5	1.2	2.5	1.4	1.1	*	*	1.2	*	1.3
<b>Births to mothers born outside the 50 States and D.C.</b>										
<b>Mother</b>										
Prenatal care beginning in the first trimester .....	74.9	73.3	74.7	74.3	81.0	86.3	87.8	77.1	82.8	78.4
Late or no prenatal care .....	6.1	6.7	6.4	8.0	3.9	2.5	2.4	*	3.2	4.6
Smoker <sup>2</sup> .....	3.1	3.6	2.0	6.3	1.9	0.4	3.6	*	2.4	2.0
Drinker <sup>3</sup> .....	0.6	0.6	0.5	*	0.3	0.1	1.0	*	0.3	0.3
Weight gain of less than 16 lbs <sup>4</sup> .....	11.9	12.3	13.2	12.1	9.4	6.3	10.6	*	6.9	10.7
Median weight gain <sup>4</sup> .....	29.6	29.5	30.0	29.8	29.5	30.2	25.8	30.8	30.4	28.9
Cesarean delivery rate .....	19.7	19.5	23.4	19.2	18.9	19.1	14.4	*	23.5	17.6
<b>Infant</b>										
Preterm births <sup>5</sup> .....	10.3	10.0	13.5	11.3	9.9	7.2	7.4	*	11.6	10.4
<b>Birthweight</b>										
Very low birthweight <sup>6</sup> .....	1.1	1.0	2.4	1.6	1.0	0.6	0.9	*	1.1	1.0
Low birthweight <sup>7</sup> .....	6.2	5.7	9.2	7.4	6.9	4.8	6.4	*	7.8	7.4
4,000 grams or more <sup>8</sup> .....	9.1	10.0	8.5	8.0	5.8	6.5	4.5	*	6.4	5.4
5-minute Apgar score of less than 7 <sup>9</sup> ..	1.2	1.1	1.9	*	1.0	0.6	*	*	1.2	1.0

\* Figure does not meet standards of reliability or precision.

<sup>1</sup> Includes births to Aleuts and Eskimos.

<sup>2</sup> Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not report tobacco use on the birth certificate.

<sup>3</sup> Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.

<sup>4</sup> Excludes data for California, which did not report weight gain on the birth certificate. Median weight shown in pounds.

<sup>5</sup> Born prior to 37 completed weeks of gestation.

<sup>6</sup> Birthweight of less than 1,500 grams (3 lb 4 oz).

<sup>7</sup> Birthweight of less than 2,500 grams (5 lb 8 oz).

<sup>8</sup> Equivalent to 8 lb 14 oz.

<sup>9</sup> Excludes data for California and Texas, which did not report 5-minute Apgar score on the birth certificate.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 25. Percent of births with selected medical or health characteristics, by Hispanic origin of mother and by race for mothers of non-Hispanic origin and by place of birth of mother: United States, 1996**

Characteristic	Origin of mother									
	All origins <sup>1</sup>	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
<b>All Births</b>										
<b>Mother</b>										
Prenatal care beginning in the first trimester .....	81.9	72.2	70.7	75.0	89.2	75.0	74.6	84.0	87.4	71.5
Late or no prenatal care .....	4.0	6.7	7.2	5.7	1.6	5.5	5.9	3.4	2.4	7.3
Smoker <sup>3</sup> .....	13.6	4.3	3.1	11.0	4.7	1.8	9.1	15.1	16.9	10.3
Drinker <sup>4</sup> .....	1.4	0.7	0.6	1.1	0.4	0.4	1.7	1.5	1.4	2.0
Weight gain of less than 16 lbs <sup>5</sup> .....	11.1	13.4	14.7	12.4	7.2	10.9	13.2	10.8	9.4	16.9
Median weight gain <sup>5</sup> .....	30.4	29.6	28.4	30.4	31.3	30.2	30.1	30.5	30.7	29.0
Cesarean delivery rate .....	20.7	20.0	19.4	20.8	30.3	21.3	19.9	20.8	20.8	21.7
<b>Infant</b>										
Preterm births <sup>6</sup> .....	11.0	10.9	10.5	13.2	10.3	10.9	12.0	11.0	9.5	17.5
<b>Birthweight</b>										
Very low birthweight <sup>7</sup> .....	1.4	1.1	1.0	1.7	1.3	1.1	1.5	1.4	1.1	3.0
Low birthweight <sup>8</sup> .....	7.4	6.3	5.9	9.2	6.5	6.0	7.7	7.6	6.4	13.1
4,000 grams or more <sup>9</sup> .....	10.2	9.0	9.3	7.0	9.7	9.2	7.7	10.5	12.1	5.3
5-minute Apgar score of less than 7 <sup>10</sup> ...	1.4	1.2	1.2	1.4	0.8	1.0	1.4	1.5	1.2	2.5
<b>Births to mothers born in the 50 States and D.C.</b>										
<b>Mother</b>										
Prenatal care beginning in the first trimester .....	83.5	75.4	75.0	75.4	89.1	79.6	74.7	84.3	87.5	71.2
Late or no prenatal care .....	3.5	5.2	5.2	5.5	1.7	3.8	5.7	3.3	2.3	7.4
Smoker <sup>3</sup> .....	15.5	7.7	5.7	12.6	5.6	5.7	11.1	16.1	17.3	11.1
Drinker <sup>4</sup> .....	1.5	1.2	1.0	1.1	0.7	1.2	2.2	1.6	1.4	2.1
Weight gain of less than 16 lbs <sup>5</sup> .....	11.0	12.5	13.1	11.7	6.6	8.5	13.2	10.9	9.4	17.3
Median weight gain <sup>5</sup> .....	30.5	29.6	28.4	30.4	31.3	30.2	30.1	30.5	30.7	29.0
Cesarean delivery rate .....	20.9	20.6	20.8	20.5	25.6	18.6	19.8	20.9	20.9	21.6
<b>Infant</b>										
Preterm births <sup>6</sup> .....	11.1	11.7	11.4	12.8	9.5	10.7	12.2	11.1	9.5	17.8
<b>Birthweight</b>										
Very low birthweight <sup>7</sup> .....	1.4	1.3	1.2	1.7	1.2	1.3	1.5	1.4	1.1	3.0
Low birthweight <sup>8</sup> .....	7.6	7.2	6.7	9.1	6.2	6.1	8.2	7.7	6.4	13.4
4,000 grams or more <sup>9</sup> .....	10.5	8.2	8.5	7.0	9.5	8.6	7.4	10.7	12.1	5.0
5-minute Apgar score of less than 7 <sup>10</sup> ...	1.5	1.2	1.2	1.3	0.7	1.0	1.4	1.5	1.2	2.5
<b>Births to mothers born outside the 50 States and D.C.</b>										
<b>Mother</b>										
Prenatal care beginning in the first trimester .....	74.9	70.3	68.1	74.4	89.3	74.6	74.8	81.4	84.3	75.5
Late or no prenatal care .....	6.1	7.5	8.4	6.0	1.5	5.6	6.4	4.2	3.6	6.2
Smoker <sup>3</sup> .....	3.1	1.9	1.1	8.5	4.1	1.5	2.3	4.4	8.0	1.9
Drinker <sup>4</sup> .....	0.6	0.4	0.3	1.0	0.3	0.4	0.4	0.7	1.3	0.5
Weight gain of less than 16 lbs <sup>5</sup> .....	11.9	14.0	16.0	13.3	7.6	11.2	13.1	9.7	8.1	13.4
Median weight gain <sup>5</sup> .....	29.6	28.3	26.6	30.1	30.9	30.1	28.9	30.2	30.6	30.0
Cesarean delivery rate .....	19.7	19.6	18.6	21.2	33.1	21.5	20.4	19.8	19.3	23.4
<b>Infant</b>										
Preterm births <sup>6</sup> .....	10.3	10.4	10.0	13.6	10.8	10.9	11.0	10.1	8.6	13.8
<b>Birthweight</b>										
Very low birthweight <sup>7</sup> .....	1.1	1.0	0.9	1.7	1.4	1.1	1.1	1.2	1.0	2.5
Low birthweight <sup>8</sup> .....	6.2	5.7	5.3	9.4	6.6	6.0	5.7	6.9	5.8	9.4
4,000 grams or more <sup>9</sup> .....	9.1	9.6	9.9	7.1	9.8	9.2	8.6	8.3	11.4	8.4
5-minute Apgar score of less than 7 <sup>10</sup> ...	1.2	1.1	1.2	1.5	0.8	1.0	1.2	1.2	1.0	2.0

<sup>1</sup> Includes origin not stated.  
<sup>2</sup> Includes races other than white and black.  
<sup>3</sup> Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not report tobacco use on the birth certificate.  
<sup>4</sup> Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.  
<sup>5</sup> Excludes data for California, which did not report weight gain on the birth certificate. Median weight gain shown in pounds.  
<sup>6</sup> Born prior to 37 completed weeks of gestation.  
<sup>7</sup> Birthweight of less than 1,500 grams (3 lb 4 oz).  
<sup>8</sup> Birthweight of less than 2,500 grams (5 lb 8 oz).  
<sup>9</sup> Equivalent to 8 lb 14 oz.  
<sup>10</sup> Excludes data for California and Texas, which did not report 5-minute Apgar score on the birth certificate.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 26. Live births to mothers with selected medical risk factors and rates by age of mother, by race of mother: United States, 1996**

[Rates are number of live births with specified medical risk factor per 1,000 live births in specified group]

Medical risk factor and race of mother	All births <sup>1</sup>	Medical risk factor reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	
<b>All races<sup>2</sup></b>										
Anemia .....	3,891,494	75,400	19.6	28.5	23.7	17.5	15.2	15.2	16.3	51,830
Cardiac disease .....	3,891,494	19,226	5.0	3.1	3.6	4.9	6.3	7.3	8.8	51,830
Acute or chronic lung disease .....	3,891,494	32,006	8.3	11.3	9.3	7.5	7.0	7.6	8.4	51,830
Diabetes .....	3,891,494	100,845	26.3	8.6	16.5	25.8	34.4	47.4	64.5	51,830
Genital herpes <sup>3</sup> .....	3,561,088	31,795	9.1	6.4	7.8	8.9	10.3	12.0	13.0	48,599
Hydramnios/Oligohydramnios .....	3,891,494	47,824	12.5	13.9	12.8	11.5	11.7	13.3	16.7	51,830
Hemoglobinopathy .....	3,891,494	2,979	0.8	1.1	0.9	0.7	0.6	0.7	0.7	51,830
Hypertension, chronic .....	3,891,494	26,221	6.8	2.4	4.1	6.0	8.5	13.9	24.5	51,830
Hypertension, pregnancy-associated .....	3,891,494	137,724	35.9	42.1	35.9	34.5	32.7	36.7	46.4	51,830
Eclampsia .....	3,891,494	13,591	3.5	5.3	3.9	3.1	2.8	3.3	4.4	51,830
Incompetent cervix .....	3,891,494	9,817	2.6	1.1	1.9	2.6	3.2	4.1	4.4	51,830
Previous infant 4000+ grams .....	3,891,494	42,170	11.0	1.4	6.4	11.5	15.9	19.3	22.9	51,830
Previous preterm or small-for-gestational-age infant .....	3,891,494	44,875	11.7	5.0	11.7	12.0	13.1	15.0	17.2	51,830
Renal disease <sup>4</sup> .....	3,831,006	10,372	2.7	3.3	3.2	2.7	2.3	2.2	2.5	52,640
Rh sensitization <sup>5</sup> .....	3,854,843	24,396	6.4	5.2	6.0	6.6	6.9	7.3	6.8	53,060
Uterine bleeding <sup>3</sup> .....	3,561,088	25,671	7.3	5.3	6.3	7.4	8.1	9.2	10.2	48,599
<b>White</b>										
Anemia .....	3,093,057	51,039	16.7	24.3	19.8	15.2	13.5	13.7	14.5	42,372
Cardiac disease .....	3,093,057	16,109	5.3	3.0	3.6	5.3	6.6	7.6	9.4	42,372
Acute or chronic lung disease .....	3,093,057	24,640	8.1	10.7	8.8	7.4	7.1	7.6	8.3	42,372
Diabetes .....	3,093,057	78,249	25.6	8.8	16.5	25.0	32.3	44.1	60.3	42,372
Genital herpes <sup>3</sup> .....	2,811,247	25,488	9.2	5.7	7.1	8.8	11.0	13.1	14.8	39,542
Hydramnios/Oligohydramnios .....	3,093,057	36,264	11.9	13.1	12.4	10.9	11.3	12.7	15.9	42,372
Hemoglobinopathy .....	3,093,057	981	0.3	0.3	0.3	0.3	0.3	0.4	0.5	42,372
Hypertension, chronic .....	3,093,057	18,134	5.9	2.1	3.6	5.4	7.2	11.4	19.4	42,372
Hypertension, pregnancy-associated .....	3,093,057	110,492	36.2	42.4	36.9	35.3	32.9	36.1	45.8	42,372
Eclampsia .....	3,093,057	10,072	3.3	4.7	3.6	3.0	2.7	3.1	4.2	42,372
Incompetent cervix .....	3,093,057	7,043	2.3	1.0	1.6	2.2	2.9	3.9	4.2	42,372
Previous infant 4000+ grams .....	3,093,057	38,111	12.5	1.5	7.0	12.7	17.6	21.5	25.9	42,372
Previous preterm or small-for-gestational-age infant .....	3,093,057	34,242	11.2	4.4	10.8	11.4	12.8	14.6	16.8	42,372
Renal disease <sup>4</sup> .....	3,052,835	8,620	2.9	3.6	3.4	2.8	2.4	2.3	2.7	43,122
Rh sensitization <sup>5</sup> .....	3,060,288	22,024	7.3	6.2	6.8	7.4	7.7	8.3	7.8	43,469
Uterine bleeding <sup>3</sup> .....	2,811,247	21,195	7.6	5.8	6.6	7.7	8.3	9.4	10.6	39,542
<b>Black</b>										
Anemia .....	594,781	19,881	33.8	37.9	37.8	31.1	28.2	26.2	26.7	6,765
Cardiac disease .....	594,781	2,554	4.3	3.4	4.0	3.9	5.6	6.6	8.1	6,765
Acute or chronic lung disease .....	594,781	6,348	10.8	13.1	11.8	9.2	8.5	9.1	11.8	6,765
Diabetes .....	594,781	14,568	24.8	7.7	15.7	27.6	42.0	58.5	80.2	6,765
Genital herpes <sup>3</sup> .....	555,925	5,464	9.9	8.4	11.4	11.2	8.9	7.2	8.0	6,557
Hydramnios/Oligohydramnios .....	594,781	9,140	15.5	16.1	14.7	14.7	15.9	17.5	23.3	6,765
Hemoglobinopathy .....	594,781	1,844	3.1	3.2	3.5	3.2	2.6	2.7	2.5	6,765
Hypertension, chronic .....	594,781	7,094	12.1	3.3	6.6	11.6	20.5	35.2	63.6	6,765
Hypertension, pregnancy-associated .....	594,781	22,099	37.6	41.9	33.6	34.9	37.4	45.3	57.5	6,765
Eclampsia .....	594,781	2,941	5.0	6.8	4.7	4.0	4.4	4.9	6.4	6,765
Incompetent cervix .....	594,781	2,465	4.2	1.5	3.1	5.5	7.0	6.7	6.6	6,765
Previous infant 4000+ grams .....	594,781	2,657	4.5	1.0	3.6	5.7	7.4	8.5	9.5	6,765
Previous preterm or small-for-gestational-age infant .....	594,781	8,748	14.9	6.6	15.8	18.0	18.1	19.1	21.4	6,765
Renal disease <sup>4</sup> .....	575,206	1,335	2.3	2.4	2.7	2.2	2.0	1.9	2.5	6,819
Rh sensitization <sup>5</sup> .....	592,015	1,967	3.4	3.2	3.3	3.2	3.8	3.7	3.6	6,867
Uterine bleeding <sup>3</sup> .....	555,925	3,227	5.9	4.4	5.3	6.4	7.1	7.8	7.4	6,557

<sup>1</sup> Total number of births to residents of areas reporting specified medical risk factor.

<sup>2</sup> Includes races other than white and black.

<sup>3</sup> Texas does not report this risk factor.

<sup>4</sup> Alabama does not report this risk factor.

<sup>5</sup> Kansas does not report this risk factor.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 27. Number and rate of live births to mothers with selected medical risk factors, complications of labor, and obstetric procedures, by specified race of mother: United States, 1996**

[Rates are number of live births with specified risk factors, complications, or procedures per 1,000 live births in specified group]

Medical risk factor, complication, and obstetric procedure	All races	White	Black	American Indian <sup>1</sup>	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
Number										
Medical risk factors										
Anemia .....	75,400	51,039	19,881	1,788	2,692	280	132	211	456	1,613
Diabetes .....	100,845	78,249	14,568	1,717	6,311	1,231	226	166	1,272	3,416
Hypertension, pregnancy-associated .....	137,724	110,492	22,099	1,902	3,231	366	165	170	870	1,660
Uterine bleeding <sup>2</sup> .....	25,671	21,195	3,227	299	950	171	85	59	187	448
Complications of labor and/or delivery										
Meconium, moderate/heavy .....	223,536	163,798	48,020	2,266	9,452	1,552	349	384	1,980	5,187
Premature rupture of membrane .....	113,112	86,973	19,710	1,608	4,821	842	349	219	909	2,502
Dysfunctional labor .....	105,749	85,113	15,076	1,295	4,265	752	297	220	768	2,228
Breech/Malpresentation .....	146,431	121,992	17,526	1,355	5,558	951	344	245	1,091	2,927
Cephalopelvic disproportion .....	90,105	73,728	11,344	771	4,262	806	218	157	953	2,128
Fetal distress <sup>3</sup> .....	147,814	111,299	29,961	1,272	5,282	818	205	169	1,008	3,082
Obstetric procedures										
Amniocentesis .....	124,711	106,391	10,722	824	6,774	1,834	795	234	1,310	2,601
Electronic fetal monitoring .....	3,184,945	2,540,938	487,391	29,711	126,905	21,944	6,995	4,781	23,462	69,723
Induction of labor .....	653,877	554,925	73,716	6,419	18,817	3,020	1,171	965	3,256	10,405
Ultrasound <sup>4</sup> .....	2,457,576	1,992,208	344,461	22,605	98,302	17,349	6,028	3,839	18,788	52,298
Stimulation of labor .....	652,196	529,023	91,358	5,555	26,260	4,721	1,426	781	4,226	15,106
Rate										
Medical risk factors										
Anemia .....	19.6	16.7	33.8	48.3	16.4	9.9	14.9	35.9	14.7	17.9
Diabetes .....	26.3	25.6	24.8	46.4	38.5	43.6	25.6	28.2	41.1	37.9
Hypertension, pregnancy-associated .....	35.9	36.2	37.6	51.4	19.7	13.0	18.7	28.9	28.1	18.4
Uterine bleeding <sup>2</sup> .....	7.3	7.6	5.9	8.3	6.1	6.3	9.9	10.1	6.3	5.3
Complications of labor and/or delivery										
Meconium, moderate/heavy .....	58.1	53.6	81.5	61.1	57.5	54.9	39.5	65.2	63.9	57.4
Premature rupture of membrane .....	29.4	28.4	33.4	43.4	29.3	29.8	39.5	37.2	29.3	27.7
Dysfunctional labor .....	27.5	27.8	25.6	34.9	25.9	26.6	33.6	37.3	24.8	24.7
Breech/Malpresentation .....	38.0	39.9	29.7	36.6	33.8	33.6	38.9	41.6	35.2	32.4
Cephalopelvic disproportion .....	23.4	24.1	19.2	20.8	25.9	28.5	24.7	26.7	30.7	23.5
Fetal distress <sup>3</sup> .....	42.0	40.1	54.4	35.1	34.0	30.3	23.8	29.0	33.7	36.7
Obstetric procedures										
Amniocentesis .....	32.3	34.7	18.2	22.2	41.1	64.7	89.8	39.7	42.2	28.7
Electronic fetal monitoring .....	825.3	828.6	825.1	799.2	770.4	773.7	789.8	810.2	756.1	769.8
Induction of labor .....	169.4	181.0	124.8	172.7	114.2	106.5	132.2	163.5	104.9	114.9
Ultrasound <sup>4</sup> .....	638.7	651.5	585.6	608.4	597.6	612.3	681.2	651.0	606.0	578.4
Stimulation of labor .....	169.0	172.5	154.7	149.4	159.4	166.5	161.0	132.4	136.2	166.8

<sup>1</sup> Includes births to Aleuts and Eskimos.  
<sup>2</sup> Texas does not report this risk factor.  
<sup>3</sup> Texas does not report this complication.  
<sup>4</sup> Delaware does not report this procedure.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 28. Number and rate of live births to mothers with selected medical risk factors, complications of labor, and obstetric procedures, by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1996**

[Rates are number of live births with specified risk factors, complications or procedures per 1,000 live births in specified group]

Medical risk factor, complication, and obstetric procedure	All origins <sup>1</sup>	Origin of mother								
		Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total <sup>2</sup>	White	Black
Number										
Medical risk factors										
Anemia .....	75,400	13,086	8,269	1,576	248	1,564	1,429	60,946	37,296	19,376
Diabetes .....	100,845	17,094	11,169	1,790	304	2,592	1,239	82,045	60,239	14,013
Hypertension, pregnancy-associated .....	137,724	18,599	12,436	1,480	373	2,678	1,632	117,210	90,765	21,508
Uterine bleeding <sup>3</sup> .....	25,671	2,732	1,564	358	57	490	263	22,435	18,123	3,137
Complications of labor and/or delivery										
Meconium, moderate/heavy .....	223,536	41,368	27,373	3,746	566	6,909	2,774	178,978	121,146	46,532
Premature rupture of membrane .....	113,112	13,807	8,024	1,701	350	2,312	1,420	96,901	71,677	19,050
Dysfunctional labor .....	105,749	15,611	8,834	1,771	578	2,809	1,619	87,138	67,362	14,426
Breech/Malpresentation .....	146,431	20,679	13,763	1,818	510	2,976	1,612	123,454	99,799	16,976
Cephalopelvic disproportion .....	90,105	12,378	8,665	984	238	1,607	884	76,620	60,660	11,091
Fetal distress <sup>4</sup> .....	147,814	19,589	11,828	2,225	378	3,549	1,609	125,878	90,343	29,194
Obstetric procedures										
Amniocentesis .....	124,711	10,240	5,114	1,360	360	2,332	1,074	110,958	93,258	10,332
Electronic fetal monitoring .....	3,184,945	532,841	361,613	46,789	11,014	75,728	37,697	2,608,232	1,983,272	473,717
Induction of labor .....	653,877	77,744	50,990	6,918	2,420	10,424	6,992	564,298	468,389	71,663
Ultrasound <sup>5</sup> .....	2,457,576	363,733	241,719	34,334	7,715	50,644	29,321	2,055,041	1,604,056	334,490
Stimulation of labor .....	652,196	105,099	70,023	10,276	2,177	15,214	7,409	535,806	416,556	88,489
Rate										
Medical risk factors										
Anemia .....	19.6	18.8	17.0	29.5	19.8	16.2	31.3	19.7	16.0	33.9
Diabetes .....	26.3	24.6	22.9	33.5	24.2	26.8	27.2	26.5	25.9	24.5
Hypertension, pregnancy-associated .....	35.9	26.8	25.5	27.7	29.7	27.7	35.8	37.9	39.0	37.6
Uterine bleeding <sup>3</sup> .....	7.3	4.9	4.4	6.8	4.6	5.5	6.7	7.7	8.3	5.9
Complications of labor and/or delivery										
Meconium, moderate/heavy .....	58.1	59.3	56.0	70.1	45.1	71.2	60.6	57.8	52.0	81.1
Premature rupture of membrane .....	29.4	19.8	16.4	31.8	27.9	23.8	31.0	31.3	30.8	33.2
Dysfunctional labor .....	27.5	22.4	18.1	33.2	46.0	28.9	35.4	28.1	28.9	25.2
Breech/Malpresentation .....	38.0	29.7	28.2	34.0	40.6	30.7	35.2	39.8	42.8	29.6
Cephalopelvic disproportion .....	23.4	17.8	17.7	18.4	18.9	16.6	19.3	24.7	26.0	19.3
Fetal distress <sup>4</sup> .....	42.0	35.4	32.9	42.4	30.7	39.4	41.1	43.3	41.2	54.6
Obstetric procedures										
Amniocentesis .....	32.3	14.7	10.5	25.4	28.6	24.0	23.4	35.7	39.9	18.0
Electronic fetal monitoring .....	825.3	763.5	740.0	872.2	876.5	779.1	822.4	839.3	848.2	824.5
Induction of labor .....	169.4	111.4	104.3	129.0	192.6	107.2	152.5	181.6	200.3	124.7
Ultrasound <sup>5</sup> .....	638.7	521.7	494.9	643.1	614.1	521.6	640.0	663.5	688.3	584.6
Stimulation of labor .....	169.0	150.6	143.3	191.6	173.2	156.5	161.6	172.4	178.1	154.0

<sup>1</sup> Includes origin not stated.  
<sup>2</sup> Includes races other than white and black.  
<sup>3</sup> Texas does not report this risk factor.  
<sup>4</sup> Texas does not report this complication.  
<sup>5</sup> Delaware does not report this procedure.

NOTE: Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 29. Number of live births by smoking status of mother, percent smokers, and percent distribution by average number of cigarettes smoked by mothers per day, according to age and race of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1996**

Smoking status, smoking measure, and race of mother	Age of mother									
	All ages	Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-49 years
			Total	15-17 years	18-19 years					
Number										
<b>All races<sup>1</sup></b>										
Total .....	3,117,068	9,252	404,128	153,003	251,125	767,447	859,364	710,346	310,239	56,292
Smoker .....	418,280	705	68,542	23,276	45,266	127,031	104,257	76,388	35,787	5,570
Nonsmoker .....	2,649,899	8,422	330,078	127,672	202,406	629,421	741,462	622,014	268,937	49,565
Not stated .....	48,889	125	5,508	2,055	3,453	10,995	13,645	11,944	5,515	1,157
<b>White</b>										
Total .....	2,449,057	4,150	273,392	97,144	176,248	576,829	700,767	591,857	256,455	45,607
Smoker .....	354,854	536	59,582	19,972	39,610	110,094	88,820	62,771	28,683	4,368
Nonsmoker .....	2,056,100	3,555	209,962	75,810	134,152	458,488	601,032	519,428	223,293	40,342
Not stated .....	38,103	59	3,848	1,362	2,486	8,247	10,915	9,658	4,479	897
<b>Black</b>										
Total .....	532,866	4,798	118,641	51,178	67,463	162,525	118,449	83,013	38,120	7,320
Smoker .....	53,460	139	6,999	2,539	4,460	13,746	13,130	11,985	6,388	1,073
Nonsmoker .....	471,541	4,606	110,290	48,065	62,225	146,640	103,409	69,481	31,036	6,079
Not stated .....	7,865	53	1,352	574	778	2,139	1,910	1,547	696	168
Percent										
Smoker <sup>1</sup> .....	13.6	7.7	17.2	15.4	18.3	16.8	12.3	10.9	11.7	10.1
White .....	14.7	13.1	22.1	20.9	22.8	19.4	12.9	10.8	11.4	9.8
Black .....	10.2	2.9	6.0	5.0	6.7	8.6	11.3	14.7	17.1	15.0
Percent distribution										
<b>All races<sup>1</sup></b>										
Smoker .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes .....	26.2	51.1	33.9	37.5	32.1	26.3	24.0	23.8	23.0	21.4
6-10 cigarettes .....	40.4	32.6	41.9	41.3	42.3	41.9	40.5	38.8	36.8	35.4
11-15 cigarettes .....	6.4	*	4.6	4.1	4.8	6.0	6.9	7.4	7.4	7.3
16-20 cigarettes .....	22.7	12.7	17.2	15.2	18.2	22.2	24.0	24.7	26.2	27.9
21-30 cigarettes .....	2.9	*	1.6	1.3	1.8	2.5	3.2	3.6	4.4	4.8
31-40 cigarettes .....	1.1	*	0.6	0.4	0.7	0.9	1.1	1.5	2.0	2.9
41 cigarettes or more .....	0.2	*	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4
<b>White</b>										
Smoker .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes .....	23.5	45.0	30.9	34.2	29.2	23.5	21.4	21.2	20.3	19.1
6-10 cigarettes .....	40.7	36.4	43.3	43.1	43.4	42.4	40.6	38.1	35.7	33.6
11-15 cigarettes .....	6.9	*	4.9	4.4	5.1	6.5	7.5	8.2	8.2	8.4
16-20 cigarettes .....	24.2	14.1	18.4	16.3	19.4	23.8	25.6	26.6	28.3	29.8
21-30 cigarettes .....	3.2	*	1.8	1.4	2.0	2.7	3.5	4.0	5.1	5.5
31-40 cigarettes .....	1.2	*	0.6	0.4	0.7	0.9	1.2	1.6	2.2	3.3
41 cigarettes or more .....	0.2	*	0.1	0.1	0.1	0.2	0.2	0.2	0.3	*
<b>Black</b>										
Smoker .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes .....	41.8	71.4	56.4	59.6	54.6	45.5	39.7	36.2	34.1	29.7
6-10 cigarettes .....	39.4	22.2	31.3	29.1	32.6	38.4	40.7	42.4	41.9	43.0
11-15 cigarettes .....	3.0	*	2.1	1.9	2.2	2.6	3.1	3.4	4.0	3.0
16-20 cigarettes .....	13.7	*	8.8	8.1	9.2	11.6	14.5	15.4	17.4	20.0
21-30 cigarettes .....	1.1	*	0.7	*	0.6	1.0	1.1	1.3	1.4	2.3
31-40 cigarettes .....	0.8	*	0.5	*	0.5	0.6	0.7	1.0	0.9	*
41 cigarettes or more .....	0.2	*	*	*	*	0.2	0.2	0.3	*	*

\* Figure does not meet standards of reliability or precision.  
<sup>1</sup> Includes races other than white and black.

NOTES: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy. Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 30. Number of live births by smoking status of mother and percent of mothers who smoked cigarettes during pregnancy, by age and Hispanic origin of mother and by race for mothers of non-Hispanic origin: Total of 46 reporting States, the District of Columbia, and New York City, 1996**

Origin of mother	Smoking status				Age of mother									
	Total births	Smoker	Non-smoker	Not stated	All ages	Under 15 years	15-19 years							
							Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years
All origins <sup>1</sup> .....	3,117,068	418,280	2,649,899	48,889	13.6	7.7	17.2	15.4	18.3	16.8	12.3	10.9	11.7	10.1
Hispanic .....	431,574	18,478	408,212	4,884	4.3	3.4	5.0	5.0	5.0	4.3	3.9	4.2	4.9	4.7
Mexican .....	267,473	8,222	257,468	1,783	3.1	3.0	3.6	3.8	3.5	2.9	2.7	3.2	3.7	3.9
Puerto Rican .....	50,118	5,367	43,439	1,312	11.0	*	10.1	9.0	10.9	11.6	11.1	10.7	12.1	10.3
Cuban .....	11,658	539	11,051	68	4.7	*	6.1	*	6.6	4.8	3.9	4.1	6.6	*
Central and South American .....	66,915	1,211	64,786	918	1.8	*	2.0	2.2	2.0	1.6	1.5	2.0	2.5	3.0
Other and unknown Hispanic .....	35,410	3,139	31,468	803	9.1	*	9.6	9.3	9.9	9.6	8.4	8.5	9.3	8.6
Non-Hispanic <sup>2</sup> .....	2,655,953	395,695	2,220,401	39,857	15.1	8.9	20.0	18.1	21.2	19.4	13.6	11.7	12.5	10.7
White .....	2,006,908	333,703	1,643,152	30,053	16.9	21.5	28.6	28.2	28.7	23.8	14.5	11.7	12.2	10.5
Black .....	519,105	52,566	459,361	7,178	10.3	2.9	5.9	5.0	6.7	8.6	11.4	15.0	17.3	15.3

\* Figure does not meet standards of reliability or precision.

<sup>1</sup> Includes origin not stated.

<sup>2</sup> Includes races other than white and black.

NOTES: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. See Technical notes.

**Table 31. Number of live births, percent of mothers who smoked cigarettes during pregnancy, and percent distribution of average number of cigarettes smoked by mothers per day, according to educational attainment and race of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1996**

Smoking measure, and race of mother	Total	Years of school completed by mother					
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated
All births							
All races <sup>1</sup> .....	3,117,068	150,203	493,234	1,048,303	686,019	693,982	45,327
White .....	2,449,057	125,544	342,760	800,506	544,491	604,043	31,713
Black .....	532,866	17,495	132,675	205,683	115,484	51,564	9,965
Percent							
Smoker <sup>1</sup> .....	13.6	12.3	26.0	17.5	10.3	2.6	13.1
White .....	14.7	13.0	30.1	19.8	11.3	2.7	13.6
Black .....	10.2	9.8	16.1	10.1	6.7	2.6	14.2
Percent distribution							
All races <sup>1</sup>							
Smoker .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less .....	66.7	61.5	66.2	66.0	68.7	74.0	67.5
11-20 cigarettes .....	29.1	31.6	29.1	29.9	27.8	23.3	27.6
21 cigarettes or more .....	4.3	7.0	4.7	4.0	3.5	2.7	4.9
White							
Smoker .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less .....	64.2	59.3	62.8	63.7	66.8	73.2	64.1
11-20 cigarettes .....	31.2	33.2	31.9	31.9	29.4	23.9	30.3
21 cigarettes or more .....	4.6	7.5	5.3	4.4	3.8	2.9	5.6
Black							
Smoker .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less .....	81.2	78.3	80.7	81.7	82.7	82.4	76.4
11-20 cigarettes .....	16.7	18.6	16.9	16.4	15.7	16.3	20.4
21 cigarettes or more .....	2.1	3.1	2.4	1.9	1.6	*	3.2

\* Figure does not meet standards of reliability or precision.

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

NOTES: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy. Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.



Revised as of 3/24/03

**Table 32. Percent low birthweight by smoking status, age, and race and Hispanic origin of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1996**

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

Smoking status and race of mother	All ages	Age of mother								
		Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-49 years
			Total	15-17 years	18-19 years					
All races <sup>1</sup>										
Total .....	7.6	13.5	9.7	10.4	9.2	7.7	6.7	7.0	8.4	9.8
Smoker .....	12.1	16.7	11.2	11.6	10.9	10.4	11.6	13.6	17.0	19.2
Nonsmoker .....	6.9	13.2	9.3	10.2	8.7	7.1	6.0	6.2	7.2	8.7
Not stated .....	9.8	*	12.7	13.5	12.2	9.7	8.7	9.3	10.6	12.4
White, total										
Total .....	6.5	11.1	8.2	8.9	7.8	6.5	5.8	6.1	7.2	8.5
Smoker .....	10.7	16.4	10.6	11.0	10.5	9.7	10.2	11.4	14.3	16.5
Nonsmoker .....	5.7	10.3	7.4	8.2	6.9	5.7	5.1	5.4	6.3	7.6
Not stated .....	8.6	*	11.5	12.6	10.9	8.7	7.6	7.8	9.5	10.5
White, non-Hispanic										
Total .....	6.4	11.7	8.2	8.8	7.9	6.5	5.8	6.0	7.1	8.3
Smoker .....	10.6	16.7	10.6	11.1	10.4	9.6	10.1	11.2	14.2	16.4
Nonsmoker .....	5.6	10.2	7.2	7.8	6.8	5.5	5.0	5.3	6.1	7.4
Not stated .....	8.3	*	11.3	11.5	11.2	8.2	7.4	7.5	9.5	9.3
Black, total										
Total .....	13.1	15.8	13.2	13.6	12.9	12.0	12.4	13.9	16.3	18.2
Smoker .....	21.9	19.9	16.1	16.6	15.8	17.1	22.0	25.8	29.3	31.7
Nonsmoker .....	12.0	15.6	13.0	13.4	12.7	11.5	11.1	11.8	13.6	15.7
Not stated .....	16.3	*	16.6	16.3	16.9	14.2	16.1	17.5	18.7	21.7
Black, non-Hispanic										
Total .....	13.2	15.8	13.3	13.7	13.0	12.1	12.5	14.1	16.5	18.3
Smoker .....	22.0	19.8	16.1	16.6	15.9	17.2	22.1	25.9	29.2	31.8
Nonsmoker .....	12.1	15.7	13.1	13.5	12.8	11.6	11.2	12.0	13.7	15.8
Not stated .....	16.4	*	16.9	16.4	17.3	14.2	16.2	17.3	19.2	22.4
Hispanic <sup>2</sup>										
Total .....	6.8	10.5	8.1	9.1	7.4	6.4	5.8	6.6	8.2	9.6
Smoker .....	12.4	*	10.7	10.7	10.7	11.1	12.5	14.3	17.0	18.3
Nonsmoker .....	6.5	10.4	7.9	8.9	7.2	6.1	5.5	6.3	7.7	9.0
Not stated .....	10.3	*	12.1	14.6	10.1	10.7	9.0	8.7	10.7	*

\* Figure does not meet standards of reliability or precision.  
<sup>1</sup> Includes races other than white and black and origin not stated.  
<sup>2</sup> Persons of Hispanic origin may be of any race.

NOTE: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy.

**Table 33. Live births by month of pregnancy prenatal care began and percent of mothers beginning care in the first trimester and percent with late or no care, by age and race and Hispanic origin of mother: United States, 1996**

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began								Percent		
		1st trimester			2d trimester		Late or no care			Not stated	1st trimester	Late or no care
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care				
All races <sup>1</sup>	3,891,494	3,102,972	2,351,222	751,750	536,402	151,302	106,759	44,543	100,818	81.9	4.0	
Under 15 years	11,148	5,063	2,952	2,111	3,959	1,651	1,159	492	475	47.4	15.5	
15-19 years	491,577	320,094	210,384	109,710	122,329	34,726	25,366	9,360	14,428	67.1	7.3	
15 years	28,540	15,593	9,534	6,059	9,000	2,941	2,111	830	1,006	56.6	10.7	
16 years	60,287	36,017	22,462	13,555	17,181	5,195	3,834	1,361	1,894	61.7	8.9	
17 years	96,894	62,038	40,147	21,891	24,966	7,002	5,091	1,911	2,888	66.0	7.4	
18 years	135,059	88,913	58,831	30,082	33,067	9,168	6,740	2,428	3,911	67.8	7.0	
19 years	170,797	117,533	79,410	38,123	38,115	10,420	7,590	2,830	4,729	70.8	6.3	
20-24 years	945,210	704,976	508,087	196,889	168,042	46,825	33,888	12,937	25,367	76.6	5.1	
25-29 years	1,071,287	895,028	697,509	197,519	117,865	32,810	22,934	9,876	25,584	85.6	3.1	
30-34 years	897,913	776,044	616,943	159,101	78,142	21,887	14,695	7,192	21,840	88.6	2.5	
35-39 years	399,510	340,757	268,447	72,310	37,345	10,712	6,945	3,767	10,696	87.6	2.8	
40 years and over	74,849	61,010	46,900	14,110	8,720	2,691	1,772	919	2,428	84.2	3.7	
White, total	3,093,057	2,541,849	1,945,679	596,170	383,106	100,212	74,080	26,132	67,890	84.0	3.3	
Under 15 years	5,526	2,759	1,645	1,114	1,776	781	550	231	210	51.9	14.7	
15-19 years	344,685	233,463	154,153	79,310	80,636	21,926	16,520	5,406	8,660	69.5	6.5	
15 years	16,978	9,930	6,144	3,786	4,954	1,609	1,173	436	485	60.2	9.8	
16 years	39,401	24,697	15,547	9,150	10,450	3,159	2,411	748	1,095	64.5	8.2	
17 years	66,997	44,644	29,008	15,636	16,240	4,432	3,338	1,094	1,681	68.4	6.8	
18 years	96,246	65,541	43,504	22,037	22,407	5,874	4,435	1,439	2,424	69.9	6.3	
19 years	125,063	88,651	59,950	28,701	26,585	6,852	5,163	1,689	2,975	72.6	5.6	
20-24 years	726,669	556,825	403,456	153,369	121,045	31,891	24,010	7,881	16,908	78.5	4.5	
25-29 years	878,449	751,034	590,273	160,761	87,583	22,293	16,485	5,808	17,539	87.2	2.6	
30-34 years	747,436	659,551	528,368	131,183	58,144	14,378	10,305	4,073	15,363	90.1	2.0	
35-39 years	329,782	287,702	228,513	59,189	27,526	7,078	4,924	2,154	7,476	89.3	2.2	
40 years and over	60,510	50,515	39,271	11,244	6,396	1,865	1,286	579	1,734	85.9	3.2	
White, non-Hispanic	2,358,989	2,024,891	1,581,949	442,942	238,182	54,570	40,713	13,857	41,346	87.4	2.4	
Under 15 years	2,532	1,311	780	531	790	346	245	101	85	53.6	14.1	
15-19 years	225,197	160,600	107,408	53,192	48,736	11,382	8,758	2,624	4,479	72.8	5.2	
15 years	9,071	5,515	3,446	2,069	2,581	782	576	206	193	62.1	8.8	
16 years	23,312	15,245	9,726	5,519	5,921	1,596	1,249	347	550	67.0	7.0	
17 years	42,686	29,873	19,570	10,303	9,662	2,308	1,769	539	843	71.4	5.5	
18 years	64,290	46,071	30,912	15,159	13,917	3,046	2,365	681	1,256	73.1	4.8	
19 years	85,838	63,896	43,754	20,142	16,655	3,650	2,799	851	1,637	75.9	4.3	
20-24 years	508,056	409,354	303,034	106,320	72,862	16,496	12,651	3,845	9,344	82.1	3.3	
25-29 years	683,376	606,950	486,359	120,591	53,708	11,991	8,899	3,092	10,727	90.2	1.8	
30-34 years	616,224	558,562	453,332	105,230	38,619	8,699	6,237	2,462	10,344	92.2	1.4	
35-39 years	274,431	245,657	197,534	48,123	19,088	4,464	3,110	1,354	5,222	91.3	1.7	
40 years and over	49,173	42,457	33,502	8,955	4,379	1,192	813	379	1,145	88.4	2.5	
Black, total	594,781	406,278	291,968	114,310	120,726	41,737	25,249	16,488	26,040	71.4	7.3	
Under 15 years	5,193	2,130	1,211	919	2,014	803	563	240	246	43.1	16.2	
15-19 years	130,596	77,179	50,432	26,747	36,965	11,232	7,614	3,618	5,220	61.6	9.0	
15 years	10,498	5,175	3,109	2,066	3,667	1,181	822	359	475	51.6	11.8	
16 years	18,753	10,170	6,272	3,898	6,048	1,810	1,248	562	725	56.4	10.0	
17 years	26,775	15,605	10,040	5,565	7,784	2,283	1,527	756	1,103	60.8	8.9	
18 years	34,394	20,807	13,745	7,062	9,390	2,879	1,977	902	1,318	62.9	8.7	
19 years	40,176	25,422	17,266	8,156	10,076	3,079	2,040	1,039	1,599	65.9	8.0	
20-24 years	179,361	121,246	86,166	35,080	38,510	12,474	7,919	4,555	7,131	70.4	7.2	
25-29 years	133,204	97,566	72,818	24,748	21,534	8,079	4,523	3,556	6,025	76.7	6.4	
30-34 years	94,295	70,374	53,320	17,054	13,541	5,752	2,960	2,792	4,628	78.5	6.4	
35-39 years	43,716	31,867	23,767	8,100	6,726	2,808	1,375	1,433	2,315	77.0	6.8	
40 years and over	8,416	5,916	4,254	1,662	1,436	589	295	294	475	74.5	7.4	

See footnotes at end of table.

**Table 33. Live births by month of pregnancy prenatal care began and percent of mothers beginning care in the first trimester and percent with late or no care, by age and race and Hispanic origin of mother: United States, 1996 --Con.**

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began								Percent		
		1st trimester			2d trimester		Late or no care			Not stated	1st trimester	Late or no care
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care				
Black, non-Hispanic	578,099	395,966	284,902	111,064	117,412	40,605	24,350	16,255	24,116	71.5	7.3	
Under 15 years .....	5,084	2,087	1,188	899	1,969	792	554	238	236	43.0	16.3	
15-19 years .....	127,616	75,601	49,437	26,164	36,129	10,992	7,419	3,573	4,894	61.6	9.0	
15 years .....	10,301	5,096	3,064	2,032	3,598	1,152	797	355	455	51.8	11.7	
16 years .....	18,367	9,982	6,156	3,826	5,918	1,774	1,217	557	693	56.5	10.0	
17 years .....	26,134	15,269	9,828	5,441	7,599	2,233	1,488	745	1,033	60.8	8.9	
18 years .....	33,616	20,370	13,475	6,895	9,183	2,825	1,929	896	1,238	62.9	8.7	
19 years .....	39,198	24,884	16,914	7,970	9,831	3,008	1,988	1,020	1,475	66.0	8.0	
20-24 years .....	174,958	118,524	84,338	34,186	37,591	12,163	7,662	4,501	6,680	70.4	7.2	
25-29 years .....	129,002	94,855	70,918	23,937	20,816	7,821	4,317	3,504	5,510	76.8	6.3	
30-34 years .....	91,050	68,253	51,809	16,444	13,036	5,548	2,806	2,742	4,213	78.6	6.4	
35-39 years .....	42,279	30,920	23,080	7,840	6,490	2,721	1,310	1,411	2,148	77.0	6.8	
40 years and over .....	8,110	5,726	4,132	1,594	1,381	568	282	286	435	74.6	7.4	
Hispanic <sup>2</sup> .....	701,339	490,207	341,814	148,393	143,590	45,154	33,263	11,891	22,388	72.2	6.7	
Under 15 years .....	3,056	1,475	881	594	1,020	439	310	129	122	50.3	15.0	
15-19 years .....	118,878	72,376	46,401	25,975	32,015	10,543	7,774	2,769	3,944	63.0	9.2	
15 years .....	7,971	4,455	2,725	1,730	2,403	834	603	231	279	57.9	10.8	
16 years .....	16,139	9,468	5,848	3,620	4,591	1,562	1,164	398	518	60.6	10.0	
17 years .....	24,234	14,666	9,353	5,313	6,635	2,131	1,580	551	802	62.6	9.1	
18 years .....	31,711	19,308	12,469	6,839	8,482	2,819	2,069	750	1,102	63.1	9.2	
19 years .....	38,823	24,479	16,006	8,473	9,904	3,197	2,358	839	1,243	65.1	8.5	
20-24 years .....	214,173	144,210	97,962	46,248	47,848	15,281	11,340	3,941	6,834	69.6	7.4	
25-29 years .....	185,478	136,130	97,328	38,802	33,468	10,166	7,541	2,625	5,714	75.7	5.7	
30-34 years .....	119,690	91,200	66,825	24,375	19,114	5,576	4,053	1,523	3,800	78.7	4.8	
35-39 years .....	49,812	37,531	27,295	10,236	8,187	2,509	1,781	728	1,585	77.8	5.2	
40 years and over .....	10,252	7,285	5,122	2,163	1,938	640	464	176	389	73.9	6.5	

<sup>1</sup> Includes races other than white and black and origin not stated.  
<sup>2</sup> Persons of Hispanic origin may be of any race.

**Table 34. Percent of mothers beginning prenatal care in the first trimester and percent of mothers with late or no prenatal care by race and Hispanic origin of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence]

State	Percent beginning care in first trimester						Percent late <sup>1</sup> or no care					
	All races <sup>2</sup>	White		Black		Hispanic <sup>3</sup>	All races <sup>2</sup>	White		Black		Hispanic <sup>3</sup>
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States <sup>4</sup> .....	81.9	84.0	87.4	71.4	71.5	72.2	4.0	3.3	2.4	7.3	7.3	6.7
Alabama .....	81.6	87.8	88.3	68.8	68.8	62.1	3.8	2.3	2.1	6.9	6.9	11.0
Alaska .....	80.8	83.2	83.8	81.8	82.5	75.5	3.3	2.3	2.2	*	*	3.6
Arizona .....	73.7	74.8	83.5	69.6	69.7	62.5	7.4	7.0	3.7	9.2	9.2	11.7
Arkansas .....	74.8	78.7	79.8	61.0	61.1	56.9	6.8	5.1	4.7	12.7	12.7	13.8
California .....	80.6	80.4	87.1	78.8	78.8	75.5	3.8	3.9	2.4	4.3	4.3	4.9
Colorado .....	81.4	81.9	86.7	75.5	75.7	66.8	4.5	4.3	2.9	6.5	6.7	8.8
Connecticut .....	88.2	89.7	91.8	77.1	77.7	77.1	2.3	1.9	1.4	5.1	4.9	4.9
Delaware .....	83.6	87.0	88.8	72.8	72.9	67.1	3.2	2.3	1.9	6.3	6.2	6.5
District of Columbia .....	64.6	77.4	87.5	60.0	60.0	60.8	11.8	7.2	5.3	13.5	13.6	10.0
Florida .....	83.3	86.5	88.3	72.3	72.3	80.5	3.3	2.5	2.0	6.3	6.3	4.0
Georgia .....	85.2	89.0	90.5	78.0	78.0	73.3	3.2	2.2	1.8	5.0	5.0	7.0
Hawaii .....	84.2	89.3	89.6	86.4	87.0	83.6	3.5	1.9	1.8	*	*	3.0
Idaho .....	78.9	79.2	81.7	75.7	77.9	60.0	4.5	4.5	3.6	*	*	10.8
Illinois .....	81.5	84.7	88.6	68.8	68.7	71.4	4.2	3.0	2.1	8.8	8.8	6.2
Indiana .....	80.4	82.2	82.8	64.7	64.7	66.8	3.8	3.3	3.1	8.4	8.4	8.1
Iowa .....	87.1	87.7	88.5	75.0	74.4	69.1	2.5	2.3	2.1	7.2	7.3	7.8
Kansas .....	85.5	86.4	88.8	76.4	76.3	64.7	2.6	2.4	1.7	5.0	5.0	8.5
Kentucky .....	84.7	85.8	85.9	74.3	74.3	75.5	2.9	2.6	2.6	5.6	5.6	7.5
Louisiana .....	81.1	88.7	88.9	70.4	70.3	81.9	4.2	1.9	1.8	7.5	7.5	4.0
Maine .....	89.9	90.1	90.4	85.5	85.9	78.9	1.7	1.7	1.6	*	*	*
Maryland .....	88.3	92.4	93.2	78.5	78.5	81.0	2.7	1.6	1.4	5.3	5.3	4.2
Massachusetts .....	83.7	85.6	87.1	70.6	70.6	70.2	3.0	2.4	2.0	7.2	7.2	6.4
Michigan .....	84.2	87.0	88.1	71.5	71.5	73.1	3.0	2.3	2.1	6.2	6.2	5.5
Minnesota .....	83.5	86.0	86.7	64.5	64.4	59.8	3.4	2.7	2.4	10.0	10.0	10.0
Mississippi .....	78.6	88.0	88.1	68.0	68.0	80.2	4.2	2.1	2.0	6.6	6.6	*
Missouri .....	85.5	87.9	88.2	72.2	72.2	77.9	2.9	2.1	2.1	7.0	7.0	4.0
Montana .....	82.7	84.4	84.7	81.6	77.4	73.9	3.2	2.5	2.4	*	*	*
Nebraska .....	84.5	85.4	87.3	73.2	73.1	66.6	2.6	2.3	1.9	5.9	6.0	6.7
Nevada .....	77.6	78.5	84.2	67.4	67.3	65.7	6.0	5.8	3.4	8.9	8.9	11.2
New Hampshire .....	89.1	89.3	89.6	76.4	74.2	75.5	1.5	1.5	1.4	*	*	*
New Jersey .....	81.8	85.5	89.4	65.5	65.5	70.9	4.6	3.0	2.2	11.6	11.8	6.3
New Mexico .....	69.7	71.9	78.9	60.9	61.9	66.4	8.0	7.5	4.3	7.4	7.7	9.9
New York .....	79.1	82.6	87.0	68.4	68.5	68.4	5.4	4.2	2.9	9.3	9.3	8.3
North Carolina .....	83.5	88.1	89.6	71.8	71.8	67.8	3.3	2.1	1.7	6.7	6.7	7.4
North Dakota .....	84.7	86.3	86.6	78.7	77.9	71.5	2.0	1.4	1.3	*	*	*
Ohio .....	85.4	87.6	87.9	72.5	72.5	76.4	3.4	2.7	2.6	8.1	8.1	5.6
Oklahoma .....	78.7	81.1	81.8	67.1	67.0	70.1	4.6	3.8	3.6	8.6	8.6	7.3
Oregon .....	79.9	80.3	82.6	76.6	76.3	65.6	3.9	3.8	3.1	5.7	5.9	7.8
Pennsylvania .....	84.2	87.1	88.0	67.1	67.2	70.6	3.6	2.5	2.3	10.6	10.6	6.6
Rhode Island .....	89.6	90.8	91.8	78.6	80.6	84.1	1.5	1.2	0.9	4.4	4.0	2.4
South Carolina .....	79.4	86.2	86.9	67.1	67.2	63.9	4.7	2.8	2.6	8.1	8.1	10.3
South Dakota .....	81.7	85.5	85.7	63.9	65.0	71.3	3.5	2.0	2.0	*	*	*
Tennessee .....	83.3	86.7	87.2	71.5	71.5	65.5	3.7	2.4	2.2	8.3	8.2	11.7
Texas .....	78.1	78.4	86.6	74.0	74.0	70.2	5.4	5.4	2.5	6.1	6.1	8.2
Utah .....	83.8	84.7	86.8	64.5	68.4	64.9	3.3	3.0	2.4	7.2	*	8.5
Vermont .....	87.4	87.5	87.6	*	*	89.5	2.0	2.0	2.0	*	*	*
Virginia .....	84.5	88.4	89.7	72.1	72.1	72.6	3.3	2.2	1.9	6.8	6.8	5.5
Washington .....	83.2	84.1	86.1	76.7	76.7	70.7	3.6	3.2	2.6	7.1	7.1	6.4
West Virginia .....	81.9	82.5	82.6	65.9	66.0	73.7	2.7	2.5	2.5	6.2	6.2	*
Wisconsin .....	84.1	87.0	88.0	66.2	66.2	69.5	3.3	2.4	2.1	9.3	9.3	7.1
Wyoming .....	81.9	82.5	83.8	64.6	63.8	69.3	3.7	3.5	3.2	*	*	6.3
Puerto Rico .....	77.3	78.3	---	66.2	---	---	3.5	3.2	---	6.9	---	---
Virgin Islands .....	55.4	60.1	76.3	54.5	54.3	52.6	11.6	8.6	*	12.2	11.6	14.8
Guam .....	66.7	79.8	80.1	80.5	78.4	78.0	11.0	*	*	*	*	*

\* Figure does not meet standards of reliability or precision.

--- Data not available.

<sup>1</sup> Care beginning in 3rd trimester.

<sup>2</sup> Includes races other than white and black and origin not stated.

<sup>3</sup> Persons of Hispanic origin may be of any race.

<sup>4</sup> Excludes data for Puerto Rico, Virgin Islands, and Guam.

**Table 35. Live births by month of pregnancy prenatal care began, number of prenatal visits, and median number of visits, by race and Hispanic origin of mother: United States, 1996**

Number of prenatal visits and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began							Not stated
		1st trimester			2d trimester		Late or no care		
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	
All races <sup>1</sup> .....	3,891,494	3,102,972	2,351,222	751,750	536,402	151,302	106,759	44,543	100,818
No visits .....	44,543	...	...	...	...	44,543	...	44,543	...
1-2 visits .....	40,612	9,316	5,851	3,465	10,075	19,212	19,212	...	2,009
3-4 visits .....	82,777	22,643	12,623	10,020	31,014	26,974	26,974	...	2,146
5-6 visits .....	179,054	74,312	42,443	31,869	75,329	26,241	26,241	...	3,172
7-8 visits .....	333,522	200,056	121,706	78,350	113,534	15,756	15,756	...	4,176
9-10 visits .....	739,021	572,955	377,478	195,477	149,518	8,505	8,505	...	8,043
11-12 visits .....	1,003,513	910,282	691,333	218,949	84,448	3,493	3,493	...	5,290
13-14 visits .....	646,478	610,592	503,996	106,596	31,548	1,455	1,455	...	2,883
15-16 visits .....	447,611	424,414	361,133	63,281	20,089	1,066	1,066	...	2,042
17-18 visits .....	96,300	91,825	77,897	13,928	3,776	224	224	...	475
19 visits or more .....	140,751	132,733	115,228	17,505	6,703	416	416	...	899
Not stated .....	137,312	53,844	41,534	12,310	10,368	3,417	3,417	...	69,683
Median number of visits .....	12.3	12.6	12.8	11.6	9.6	5.4	5.4	...	10.3
White, total .....	3,093,057	2,541,849	1,945,679	596,170	383,106	100,212	74,080	26,132	67,890
No visits .....	26,132	...	...	...	...	26,132	...	26,132	...
1-2 visits .....	25,046	5,890	3,811	2,079	5,627	12,443	12,443	...	1,086
3-4 visits .....	53,746	14,636	8,245	6,391	19,451	18,324	18,324	...	1,335
5-6 visits .....	124,070	53,041	30,410	22,631	50,724	18,230	18,230	...	2,075
7-8 visits .....	251,957	156,404	96,429	59,975	81,241	11,308	11,308	...	3,004
9-10 visits .....	582,216	461,281	307,245	154,036	108,959	6,181	6,181	...	5,795
11-12 visits .....	828,162	757,920	579,782	178,138	63,432	2,686	2,686	...	4,124
13-14 visits .....	542,993	515,339	427,043	88,296	24,153	1,190	1,190	...	2,311
15-16 visits .....	367,154	349,674	298,981	50,693	15,052	837	837	...	1,591
17-18 visits .....	80,331	76,898	65,542	11,356	2,872	189	189	...	372
19 visits or more .....	115,612	109,833	96,172	13,661	4,767	315	315	...	697
Not stated .....	95,638	40,933	32,019	8,914	6,828	2,377	2,377	...	45,500
Median number of visits .....	12.4	12.6	12.8	11.8	9.8	5.5	5.5	...	10.5
White, non-Hispanic .....	2,358,989	2,024,891	1,581,949	442,942	238,182	54,570	40,713	13,857	41,346
No visits .....	13,857	...	...	...	...	13,857	...	13,857	...
1-2 visits .....	13,298	3,159	2,115	1,044	2,981	6,517	6,517	...	641
3-4 visits .....	29,161	8,550	5,013	3,537	10,458	9,392	9,392	...	761
5-6 visits .....	74,868	34,923	20,819	14,104	28,989	9,739	9,739	...	1,217
7-8 visits .....	170,878	113,698	72,195	41,503	48,858	6,579	6,579	...	1,743
9-10 visits .....	423,727	348,934	239,305	109,629	67,321	3,697	3,697	...	3,775
11-12 visits .....	667,279	618,716	480,076	138,640	43,787	1,764	1,764	...	3,012
13-14 visits .....	451,381	431,364	359,454	71,910	17,378	823	823	...	1,816
15-16 visits .....	294,870	283,410	245,557	37,853	9,683	561	561	...	1,216
17-18 visits .....	66,200	63,701	54,795	8,906	2,086	126	126	...	287
19 visits or more .....	94,934	90,905	80,315	10,590	3,282	223	223	...	524
Not stated .....	58,536	27,531	22,305	5,226	3,359	1,292	1,292	...	26,354
Median number of visits .....	12.5	12.7	12.9	12.0	10.0	5.8	5.8	...	10.7
Black, total .....	594,781	406,278	291,968	114,310	120,726	41,737	25,249	16,488	26,040
No visits .....	16,488	...	...	...	...	16,488	...	16,488	...
1-2 visits .....	12,959	2,904	1,725	1,179	3,837	5,417	5,417	...	801
3-4 visits .....	23,470	6,611	3,621	2,990	9,477	6,729	6,729	...	653
5-6 visits .....	42,585	16,382	9,450	6,932	19,182	6,161	6,161	...	860
7-8 visits .....	60,158	31,194	18,212	12,982	24,742	3,314	3,314	...	908
9-10 visits .....	115,739	80,316	50,347	29,969	31,950	1,786	1,786	...	1,687
11-12 visits .....	123,760	106,044	76,766	29,278	16,278	598	598	...	840
13-14 visits .....	73,964	67,627	54,212	13,415	5,746	181	181	...	410
15-16 visits .....	60,287	55,629	45,988	9,641	4,155	167	167	...	336
17-18 visits .....	11,970	11,163	9,175	1,988	703	23	23	...	81
19 visits or more .....	20,057	18,136	14,973	3,163	1,691	72	72	...	158
Not stated .....	33,344	10,272	7,499	2,773	2,965	801	801	...	19,306
Median number of visits .....	11.5	12.4	12.7	11.2	9.2	5.0	5.0	...	9.4

See footnotes at end of table.

**Table 35. Live births by month of pregnancy prenatal care began, number of prenatal visits, and median number of visits, by race and Hispanic origin of mother: United States, 1996 --Con.**

Number of prenatal visits and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began							Not stated
		1st trimester			2d trimester		Late or no care		
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	
Black, non-Hispanic .....	578,099	395,966	284,902	111,064	117,412	40,605	24,350	16,255	24,116
No visits .....	16,255	...	...	...	...	16,255	...	16,255	...
1-2 visits .....	12,620	2,840	1,681	1,159	3,756	5,260	5,260	...	764
3-4 visits .....	22,830	6,471	3,546	2,925	9,237	6,508	6,508	...	614
5-6 visits .....	41,307	15,911	9,183	6,728	18,675	5,926	5,926	...	795
7-8 visits .....	58,258	30,260	17,725	12,535	23,986	3,175	3,175	...	837
9-10 visits .....	112,085	77,745	48,714	29,031	31,067	1,719	1,719	...	1,554
11-12 visits .....	120,665	103,482	74,986	28,496	15,848	571	571	...	764
13-14 visits .....	72,206	66,090	53,045	13,045	5,562	172	172	...	382
15-16 visits .....	59,033	54,499	45,082	9,417	4,070	162	162	...	302
17-18 visits .....	11,676	10,895	8,952	1,943	686	22	22	...	73
19 visits or more .....	19,682	17,818	14,715	3,103	1,650	67	67	...	147
Not stated .....	31,482	9,955	7,273	2,682	2,875	768	768	...	17,884
Median number of visits .....	11.5	12.4	12.7	11.2	9.2	5.0	5.0	...	9.3
Hispanic <sup>2</sup> .....	701,339	490,207	341,814	148,393	143,590	45,154	33,263	11,891	22,388
No visits .....	11,891	...	...	...	...	11,891	...	11,891	...
1-2 visits .....	11,676	2,673	1,653	1,020	2,637	5,927	5,927	...	439
3-4 visits .....	24,554	6,052	3,217	2,835	8,997	8,946	8,946	...	559
5-6 visits .....	48,577	17,585	9,258	8,327	21,663	8,498	8,498	...	831
7-8 visits .....	78,393	40,242	22,404	17,838	32,191	4,762	4,762	...	1,198
9-10 visits .....	152,829	107,235	64,044	43,191	41,266	2,452	2,452	...	1,876
11-12 visits .....	151,662	130,616	92,619	37,997	19,217	887	887	...	942
13-14 visits .....	86,806	79,336	63,629	15,707	6,704	345	345	...	421
15-16 visits .....	69,449	63,542	50,979	12,563	5,309	268	268	...	330
17-18 visits .....	13,413	12,518	10,138	2,380	767	53	53	...	75
19 visits or more .....	19,728	18,022	15,021	3,001	1,464	89	89	...	153
Not stated .....	32,361	12,386	8,852	3,534	3,375	1,036	1,036	...	15,564
Median number of visits .....	11.3	12.3	12.6	11.0	9.3	5.3	5.3	...	9.6

... Category not applicable.  
<sup>1</sup> Includes races other than white and black and origin not stated.  
<sup>2</sup> Persons of Hispanic origin may be of any race.

**Table 36. Live births to mothers with selected obstetric procedures and rates by age of mother, by race of mother: United States, 1996**

[Rates are number of live births with specified procedure per 1,000 live births in specified group]

Obstetric procedure and race of mother	All births	Obstetric procedure reported	Age of mother						Not stated	
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years		40-49 years
All races <sup>1</sup>										
Amniocentesis .....	3,891,494	124,711	32.3	9.1	10.6	14.8	27.6	140.6	192.4	32,311
Electronic fetal monitoring .....	3,891,494	3,184,945	825.3	833.8	828.0	827.2	823.5	812.7	794.9	32,311
Induction of labor .....	3,891,494	653,877	169.4	151.0	164.9	176.8	175.0	170.3	174.4	32,311
Stimulation of labor .....	3,891,494	652,196	169.0	177.0	172.2	171.6	165.9	155.6	146.2	32,311
Tocolysis .....	3,891,494	83,662	21.7	24.0	22.1	21.4	20.8	20.4	22.0	32,311
Ultrasound <sup>2</sup> .....	3,881,339	2,457,576	638.7	618.2	630.3	644.6	649.0	645.5	635.8	33,366
White										
Amniocentesis .....	3,093,057	106,391	34.7	9.3	10.8	15.1	28.7	148.8	205.5	26,456
Electronic fetal monitoring .....	3,093,057	2,540,938	828.6	836.7	830.1	831.0	828.1	816.8	798.2	26,456
Induction of labor .....	3,093,057	554,925	181.0	165.0	177.3	187.5	184.8	179.1	183.8	26,456
Stimulation of labor .....	3,093,057	529,023	172.5	183.7	176.7	174.9	168.4	158.7	149.1	26,456
Tocolysis .....	3,093,057	66,723	21.8	24.7	22.4	21.4	20.7	20.4	22.1	26,456
Ultrasound <sup>2</sup> .....	3,085,504	1,992,208	651.5	635.0	642.8	656.2	660.2	656.5	646.9	27,451
Black										
Amniocentesis .....	594,781	10,722	18.2	8.3	9.8	13.0	20.2	76.8	109.4	4,095
Electronic fetal monitoring .....	594,781	487,391	825.1	833.0	830.4	823.0	815.7	808.6	810.7	4,095
Induction of labor .....	594,781	73,716	124.8	117.6	122.9	128.2	129.0	131.8	144.5	4,095
Stimulation of labor .....	594,781	91,358	154.7	162.1	158.4	152.8	149.0	138.3	133.3	4,095
Tocolysis .....	594,781	12,430	21.0	21.4	20.9	21.0	21.3	19.8	20.5	4,095
Ultrasound <sup>2</sup> .....	592,410	344,461	585.6	578.3	587.2	589.4	587.4	584.9	589.4	4,146

<sup>1</sup> Includes races other than white and black.  
<sup>2</sup> Delaware does not report this procedure.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 37. Live births to mothers with selected complications of labor and/or delivery and rates by age of mother, by race of mother: United States, 1996**

[Rates are number of live births with specified complication per 1,000 live births in specified group]

Complication and race of mother	All births <sup>1</sup>	Complication reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	
All races <sup>2</sup>										
Febrile .....	3,891,494	61,850	16.1	19.2	16.6	16.4	14.9	13.2	12.6	42,175
Meconium, moderate/heavy .....	3,891,494	223,536	58.1	63.1	58.0	56.0	56.6	59.8	64.6	42,175
Premature rupture of membrane .....	3,891,494	113,112	29.4	28.6	27.8	29.1	30.0	32.4	36.1	42,175
Abruptio placenta .....	3,891,494	22,062	5.7	5.4	5.3	5.4	5.9	7.0	8.7	42,175
Placenta previa .....	3,891,494	12,915	3.4	1.2	1.9	3.1	4.6	6.4	8.9	42,175
Other excessive bleeding <sup>3</sup> .....	3,777,188	21,142	5.7	5.7	5.7	5.4	5.5	6.2	7.4	42,892
Seizures during labor .....	3,891,494	1,617	0.4	0.8	0.4	0.3	0.3	0.4	0.6	42,175
Precipitous labor .....	3,891,494	77,614	20.2	14.2	18.6	19.9	23.1	24.8	24.1	42,175
Prolonged labor .....	3,891,494	34,445	8.9	9.4	8.8	9.0	8.7	8.7	9.7	42,175
Dysfunctional labor .....	3,891,494	105,749	27.5	25.7	26.1	28.3	28.2	28.3	32.2	42,175
Breech/Malpresentation .....	3,891,494	146,431	38.0	29.4	32.1	38.3	43.0	47.8	56.5	42,175
Cephalopelvic disproportion .....	3,891,494	90,105	23.4	21.6	21.7	24.6	24.7	23.5	23.9	42,175
Cord prolapse .....	3,891,494	8,244	2.1	1.7	1.9	2.1	2.3	2.8	3.3	42,175
Anesthetic complication <sup>4</sup> .....	3,561,088	2,214	0.6	0.4	0.5	0.7	0.7	0.8	1.0	44,789
Fetal distress <sup>4</sup> .....	3,561,088	147,814	42.0	45.7	41.3	40.3	40.9	44.4	52.6	44,789
White										
Febrile .....	3,093,057	46,821	15.3	18.0	16.1	15.9	14.1	12.4	12.1	34,689
Meconium, moderate/heavy .....	3,093,057	163,798	53.6	56.7	53.2	52.0	52.7	55.7	60.4	34,689
Premature rupture of membrane .....	3,093,057	86,973	28.4	27.1	26.7	28.3	29.1	31.4	35.2	34,689
Abruptio placenta .....	3,093,057	16,990	5.6	5.3	5.2	5.2	5.8	6.7	8.2	34,689
Placenta previa .....	3,093,057	10,093	3.3	1.1	1.9	3.0	4.4	6.1	8.5	34,689
Other excessive bleeding <sup>3</sup> .....	3,006,671	16,630	5.6	5.8	5.7	5.4	5.4	6.0	6.8	35,415
Seizures during labor .....	3,093,057	994	0.3	0.7	0.4	0.3	0.2	0.3	0.4	34,689
Precipitous labor .....	3,093,057	60,183	19.7	13.0	17.5	19.2	22.8	24.9	23.8	34,689
Prolonged labor .....	3,093,057	27,958	9.1	9.9	9.3	9.2	8.8	8.8	10.0	34,689
Dysfunctional labor .....	3,093,057	85,113	27.8	25.9	26.7	28.7	28.3	28.2	32.4	34,689
Breech/Malpresentation .....	3,093,057	121,992	39.9	31.9	33.9	39.7	44.4	48.6	57.0	34,689
Cephalopelvic disproportion .....	3,093,057	73,728	24.1	22.1	22.8	25.4	24.9	23.7	24.7	34,689
Cord prolapse .....	3,093,057	6,524	2.1	1.7	1.9	2.0	2.3	2.8	3.3	34,689
Anesthetic complication <sup>4</sup> .....	2,811,247	1,805	0.7	0.4	0.5	0.7	0.8	0.8	1.0	36,831
Fetal distress <sup>4</sup> .....	2,811,247	111,299	40.1	43.7	39.5	38.6	39.1	42.2	50.3	36,831
Black										
Febrile .....	594,781	10,544	17.9	21.8	17.8	16.7	16.1	15.0	11.4	5,265
Meconium, moderate/heavy .....	594,781	48,020	81.5	79.7	77.2	81.3	86.6	91.2	93.6	5,265
Premature rupture of membrane .....	594,781	19,710	33.4	31.5	31.1	33.6	36.5	40.5	41.9	5,265
Abruptio placenta .....	594,781	4,045	6.9	5.9	6.1	7.0	7.9	9.7	10.9	5,265
Placenta previa .....	594,781	1,904	3.2	1.3	2.2	3.3	5.3	7.7	8.5	5,265
Other excessive bleeding <sup>3</sup> .....	574,264	2,668	4.7	4.4	4.7	4.2	5.2	5.4	7.1	5,228
Seizures during labor .....	594,781	323	0.5	0.9	0.5	0.5	0.3	*	*	5,265
Precipitous labor .....	594,781	12,663	21.5	16.1	21.3	23.1	25.8	24.1	24.5	5,265
Prolonged labor .....	594,781	4,051	6.9	7.6	6.5	6.9	6.7	6.7	5.9	5,265
Dysfunctional labor .....	594,781	15,076	25.6	24.9	23.4	26.5	27.7	27.9	33.4	5,265
Breech/Malpresentation .....	594,781	17,526	29.7	22.7	25.5	31.5	36.4	44.3	55.6	5,265
Cephalopelvic disproportion .....	594,781	11,344	19.2	20.7	17.7	19.3	21.1	17.6	14.0	5,265
Cord prolapse .....	594,781	1,351	2.3	1.9	2.0	2.4	2.9	3.2	2.9	5,265
Anesthetic complication <sup>4</sup> .....	555,925	306	0.6	0.4	0.5	0.6	0.7	0.7	*	5,675
Fetal distress <sup>4</sup> .....	555,925	29,961	54.4	52.0	50.6	54.1	58.5	65.1	78.7	5,675

\* Figure does not meet standards of reliability or precision.  
<sup>1</sup> Total number of births to residents of areas reporting specified complication.  
<sup>2</sup> Includes races other than white and black.  
<sup>3</sup> New Jersey does not report this complication.  
<sup>4</sup> Texas does not report this complication.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.



**Table 38. Live births by attendant, place of delivery, and race and Hispanic origin of mother: United States, 1996**

Place of delivery and race and Hispanic origin of mother	All births	Physician			Midwife			Other	Unspecified
		Total	Doctor of medicine	Doctor of osteopathy	Total	Certified nurse midwife	Other midwife		
<b>All races <sup>1</sup></b>									
Total .....	3,891,494	3,613,070	3,467,500	145,570	252,782	238,994	13,788	21,708	3,934
In hospital <sup>2</sup> .....	3,853,728	3,606,958	3,462,508	144,450	232,628	229,855	2,773	11,446	2,696
Not in hospital .....	37,085	5,847	4,748	1,099	19,892	8,884	11,008	10,228	1,118
Freestanding birthing center .....	10,278	1,698	1,051	647	8,383	5,981	2,402	190	7
Clinic or doctor's office .....	778	373	304	69	285	123	162	104	16
Residence .....	23,784	3,037	2,700	337	10,942	2,604	8,338	8,873	932
Other .....	2,245	739	693	46	282	176	106	1,061	163
Not specified .....	681	265	244	21	262	255	7	34	120
<b>White, total</b>									
Total .....	3,093,057	2,878,429	2,752,896	125,533	195,044	182,383	12,661	16,462	3,122
In hospital <sup>2</sup> .....	3,060,406	2,873,945	2,749,470	124,475	175,844	173,880	1,964	8,342	2,275
Not in hospital .....	32,052	4,252	3,214	1,038	18,946	8,256	10,690	8,099	755
Freestanding birthing center .....	9,708	1,636	993	643	7,894	5,577	2,317	171	7
Clinic or doctor's office .....	671	310	248	62	271	113	158	75	15
Residence .....	20,223	1,934	1,628	306	10,531	2,411	8,120	7,106	652
Other .....	1,450	372	345	27	250	155	95	747	81
Not specified .....	599	232	212	20	254	247	7	21	92
<b>White, non-Hispanic</b>									
Total .....	2,358,989	2,208,314	2,104,458	103,856	136,613	126,230	10,383	11,887	2,175
In hospital <sup>2</sup> .....	2,332,333	2,204,537	2,101,706	102,831	121,038	119,479	1,559	5,186	1,572
Not in hospital .....	26,236	3,582	2,573	1,009	15,396	6,579	8,817	6,685	573
Freestanding birthing center .....	6,920	1,421	787	634	5,350	4,190	1,160	146	3
Clinic or doctor's office .....	585	269	210	59	237	92	145	65	14
Residence .....	17,729	1,617	1,324	293	9,637	2,212	7,425	5,961	514
Other .....	1,002	275	252	23	172	85	87	513	42
Not specified .....	420	195	179	16	179	172	7	16	30
<b>Black, total</b>									
Total .....	594,781	548,597	533,468	15,129	41,739	40,928	811	3,970	475
In hospital <sup>2</sup> .....	590,877	547,226	532,136	15,090	41,192	40,514	678	2,291	168
Not in hospital .....	3,832	1,340	1,302	38	543	410	133	1,668	281
Freestanding birthing center .....	356	36	35	1	309	253	56	11	-
Clinic or doctor's office .....	45	34	33	1	6	5	1	5	-
Residence .....	2,773	965	944	21	207	136	71	1,400	201
Other .....	658	305	290	15	21	16	5	252	80
Not specified .....	72	31	30	1	4	4	-	11	26
<b>Black, non-Hispanic</b>									
Total .....	578,099	534,659	519,986	14,673	39,143	38,352	791	3,878	419
In hospital <sup>2</sup> .....	574,368	533,324	518,690	14,634	38,649	37,982	667	2,235	160
Not in hospital .....	3,686	1,308	1,270	38	490	366	124	1,632	256
Freestanding birthing center .....	330	34	33	1	285	230	55	11	-
Clinic or doctor's office .....	44	33	32	1	6	5	1	5	-
Residence .....	2,680	943	922	21	182	118	64	1,371	184
Other .....	632	298	283	15	17	13	4	245	72
Not specified .....	45	27	26	1	4	4	-	11	3
<b>Hispanic <sup>3</sup></b>									
Total .....	701,339	638,539	618,859	19,680	57,787	55,628	2,159	4,192	821
In hospital <sup>2</sup> .....	696,135	637,939	618,288	19,651	54,416	54,031	385	3,119	661
Not in hospital .....	5,173	584	559	25	3,362	1,588	1,774	1,070	157
Freestanding birthing center .....	2,766	211	204	7	2,526	1,368	1,158	25	4
Clinic or doctor's office .....	79	34	30	4	34	21	13	10	1
Residence .....	1,924	248	238	10	731	135	596	828	117
Other .....	404	91	87	4	71	64	7	207	35
Not specified .....	31	16	12	4	9	9	-	3	3

- Quantity zero.

<sup>1</sup> Includes races other than white and black and origin not stated.

<sup>2</sup> Includes births occurring en route to or on arrival at hospital.

<sup>3</sup> Persons of Hispanic origin may be of any race.

**Table 39. Live births by method of delivery and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by race and Hispanic origin of mother: United States, 1989-96**

Year and race and Hispanic origin of mother	Births by method of delivery						Cesarean delivery rate		Rate of vaginal birth after previous cesarean <sup>3</sup>	
	All births	Vaginal		Cesarean			Not stated	Total <sup>1</sup>		Primary <sup>2</sup>
		Total	After previous cesarean	Total	Primary	Repeat				
<b>All races<sup>4</sup></b>										
1996	3,891,494	3,061,092	116,045	797,119	503,724	293,395	33,283	20.7	14.6	28.3
1995	3,899,589	3,063,724	112,439	806,722	510,104	296,618	29,143	20.8	14.7	27.5
1994	3,952,767	3,087,576	110,341	830,517	520,647	309,870	34,674	21.2	14.9	26.3
1993	4,000,240	3,098,796	103,581	861,987	539,251	322,736	39,457	21.8	15.3	24.3
1992	4,065,014	3,100,710	97,549	888,622	554,662	333,960	75,682	22.3	15.6	22.6
1991	4,110,907	3,100,891	90,690	905,077	569,195	335,882	104,939	22.6	15.9	21.3
1990 <sup>5,9</sup>	4,110,563	3,111,421	84,299	914,096	575,066	339,030	85,046	22.7	16.0	19.9
1989 <sup>6</sup>	3,798,734	2,793,463	71,019	826,955	521,873	305,082	178,316	22.8	16.1	18.9
<b>White, total</b>										
1996	3,093,057	2,434,079	93,783	631,409	395,851	235,558	27,569	20.6	14.5	28.5
1995	3,098,885	2,435,191	90,940	639,818	401,098	238,720	23,876	20.8	14.6	27.6
1994	3,121,004	2,435,965	88,471	656,400	407,946	248,454	28,639	21.2	14.8	26.3
1993	3,149,833	2,435,229	82,995	682,355	423,540	258,815	32,249	21.9	15.3	24.3
1992	3,201,678	2,434,959	77,977	705,841	437,398	268,443	60,878	22.5	15.7	22.5
1991	3,241,273	2,434,900	72,564	723,088	452,534	270,554	83,285	22.9	16.1	21.1
1990 <sup>5</sup>	3,252,473	2,453,857	67,191	732,713	458,656	274,057	65,903	23.0	16.1	19.7
1989 <sup>6</sup>	3,022,537	2,212,843	56,851	667,114	418,177	248,937	142,580	23.2	16.2	18.6
<b>White, non-Hispanic</b>										
1996	2,358,989	1,851,058	73,973	485,530	308,482	177,048	22,401	20.8	14.8	29.5
1995	2,382,638	1,867,024	72,124	496,103	313,933	182,170	19,511	21.0	14.9	28.4
1994	2,438,855	1,896,609	71,597	518,021	324,236	193,785	24,225	21.5	15.1	27.0
1993	2,472,031	1,902,433	67,536	542,013	338,236	203,777	27,585	22.2	15.6	24.9
1992 <sup>8</sup>	2,527,207	1,916,414	63,828	566,788	352,470	214,318	44,005	22.8	16.0	22.9
1991 <sup>8</sup>	2,589,878	1,941,726	60,174	587,802	368,721	219,081	60,350	23.2	16.4	21.5
1990 <sup>5,9</sup>	2,626,500	1,972,754	55,952	603,467	378,508	224,959	50,279	23.4	16.5	19.9
1989 <sup>6,10</sup>	2,526,367	1,806,753	47,559	556,585	349,858	206,727	163,029	23.6	16.6	18.7
<b>Black, total</b>										
1996	594,781	462,378	16,866	128,357	82,646	45,711	4,046	21.7	15.6	27.0
1995	603,139	468,984	16,224	130,482	84,441	46,041	3,673	21.8	15.7	26.1
1994	636,391	493,879	16,970	138,067	88,636	49,431	4,445	21.8	15.7	25.6
1993	658,875	509,816	16,179	143,452	91,677	51,775	5,607	22.0	15.7	23.8
1992	673,633	514,929	15,382	146,480	93,165	53,315	12,224	22.1	15.7	22.4
1991	682,602	519,047	14,213	145,583	92,645	52,938	17,972	21.9	15.5	21.2
1990 <sup>5</sup>	679,236	516,581	13,496	146,472	93,476	52,996	16,183	22.1	15.7	20.3
1989 <sup>6</sup>	611,147	452,291	11,104	127,907	82,695	45,212	30,319	22.0	15.8	19.7
<b>Black, non-Hispanic</b>										
1996	578,099	449,544	16,322	124,836	80,457	44,379	3,719	21.7	15.7	26.9
1995	587,781	457,104	15,721	127,171	82,395	44,776	3,506	21.8	15.7	26.0
1994	619,198	480,551	16,478	134,526	86,411	48,115	4,121	21.9	15.7	25.5
1993	641,273	496,333	15,675	139,702	89,315	50,387	5,238	22.0	15.7	23.7
1992 <sup>8</sup>	657,450	502,669	14,950	143,153	91,086	52,067	11,628	22.2	15.7	22.3
1991 <sup>8</sup>	666,758	507,522	13,847	142,417	90,664	51,753	16,819	21.9	15.5	21.1
1990 <sup>5,9</sup>	661,701	503,720	13,157	142,838	91,175	51,663	15,143	22.1	15.7	20.3
1989 <sup>6,10</sup>	611,269	440,310	10,726	125,290	81,177	44,113	45,669	22.2	15.9	19.6
<b>Hispanic<sup>7</sup></b>										
1996	701,339	558,105	18,491	139,554	83,392	56,162	3,680	20.0	13.4	24.8
1995	679,768	539,731	17,396	136,640	82,662	53,978	3,397	20.2	13.7	24.4
1994	665,026	525,928	16,206	135,569	81,961	53,608	3,529	20.5	13.9	23.2
1993	654,418	514,493	14,586	136,279	82,576	53,703	3,646	20.9	14.2	21.4
1992 <sup>8</sup>	643,271	494,338	13,111	133,369	81,211	52,158	15,564	21.2	14.4	20.1
1991 <sup>8</sup>	623,085	472,126	11,615	129,752	80,228	49,524	21,207	21.6	14.8	19.0
1990 <sup>5,9</sup>	595,073	458,242	10,395	122,969	76,027	46,942	13,862	21.2	14.5	18.1
1989 <sup>6,10</sup>	532,249	385,462	8,549	105,268	64,905	40,363	41,519	21.5	14.7	17.5

<sup>1</sup> Percent of all live births by cesarean delivery.  
<sup>2</sup> Number of primary cesareans per 100 live births to women who have not had a previous cesarean.  
<sup>3</sup> Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.  
<sup>4</sup> Includes races other than white and black and origin not stated.  
<sup>5</sup> Excludes data for Oklahoma, which did not report method of delivery on the birth certificate.  
<sup>6</sup> Excludes data for Louisiana, Maryland, Nebraska, Nevada, and Oklahoma, which did not report method of delivery on the birth certificate.  
<sup>7</sup> Persons of Hispanic origin may be of any race.  
<sup>8</sup> Excludes data for New Hampshire which did not report Hispanic origin.  
<sup>9</sup> Excludes data for New Hampshire and Oklahoma which did not report Hispanic origin.  
<sup>10</sup> Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

**Table 40. Live births by method of delivery, and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by age and race and Hispanic origin of mother: United States, 1996**

Age and race and Hispanic origin of mother	Births by method of delivery						Cesarean delivery rate		Rate of vaginal birth after previous cesarean <sup>3</sup>	
	All births	Vaginal		Cesarean			Not stated	Total <sup>1</sup>		Primary <sup>2</sup>
		Total	After previous cesarean	Total	Primary	Repeat				
All races <sup>4</sup>	3,891,494	3,061,092	116,045	797,119	503,724	293,395	33,283	20.7	14.6	28.3
Under 20 years	502,725	426,649	3,956	72,296	64,439	7,857	3,780	14.5	13.2	33.5
20-24 years	945,210	774,542	21,852	162,789	113,189	49,600	7,879	17.4	13.1	30.6
25-29 years	1,071,287	843,609	33,830	218,535	136,873	81,662	9,143	20.6	14.5	29.3
30-34 years	897,913	678,495	36,419	211,410	117,743	93,667	8,008	23.8	15.5	28.0
35-39 years	399,510	287,146	17,302	108,640	57,806	50,834	3,724	27.4	17.6	25.4
40-49 years	74,849	50,651	2,686	23,449	13,674	9,775	749	31.6	22.2	21.6
White, total	3,093,057	2,434,079	93,783	631,409	395,851	235,558	27,569	20.6	14.5	28.5
Under 20 years	350,211	298,322	2,441	49,060	44,204	4,856	2,829	14.1	13.0	33.5
20-24 years	726,669	596,341	16,116	124,076	87,431	36,645	6,252	17.2	13.1	30.5
25-29 years	878,449	692,751	27,609	177,926	111,422	66,504	7,772	20.4	14.3	29.3
30-34 years	747,436	566,817	30,701	173,748	95,746	78,002	6,871	23.5	15.2	28.2
35-39 years	329,782	238,611	14,681	87,953	46,225	41,728	3,218	26.9	17.1	26.0
40-49 years	60,510	41,237	2,235	18,646	10,823	7,823	627	31.1	21.7	22.2
White, non-Hispanic	2,358,989	1,851,058	73,973	485,530	308,482	177,048	22,401	20.8	14.8	29.5
Under 20 years	227,729	193,317	1,450	32,308	29,553	2,755	2,104	14.3	13.3	34.5
20-24 years	508,056	415,449	11,132	87,655	62,944	24,711	4,952	17.4	13.5	31.1
25-29 years	683,376	538,905	21,135	138,025	89,280	48,745	6,446	20.4	14.7	30.2
30-34 years	616,224	469,754	25,732	140,761	79,529	61,232	5,709	23.1	15.2	29.6
35-39 years	274,431	199,956	12,632	71,777	38,397	33,380	2,698	26.4	17.0	27.5
40-49 years	49,173	33,677	1,892	15,004	8,779	6,225	492	30.8	21.6	23.3
Black, total	594,781	462,378	16,866	128,357	82,646	45,711	4,046	21.7	15.6	27.0
Under 20 years	135,789	113,573	1,413	21,454	18,599	2,855	762	15.9	14.2	33.1
20-24 years	179,361	144,669	5,037	33,468	21,791	11,677	1,224	18.8	13.5	30.1
25-29 years	133,204	101,536	4,768	30,753	18,305	12,448	915	23.2	15.9	27.7
30-34 years	94,295	67,630	3,762	25,930	14,470	11,460	735	27.7	18.5	24.7
35-39 years	43,716	29,580	1,622	13,804	7,687	6,117	332	31.8	21.6	21.0
40-49 years	8,416	5,390	264	2,948	1,794	1,154	78	35.4	25.9	18.6
Black, non-Hispanic	578,099	449,544	16,322	124,836	80,457	44,379	3,719	21.7	15.7	26.9
Under 20 years	132,700	110,980	1,380	20,998	18,188	2,810	722	15.9	14.2	32.9
20-24 years	174,958	141,065	4,918	32,738	21,277	11,461	1,155	18.8	13.5	30.0
25-29 years	129,002	98,396	4,605	29,783	17,711	12,072	823	23.2	15.9	27.6
30-34 years	91,050	65,279	3,609	25,115	14,070	11,045	656	27.8	18.6	24.6
35-39 years	42,279	28,619	1,556	13,359	7,476	5,883	301	31.8	21.6	20.9
40-49 years	8,110	5,205	254	2,843	1,735	1,108	62	35.3	25.9	18.6
Hispanic <sup>5</sup>	701,339	558,105	18,491	139,554	83,392	56,162	3,680	20.0	13.4	24.8
Under 20 years	121,934	104,573	999	16,692	14,594	2,098	669	13.8	12.4	32.3
20-24 years	214,173	177,235	4,863	35,816	24,004	11,812	1,122	16.8	12.2	29.2
25-29 years	185,478	146,287	6,123	38,233	20,998	17,235	958	20.7	13.0	26.2
30-34 years	119,690	88,489	4,437	30,576	14,767	15,809	625	25.7	14.9	21.9
35-39 years	49,812	34,693	1,776	14,867	7,154	7,713	252	30.0	17.9	18.7
40-49 years	10,252	6,828	293	3,370	1,875	1,495	54	33.0	22.3	16.4

<sup>1</sup> Percent of all live births by cesarean delivery.  
<sup>2</sup> Number of primary cesareans per 100 live births to women who have not had a previous cesarean.  
<sup>3</sup> Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.  
<sup>4</sup> Includes races other than white and black and origin not stated.  
<sup>5</sup> Persons of Hispanic origin may be of any race.

**Table 41. Rates of cesarean delivery and vaginal birth after previous cesarean delivery by race and Hispanic origin of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence]

State	Cesarean delivery rate <sup>1</sup>						Rate of vaginal births after previous cesarean <sup>2</sup>					
	All races <sup>3</sup>	White		Black		Hispanic <sup>4</sup>	All races <sup>3</sup>	White		Black		Hispanic <sup>4</sup>
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States <sup>5</sup> .....	20.7	20.6	20.8	21.7	21.7	20.0	28.3	28.5	29.5	27.0	26.9	24.8
Alabama .....	23.3	23.7	23.8	22.7	22.6	22.3	22.4	21.9	21.8	23.8	23.9	23.6
Alaska .....	16.7	19.2	19.2	19.7	18.6	20.0	34.6	30.9	30.4	*	*	36.5
Arizona .....	16.1	16.2	16.8	19.3	19.4	15.4	28.9	27.4	28.7	25.0	25.0	25.9
Arkansas .....	25.3	25.0	25.1	26.5	26.5	22.4	19.4	19.6	19.4	18.8	18.8	21.9
California .....	20.6	20.6	21.6	22.9	23.0	19.8	22.8	22.9	24.7	20.1	20.0	21.5
Colorado .....	15.1	15.1	15.3	16.6	17.0	14.4	40.4	40.1	40.1	43.3	43.3	39.7
Connecticut .....	19.8	19.8	20.1	20.5	20.6	18.3	33.3	32.7	32.6	36.1	36.9	32.2
Delaware .....	21.0	21.3	21.6	20.5	20.7	17.6	35.0	34.4	33.8	37.4	36.8	43.6
District of Columbia ...	21.3	19.2	23.3	22.1	22.2	13.6	21.2	27.6	*	20.0	20.0	*
Florida .....	21.6	22.1	21.4	20.3	20.3	24.0	25.7	25.6	27.8	25.3	25.4	19.6
Georgia .....	20.9	20.7	21.2	21.7	21.6	15.6	25.2	26.5	26.4	22.1	22.2	27.3
Hawaii .....	17.5	19.3	19.3	20.4	21.3	16.5	35.2	34.8	34.7	*	*	36.6
Idaho .....	16.0	15.9	15.8	29.3	27.8	16.6	36.8	36.9	36.8	*	*	37.1
Illinois .....	19.3	19.3	20.1	19.4	19.4	16.7	30.1	31.3	31.5	25.4	25.4	30.2
Indiana .....	20.3	20.2	20.2	21.1	21.2	21.2	26.3	26.6	26.8	24.1	24.0	24.1
Iowa .....	18.6	18.6	18.7	19.6	19.6	17.4	35.7	35.5	35.3	34.8	33.3	36.6
Kansas .....	19.2	19.3	19.4	19.8	19.9	19.0	25.1	25.0	24.6	26.1	26.1	27.1
Kentucky .....	21.3	21.4	21.4	21.0	20.9	16.7	26.8	26.2	26.0	31.9	31.8	*
Louisiana .....	26.4	27.9	28.0	24.6	24.6	23.4	12.9	11.2	11.0	15.5	15.4	15.7
Maine .....	20.8	20.9	20.8	*	*	23.5	30.4	30.4	30.5	*	*	*
Maryland .....	21.6	21.0	21.3	23.2	23.2	17.8	33.0	33.5	33.2	31.6	31.8	34.7
Massachusetts .....	19.8	20.0	20.3	20.2	20.3	17.1	34.0	34.2	33.8	30.7	29.4	38.3
Michigan .....	20.2	20.5	20.6	18.9	18.9	19.1	27.1	27.0	27.1	27.5	27.5	27.4
Minnesota .....	16.9	17.2	17.3	16.9	16.8	16.5	36.1	35.6	35.7	41.9	41.9	37.5
Mississippi .....	26.6	28.0	28.1	25.2	25.2	27.0	18.1	16.4	16.2	19.8	19.8	*
Missouri .....	20.4	20.7	20.7	18.8	18.8	18.3	32.2	31.3	31.3	37.6	37.7	28.5
Montana .....	19.1	18.8	18.7	*	*	20.2	32.7	33.3	33.6	*	*	*
Nebraska .....	19.8	20.0	20.1	18.5	18.5	19.2	30.6	30.3	30.8	31.0	31.0	26.2
Nevada .....	19.3	19.0	20.6	22.1	22.3	15.7	29.0	29.2	26.5	30.2	29.5	35.5
New Hampshire .....	20.3	20.2	20.2	21.6	*	22.9	31.7	31.7	31.7	*	*	*
New Jersey .....	24.0	24.2	24.1	23.5	23.2	24.8	35.7	35.3	36.9	38.3	39.4	29.0
New Mexico .....	17.2	17.5	18.0	22.2	22.4	17.1	36.9	35.8	36.7	37.9	38.5	35.0
New York .....	22.9	22.9	23.6	23.2	23.3	21.8	31.6	31.5	30.7	32.0	32.2	31.6
North Carolina .....	21.1	21.1	21.5	21.4	21.4	15.9	29.3	29.0	28.5	29.4	29.5	37.0
North Dakota .....	18.9	18.2	18.2	24.7	23.3	20.4	28.9	31.2	31.2	*	*	*
Ohio .....	19.0	19.2	19.2	18.6	18.6	18.3	35.5	35.4	35.5	35.5	35.4	34.3
Oklahoma .....	22.5	22.2	22.3	24.0	24.0	21.0	22.3	23.0	22.9	20.9	21.0	24.1
Oregon .....	16.9	16.8	17.1	21.2	21.5	15.4	39.5	39.5	38.8	28.4	27.8	43.5
Pennsylvania .....	19.4	19.5	19.7	19.0	19.0	17.5	34.5	33.8	33.7	38.6	38.8	35.4
Rhode Island .....	17.7	18.1	18.8	18.0	18.1	16.7	35.1	34.2	32.9	42.4	41.2	36.7
South Carolina .....	22.6	22.8	22.8	22.3	22.3	23.1	23.3	24.4	24.6	21.2	21.1	20.7
South Dakota .....	20.8	21.4	21.3	*	*	24.7	22.8	23.1	23.2	*	*	*
Tennessee .....	21.7	21.9	21.9	21.3	21.3	22.1	27.4	26.9	27.0	28.8	28.8	25.4
Texas .....	23.1	23.1	23.7	24.5	24.5	22.4	21.7	21.8	23.9	19.4	19.3	19.8
Utah .....	15.9	15.8	15.7	22.5	22.2	17.4	34.3	34.0	33.7	*	*	36.9
Vermont .....	16.5	16.4	16.1	*	*	*	41.7	41.9	41.6	*	*	*
Virginia .....	21.1	20.8	21.0	22.2	22.2	18.3	32.2	32.1	31.9	32.8	32.9	34.1
Washington .....	16.8	16.5	16.6	21.1	20.8	16.6	35.9	36.1	36.2	32.6	32.3	35.8
West Virginia .....	22.8	22.8	22.8	23.9	24.0	20.2	23.9	24.0	24.1	*	*	*
Wisconsin .....	15.6	16.2	16.3	12.0	12.0	13.7	35.5	35.8	35.6	30.1	30.1	39.2
Wyoming .....	18.3	18.4	18.6	*	*	16.3	34.2	34.4	34.2	*	*	*
Puerto Rico .....	31.5	32.1	---	24.2	---	---	8.2	8.2	---	8.7	---	---
Virgin Islands .....	22.4	26.3	26.8	21.6	20.5	25.9	21.8	*	*	20.1	21.2	*
Guam .....	15.1	13.7	14.4	*	*	*	16.9	*	*	*	*	*

\* Figure does not meet standards of reliability or precision.  
 --- Data not available.  
 1 Percent of all live births by cesarean delivery.  
 2 Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.  
 3 Includes races other than white and black and origin not stated.  
 4 Persons of Hispanic origin may be of any race.  
 5 Excludes data for Puerto Rico, Virgin Islands, and Guam.

**Table 42. Rates of cesarean delivery and vaginal birth after previous cesarean delivery, by selected maternal medical risk factors and complications of labor and/or delivery: United States, 1996**

Medical risk factor and complication	All births to mothers with specified condition and/or procedure	Cesarean delivery rate		Rate of vaginal birth after previous cesarean <sup>3</sup>
		Total <sup>1</sup>	Primary <sup>2</sup>	
<b>Medical risk factors</b>				
Anemia .....	75,400	22.0	15.6	31.9
Cardiac disease .....	19,226	24.1	17.5	32.2
Acute or chronic lung disease .....	32,006	24.2	17.8	30.6
Diabetes .....	100,845	35.2	25.4	20.3
Genital herpes <sup>4</sup> .....	31,795	36.0	30.4	30.8
Hydramnios/Oligohydramnios .....	47,824	37.0	31.8	25.9
Hemoglobinopathy .....	2,979	24.0	17.9	33.5
Hypertension, chronic .....	26,221	38.6	29.5	20.0
Hypertension, pregnancy-associated .....	137,724	36.1	31.5	22.4
Eclampsia .....	13,591	47.8	43.7	17.7
Incompetent cervix .....	9,817	31.8	25.1	28.3
Renal disease <sup>5</sup> .....	10,372	24.1	17.9	30.7
Rh sensitization <sup>6</sup> .....	24,396	21.5	15.3	33.8
Uterine bleeding <sup>4</sup> .....	25,671	31.2	24.7	28.0
<b>Complications of labor and/or delivery</b>				
Febrile .....	61,850	30.3	28.4	49.0
Meconium, moderate/heavy .....	223,536	20.6	17.6	47.5
Premature rupture of membrane .....	113,112	25.1	22.0	41.4
Abruptio placenta .....	22,062	58.1	53.8	18.5
Placenta previa .....	12,915	81.6	77.4	4.3
Other excessive bleeding <sup>7</sup> .....	21,142	27.3	21.4	34.1
Seizures during labor .....	1,617	42.6	40.9	36.8
Precipitous labor (less than 3 hours) .....	77,614	2.8	1.8	76.5
Prolonged labor (more than 20 hours) .....	34,445	35.5	34.0	45.7
Dysfunctional labor .....	105,749	63.1	60.4	17.3
Breech/Malpresentation .....	146,431	84.7	83.0	5.3
Cephalopelvic disproportion .....	90,105	96.5	96.1	1.4
Cord prolapse .....	8,244	66.4	63.9	13.8
Anesthetic complication <sup>8</sup> .....	2,214	41.8	32.1	20.7
Fetal distress <sup>8</sup> .....	147,814	54.5	51.7	23.9

1 Percent of all live births by cesarean delivery.  
 2 Number of primary cesareans per 100 live births to women who have not had a previous cesarean.  
 3 Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.  
 4 Texas does not report this risk factor.  
 5 Alabama does not report this risk factor.  
 6 Kansas does not report this risk factor.  
 7 New Jersey does not report this complication.  
 8 Texas does not report this complication.

**Table 43. Live births by birthweight and percent very low and low birthweight, by period of gestation and race and Hispanic origin of mother: United States, 1996**

Birthweight <sup>1</sup> and race and Hispanic origin of mother	All births	Period of gestation <sup>2</sup>										Not stated
		Preterm					Term			Postterm		
		Total under 37 weeks	Under 28 weeks	28-31 weeks	32-35 weeks	36 weeks	Total 37-41 weeks	37-39 weeks	40 weeks	41 weeks	42 weeks and over	
Number												
All races <sup>3</sup> .....	3,891,494	423,107	27,456	45,275	198,918	151,458	3,093,025	1,735,210	868,341	489,474	334,713	40,649
Less than 500 grams .....	5,462	5,295	5,069	203	21	2	9	3	4	2	2	156
500-999 grams .....	21,094	20,519	15,130	4,734	618	37	182	116	36	30	23	370
1,000-1,499 grams .....	26,869	24,748	3,666	13,898	6,641	543	1,414	1,015	241	158	254	453
1,500-1,999 grams .....	55,943	45,417	1,019	10,513	29,177	4,708	8,865	7,257	1,035	573	860	801
2,000-2,499 grams .....	177,862	87,029	767	4,107	55,462	26,693	82,808	66,692	10,856	5,260	6,059	1,966
2,500-2,999 grams .....	639,110	110,395	1,111	4,308	49,820	55,156	483,440	347,337	92,877	43,226	38,573	6,702
3,000-3,499 grams .....	1,434,698	84,825	-	4,955	36,318	43,552	1,215,035	718,399	328,702	167,934	120,937	13,901
3,500-3,999 grams .....	1,127,294	35,121	-	2,449	16,287	16,385	964,314	460,764	316,002	187,548	117,637	10,222
4,000-4,499 grams .....	336,514	7,309	-	-	3,726	3,583	284,370	113,468	100,540	70,362	41,576	3,259
4,500-4,999 grams .....	55,558	1,192	-	-	564	628	46,093	17,297	16,037	12,759	7,732	541
5,000 grams or more .....	6,268	155	-	-	77	78	5,124	2,089	1,652	1,383	903	86
Not stated .....	4,822	1,102	694	108	207	93	1,371	773	359	239	157	2,192
Percent												
Very low birthweight <sup>4</sup> .....	1.4	12.0	89.2	41.7	3.7	0.4	0.1	0.1	0.0	0.0	0.1	2.5
Low birthweight <sup>5</sup> .....	7.4	43.4	95.8	74.1	46.3	21.1	3.0	4.3	1.4	1.2	2.2	9.7
Number												
White, total .....	3,093,057	299,923	15,912	29,484	141,145	113,382	2,491,649	1,374,026	710,854	406,769	270,957	30,528
Less than 500 grams .....	3,006	2,907	2,768	126	11	2	9	3	4	2	-	90
500-999 grams .....	12,785	12,404	8,864	3,119	397	24	127	76	27	24	17	237
1,000-1,499 grams .....	17,782	16,424	2,251	9,214	4,583	376	907	657	146	104	151	300
1,500-1,999 grams .....	38,421	31,246	561	7,154	20,295	3,236	6,074	4,998	677	399	583	518
2,000-2,499 grams .....	123,825	61,607	414	2,429	39,770	18,994	56,804	45,875	7,365	3,564	4,134	1,280
2,500-2,999 grams .....	458,830	79,396	618	2,443	35,280	41,055	347,497	249,634	66,350	31,513	27,436	4,501
3,000-3,499 grams .....	1,127,144	61,717	-	3,151	25,150	33,416	960,282	565,664	260,318	134,300	94,688	10,457
3,500-3,999 grams .....	956,042	26,624	-	1,769	12,088	12,767	821,552	390,155	270,220	161,177	99,510	8,356
4,000-4,499 grams .....	296,883	5,805	-	-	2,945	2,860	251,658	99,439	89,541	62,678	36,654	2,766
4,500-4,999 grams .....	49,494	944	-	-	425	519	41,206	15,179	14,454	11,573	6,883	461
5,000 grams or more .....	5,415	122	-	-	56	66	4,445	1,746	1,463	1,236	784	64
Not stated .....	3,430	727	436	79	145	67	1,088	600	289	199	117	1,498
Percent												
Very low birthweight <sup>4</sup> .....	1.1	10.6	89.7	42.4	3.5	0.4	0.0	0.1	0.0	0.0	0.1	2.2
Low birthweight <sup>5</sup> .....	6.3	41.6	96.0	75.0	46.1	20.0	2.6	3.8	1.2	1.0	1.8	8.4
Number												
White, non-Hispanic .....	2,358,989	222,592	11,747	21,774	103,279	85,792	1,915,914	1,050,238	548,994	316,682	205,431	15,052
Less than 500 grams .....	2,235	2,192	2,087	94	11	-	7	2	3	2	-	36
500-999 grams .....	9,609	9,398	6,630	2,448	299	21	93	56	19	18	12	106
1,000-1,499 grams .....	13,521	12,625	1,629	7,147	3,557	292	638	469	95	74	103	155
1,500-1,999 grams .....	29,786	24,412	383	5,523	15,937	2,569	4,680	3,883	494	303	436	258
2,000-2,499 grams .....	94,688	47,876	284	1,697	30,944	14,951	43,035	34,945	5,447	2,643	3,120	657
2,500-2,999 grams .....	338,305	59,738	401	1,586	26,027	31,724	256,520	185,272	48,242	23,006	19,918	2,129
3,000-3,499 grams .....	839,320	42,980	-	2,009	16,307	24,664	721,732	425,755	195,058	100,919	69,557	5,051
3,500-3,999 grams .....	745,169	18,095	-	1,204	7,839	9,052	646,251	305,794	213,046	127,411	76,659	4,164
4,000-4,499 grams .....	239,174	3,965	-	-	1,936	2,029	204,518	79,981	73,112	51,425	29,243	1,448
4,500-4,999 grams .....	40,507	652	-	-	272	380	33,947	12,201	12,047	9,699	5,647	261
5,000 grams or more .....	4,333	84	-	-	34	50	3,572	1,369	1,185	1,018	639	38
Not stated .....	2,342	575	333	66	116	60	921	511	246	164	97	749
Percent												
Very low birthweight <sup>4</sup> .....	1.1	10.9	90.6	44.6	3.7	0.4	0.0	0.1	0.0	0.0	0.1	2.1
Low birthweight <sup>5</sup> .....	6.4	43.5	96.5	77.9	49.2	20.8	2.5	3.7	1.1	1.0	1.8	8.5

See footnotes at end of table.

**Table 43. Live births by birthweight and percent very low and low birthweight, by period of gestation and race and Hispanic origin of mother: United States, 1996 --Con.**

Birthweight <sup>1</sup> and race and Hispanic origin of mother	All births	Period of gestation <sup>2</sup>										Not stated
		Preterm					Term			Postterm		
		Total under 37 weeks	Under 28 weeks	28-31 weeks	32-35 weeks	36 weeks	Total 37-41 weeks	37-39 weeks	40 weeks	41 weeks	42 weeks and over	
Number												
Black, total .....	594,781	102,539	10,596	13,766	48,020	30,157	438,434	263,430	113,934	61,070	48,351	5,457
Less than 500 grams .....	2,273	2,218	2,139	69	10	-	-	-	-	-	2	53
500-999 grams .....	7,536	7,382	5,747	1,439	185	11	50	36	8	6	6	98
1,000-1,499 grams .....	7,949	7,309	1,280	4,098	1,788	143	438	315	78	45	89	113
1,500-1,999 grams .....	14,937	12,177	427	2,891	7,641	1,218	2,332	1,876	297	159	236	192
2,000-2,499 grams .....	44,560	21,412	329	1,506	13,234	6,343	21,054	16,750	2,898	1,406	1,648	446
2,500-2,999 grams .....	138,659	25,327	431	1,634	12,089	11,173	103,017	73,530	20,305	9,182	9,040	1,275
3,000-3,499 grams .....	224,383	18,336	-	1,535	8,952	7,849	184,282	109,734	49,461	25,087	20,081	1,684
3,500-3,999 grams .....	121,528	6,690	-	567	3,347	2,776	100,779	49,666	32,166	18,947	13,210	849
4,000-4,499 grams .....	27,199	1,140	-	-	610	530	22,463	9,665	7,488	5,310	3,370	226
4,500-4,999 grams .....	4,140	185	-	-	100	85	3,343	1,493	1,050	800	573	39
5,000 grams or more .....	565	27	-	-	17	10	463	234	131	98	69	6
Not stated .....	1,052	336	243	27	47	19	213	131	52	30	27	476
Percent												
Very low birthweight <sup>4</sup> .....	3.0	16.5	88.5	40.8	4.1	0.5	0.1	0.1	0.1	0.1	0.2	5.3
Low birthweight <sup>5</sup> .....	13.0	49.4	95.8	72.8	47.6	25.6	5.4	7.2	2.9	2.6	4.1	18.1
Number												
Black, non-Hispanic .....	578,099	100,371	10,390	13,509	46,995	29,477	425,729	256,301	110,426	59,002	46,962	5,037
Less than 500 grams .....	2,221	2,167	2,090	67	10	-	-	-	-	-	2	52
500-999 grams .....	7,387	7,239	5,631	1,417	180	11	49	35	8	6	6	93
1,000-1,499 grams .....	7,811	7,185	1,260	4,017	1,766	142	426	308	74	44	88	112
1,500-1,999 grams .....	14,660	11,954	418	2,844	7,494	1,198	2,287	1,839	295	153	233	186
2,000-2,499 grams .....	43,627	20,967	325	1,478	12,951	6,213	20,612	16,401	2,841	1,370	1,619	429
2,500-2,999 grams .....	135,480	24,822	427	1,605	11,854	10,936	100,592	71,826	19,816	8,950	8,856	1,210
3,000-3,499 grams .....	218,044	17,890	-	1,503	8,728	7,659	179,007	106,727	47,977	24,303	19,550	1,597
3,500-3,999 grams .....	117,360	6,495	-	551	3,256	2,688	97,339	48,080	31,037	18,222	12,743	783
4,000-4,499 grams .....	26,118	1,119	-	-	599	520	21,559	9,291	7,193	5,075	3,229	211
4,500-4,999 grams .....	3,967	181	-	-	99	82	3,202	1,439	1,004	759	546	38
5,000 grams or more .....	544	24	-	-	15	9	449	229	129	91	65	6
Not stated .....	880	328	239	27	43	19	207	126	52	29	25	320
Percent												
Very low birthweight <sup>4</sup> .....	3.0	16.6	88.5	40.8	4.2	0.5	0.1	0.1	0.1	0.1	0.2	5.4
Low birthweight <sup>5</sup> .....	13.1	49.5	95.8	72.9	47.7	25.7	5.5	7.3	2.9	2.7	4.2	18.5
Number												
Hispanic <sup>6</sup> .....	701,339	74,850	3,944	7,493	36,765	26,648	549,392	310,366	153,740	85,286	62,824	14,273
Less than 500 grams .....	694	651	622	29	-	-	2	1	1	-	-	41
500-999 grams .....	3,030	2,868	2,124	641	99	4	34	20	8	6	5	123
1,000-1,499 grams .....	4,105	3,650	590	2,015	969	76	271	188	55	28	46	138
1,500-1,999 grams .....	8,196	6,481	176	1,546	4,121	638	1,336	1,071	171	94	142	237
2,000-2,499 grams .....	27,987	13,148	131	713	8,399	3,905	13,284	10,543	1,847	894	972	583
2,500-2,999 grams .....	116,713	18,978	210	848	9,006	8,914	88,150	62,374	17,562	8,214	7,308	2,277
3,000-3,499 grams .....	276,870	18,401	-	1,127	8,780	8,494	228,924	134,521	62,462	31,941	24,347	5,198
3,500-3,999 grams .....	199,955	8,408	-	562	4,204	3,642	165,788	80,075	53,917	31,796	21,762	3,997
4,000-4,499 grams .....	53,916	1,806	-	-	988	818	43,909	18,308	15,219	10,382	6,959	1,242
4,500-4,999 grams .....	8,315	283	-	-	148	135	6,715	2,817	2,203	1,695	1,132	185
5,000 grams or more .....	1,028	40	-	-	24	16	831	369	258	204	132	25
Not stated .....	530	136	91	12	27	6	148	79	37	32	19	227
Percent												
Very low birthweight <sup>4</sup> .....	1.1	9.6	86.6	35.9	2.9	0.3	0.1	0.1	0.0	0.0	0.1	2.2
Low birthweight <sup>5</sup> .....	6.3	35.9	94.5	66.1	37.0	17.4	2.7	3.8	1.4	1.2	1.9	8.0

- Quantity zero.  
 0.0 Quantity more than zero but less than 0.05.  
<sup>1</sup> Equivalents of the gram weights in pounds and ounces are shown in the Technical notes.  
<sup>2</sup> Expressed in completed weeks.  
<sup>3</sup> Includes races other than white and black and origin not stated.  
<sup>4</sup> Birthweight of less than 1,500 grams.  
<sup>5</sup> Birthweight of less than 2,500 grams.  
<sup>6</sup> Persons of Hispanic origin may be of any race.

**Table 44. Percent of live births preterm and percent of live births of low birthweight and very low birthweight, by race of mother: United States, 1981-96**

Year	Preterm <sup>1</sup>			Low birthweight <sup>3</sup>			Very low birthweight <sup>4</sup>		
	All races <sup>2</sup>	White	Black	All races <sup>2</sup>	White	Black	All races <sup>2</sup>	White	Black
1996 .....	11.0	9.8	17.4	7.4	6.3	13.0	1.37	1.09	2.99
1995 .....	11.0	9.7	17.7	7.3	6.2	13.1	1.35	1.06	2.97
1994 .....	11.0	9.6	18.1	7.3	6.1	13.2	1.33	1.02	2.96
1993 .....	11.0	9.5	18.5	7.2	6.0	13.3	1.33	1.01	2.96
1992 .....	10.7	9.1	18.4	7.1	5.8	13.3	1.29	0.96	2.96
1991 .....	10.8	9.1	18.9	7.1	5.8	13.6	1.29	0.96	2.96
1990 .....	10.6	8.9	18.8	7.0	5.7	13.3	1.27	0.95	2.92
1989 .....	10.6	8.8	18.9	7.0	5.7	13.5	1.28	0.95	2.95
1988 .....	10.2	8.5	18.7	6.9	5.7	13.3	1.24	0.93	2.86
1987 .....	10.2	8.5	18.4	6.9	5.7	13.0	1.24	0.94	2.79
1986 .....	10.0	8.4	18.0	6.8	5.7	12.8	1.21	0.93	2.73
1985 .....	9.8	8.2	17.8	6.8	5.7	12.6	1.21	0.93	2.71
1984 <sup>5</sup> .....	9.4	7.9	17.1	6.7	5.6	12.6	1.19	0.93	2.60
1983 <sup>5</sup> .....	9.6	8.0	17.7	6.8	5.7	12.8	1.19	0.92	2.60
1982 <sup>5</sup> .....	9.5	8.0	17.4	6.8	5.6	12.6	1.18	0.91	2.56
1981 <sup>5</sup> .....	9.4	7.9	17.3	6.8	5.7	12.7	1.16	0.91	2.52

1 Births of less than 37 completed weeks gestation.  
 2 Includes races other than white and black.  
 3 Less than 2,500 grams (5 lb. 8 oz).  
 4 Less than 1,500 grams (3 lb. 4 oz).  
 5 Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.



**Table 45. Number and percent low birthweight and number of live births by birthweight, by age and race and Hispanic origin of mother: United States, 1996**

Age and race and Hispanic origin of mother	Low birthweight <sup>1</sup>		Birthweight <sup>2</sup>												
	Number	Percent	Total	Less than 500 grams	500-999 grams	1,000-1,499 grams	1,500-1,999 grams	2,000-2,499 grams	2,500-2,999 grams	3,000-3,499 grams	3,500-3,999 grams	4,000-4,499 grams	4,500-4,999 grams	5,000-grams or more	Not stated
<b>All races <sup>3</sup></b>															
All ages .....	287,230	7.4	3,891,494	5,462	21,094	26,869	55,943	177,862	639,110	1,434,698	1,127,294	336,514	55,558	6,268	4,822
Under 15 years .....	1,422	12.8	11,148	34	157	161	289	781	2,903	4,367	2,056	350	27	3	20
15-19 years .....	45,667	9.3	491,577	839	3,426	4,201	8,539	28,662	105,280	196,839	115,186	24,728	3,028	230	619
15 years .....	3,196	11.2	28,540	64	270	318	618	1,926	6,778	11,537	5,764	1,098	120	6	41
16 years .....	6,037	10.0	60,287	111	498	603	1,125	3,700	13,835	24,331	13,150	2,595	243	21	75
17 years .....	9,374	9.7	96,894	163	674	852	1,747	5,938	21,218	39,155	21,836	4,584	557	36	134
18 years .....	12,506	9.3	135,059	244	897	1,139	2,401	7,825	28,870	53,945	32,024	6,689	803	69	153
19 years .....	14,554	8.5	170,797	257	1,087	1,289	2,648	9,273	34,579	67,871	42,412	9,762	1,305	98	216
20-24 years .....	69,809	7.4	945,210	1,389	4,937	6,125	12,973	44,385	170,289	365,392	258,783	68,692	10,091	995	1,159
25-29 years .....	69,499	6.5	1,071,287	1,351	5,253	6,401	13,315	43,179	161,557	392,935	327,639	100,223	16,379	1,856	1,199
30-34 years .....	61,331	6.8	897,913	1,126	4,422	5,793	12,485	37,505	127,695	315,106	281,123	93,262	16,403	1,877	1,116
35-39 years .....	32,268	8.1	399,510	581	2,391	3,374	6,762	19,160	59,530	135,479	121,067	41,418	8,127	1,062	559
40-44 years .....	6,782	9.5	71,804	137	480	765	1,462	3,938	11,331	23,611	20,670	7,588	1,452	228	142
45-49 years .....	452	14.9	3,045	5	28	49	118	252	525	969	770	253	51	17	8
<b>White, total</b>															
All ages .....	195,819	6.3	3,093,057	3,006	12,785	17,782	38,421	123,825	458,830	1,127,144	956,042	296,883	49,494	5,415	3,430
Under 15 years .....	579	10.5	5,526	12	63	69	112	323	1,264	2,248	1,173	234	15	3	10
15-19 years .....	27,238	7.9	344,685	432	1,902	2,392	5,123	17,389	66,645	138,613	88,942	20,194	2,498	188	367
15 years .....	1,634	9.6	16,978	35	130	162	333	974	3,478	6,960	3,967	828	90	3	18
16 years .....	3,390	8.6	39,401	62	274	323	627	2,104	8,090	16,000	9,623	2,047	196	17	38
17 years .....	5,489	8.2	66,997	72	382	500	1,023	3,512	13,259	27,317	16,627	3,733	462	32	78
18 years .....	7,614	7.9	96,246	125	512	663	1,497	4,817	18,680	38,628	25,048	5,461	656	57	102
19 years .....	9,111	7.3	125,063	138	604	744	1,643	5,982	23,138	49,708	33,677	8,125	1,094	79	131
20-24 years .....	45,667	6.3	726,669	715	2,785	3,873	8,574	29,720	119,256	279,281	213,094	59,009	8,748	836	778
25-29 years .....	49,346	5.6	878,449	766	3,299	4,399	9,460	31,422	120,483	318,176	283,770	89,498	14,692	1,610	874
30-34 years .....	44,550	6.0	747,436	669	2,843	4,154	9,117	27,767	97,137	258,637	245,648	84,082	14,877	1,647	858
35-39 years .....	23,305	7.1	329,782	325	1,575	2,323	4,921	14,161	45,186	110,495	105,127	36,992	7,337	919	421
40-44 years .....	4,764	8.2	58,062	83	296	525	1,022	2,838	8,452	18,932	17,660	6,659	1,284	196	115
45-49 years .....	370	15.2	2,448	4	22	47	92	205	407	762	628	215	43	16	7
<b>White, non-Hispanic</b>															
All ages .....	149,839	6.4	2,358,989	2,235	9,609	13,521	29,786	94,688	338,305	839,320	745,169	239,174	40,507	4,333	2,342
Under 15 years .....	285	11.3	2,532	5	36	33	63	148	553	950	589	136	12	1	6
15-19 years .....	18,257	8.1	225,197	318	1,305	1,597	3,463	11,574	41,780	87,590	60,637	14,630	1,927	145	231
15 years .....	863	9.5	9,071	26	80	82	173	502	1,782	3,532	2,294	528	61	2	9
16 years .....	2,063	8.9	23,312	46	174	193	385	1,265	4,477	9,122	6,065	1,412	139	13	21
17 years .....	3,564	8.4	42,686	55	259	338	682	2,230	8,104	16,806	11,130	2,661	345	24	52
18 years .....	5,240	8.2	64,290	91	357	437	1,041	3,314	12,123	24,964	17,413	3,933	515	43	59
19 years .....	6,527	7.6	85,838	100	435	547	1,182	4,263	15,294	33,166	23,735	6,096	867	63	90
20-24 years .....	32,675	6.4	508,056	520	1,989	2,769	6,298	21,099	81,124	189,813	152,221	44,286	6,777	642	518
25-29 years .....	38,834	5.7	683,376	568	2,542	3,493	7,505	24,726	91,692	242,996	223,642	72,242	12,036	1,308	626
30-34 years .....	36,465	5.9	616,224	512	2,273	3,340	7,482	22,858	78,751	210,923	204,792	70,847	12,542	1,321	583
35-39 years .....	19,184	7.0	274,431	250	1,218	1,843	4,081	11,792	37,258	91,179	88,310	31,336	6,111	756	297
40-44 years .....	3,816	8.1	47,215	61	224	400	814	2,317	6,820	15,267	14,496	5,525	1,064	151	76
45-49 years .....	323	16.5	1,958	1	22	46	80	174	327	602	482	172	38	9	5

See footnotes at end of table.

**Table 45. Number and percent low birthweight and number of live births by birthweight, by age and race and Hispanic origin of mother: United States, 1996--Con.**

Age and race and Hispanic origin of mother	Low birthweight <sup>1</sup>		Birthweight <sup>2</sup>												
	Number	Percent	Total	Less than 500 grams	500-999 grams	1,000-1,499 grams	1,500-1,999 grams	2,000-2,499 grams	2,500-2,999 grams	3,000-3,499 grams	3,500-3,999 grams	4,000-4,499 grams	4,500-4,999 grams	5,000-grams or more	Not stated
<b>Black, total</b>															
All ages .....	77,255	13.0	594,781	2,273	7,536	7,949	14,937	44,560	138,659	224,383	121,528	27,199	4,140	565	1,052
Under 15 years .....	797	15.4	5,193	21	92	80	165	439	1,519	1,961	799	99	9	-	9
15-19 years .....	17,104	13.1	130,596	392	1,428	1,685	3,155	10,444	34,929	51,621	22,615	3,695	400	30	202
15 years .....	1,454	13.9	10,498	28	128	146	263	889	3,050	4,128	1,588	232	22	2	22
16 years .....	2,465	13.2	18,753	45	209	267	458	1,486	5,277	7,448	3,066	438	34	1	24
17 years .....	3,630	13.6	26,775	85	272	331	672	2,270	7,220	10,577	4,506	715	75	4	48
18 years .....	4,511	13.1	34,394	116	367	438	829	2,761	9,188	13,573	5,967	997	107	11	40
19 years .....	5,044	12.6	40,176	118	452	503	933	3,038	10,194	15,895	7,488	1,313	162	12	68
20-24 years .....	21,345	11.9	179,361	636	2,070	2,070	3,932	12,686	42,556	70,315	36,310	7,398	1,017	119	301
25-29 years .....	16,338	12.3	133,204	545	1,764	1,704	3,203	9,122	28,699	49,859	29,442	7,320	1,140	167	239
30-34 years .....	13,139	14.0	94,295	415	1,383	1,369	2,685	7,287	19,676	33,326	21,275	5,572	978	142	187
35-39 years .....	6,991	16.0	43,716	218	698	850	1,472	3,753	9,453	14,647	9,345	2,605	494	86	95
40-44 years .....	1,488	18.4	8,124	46	144	189	309	800	1,766	2,560	1,676	495	100	21	18
45-49 years .....	53	18.2	292	-	6	2	16	29	61	94	66	15	2	-	1
<b>Black, non-Hispanic</b>															
All ages .....	75,706	13.1	578,099	2,221	7,387	7,811	14,660	43,627	135,480	218,044	117,360	26,118	3,967	544	880
Under 15 years .....	786	15.5	5,084	21	91	80	162	432	1,490	1,917	778	96	9	-	8
15-19 years .....	16,817	13.2	127,616	385	1,407	1,661	3,105	10,259	34,254	50,364	21,980	3,603	388	29	181
15 years .....	1,440	14.0	10,301	28	127	145	263	877	2,990	4,048	1,552	228	21	2	20
16 years .....	2,430	13.2	18,367	45	207	264	452	1,462	5,190	7,278	2,985	429	33	1	21
17 years .....	3,559	13.6	26,134	83	269	324	660	2,223	7,091	10,288	4,377	701	71	4	43
18 years .....	4,431	13.2	33,616	112	364	429	811	2,715	9,006	13,271	5,792	965	104	10	37
19 years .....	4,957	12.7	39,198	117	440	499	919	2,982	9,977	15,479	7,274	1,280	159	12	60
20-24 years .....	20,973	12.0	174,958	624	1,987	2,040	3,865	12,457	41,683	68,566	35,254	7,136	973	116	257
25-29 years .....	15,987	12.4	129,002	528	1,728	1,673	3,154	8,904	27,957	48,296	28,340	6,989	1,088	160	185
30-34 years .....	12,824	14.1	91,050	402	1,351	1,337	2,622	7,112	19,132	32,198	20,365	5,302	942	136	151
35-39 years .....	6,818	16.2	42,279	217	679	830	1,437	3,655	9,196	14,146	8,978	2,505	469	83	84
40-44 years .....	1,451	18.6	7,835	44	138	188	301	780	1,709	2,472	1,602	472	96	20	13
45-49 years .....	50	18.2	275	-	6	2	14	28	59	85	63	15	2	-	1
<b>Hispanic <sup>4</sup></b>															
All ages .....	44,012	6.3	701,339	694	3,030	4,105	8,196	27,987	116,713	276,870	199,955	53,916	8,315	1,028	530
Under 15 years .....	301	9.9	3,056	7	28	36	51	179	731	1,319	602	96	3	2	2
15-19 years .....	8,958	7.5	118,878	109	601	797	1,639	5,812	24,830	50,914	28,046	5,426	559	46	99
15 years .....	779	9.8	7,971	9	49	82	161	478	1,733	3,446	1,683	295	28	1	6
16 years .....	1,332	8.3	16,139	14	99	127	242	850	3,619	6,903	3,577	632	57	5	14
17 years .....	1,929	8.0	24,234	18	128	165	336	1,282	5,167	10,505	5,449	1,040	115	8	21
18 years .....	2,355	7.4	31,711	33	151	227	451	1,493	6,537	13,610	7,538	1,489	138	15	29
19 years .....	2,563	6.6	38,823	35	174	196	449	1,709	7,774	16,450	9,799	1,970	221	17	29
20-24 years .....	12,668	5.9	214,173	172	779	1,076	2,216	8,425	37,657	87,969	59,377	14,251	1,898	188	165
25-29 years .....	9,966	5.4	185,478	180	720	868	1,831	6,367	27,673	71,895	56,880	16,180	2,467	287	130
30-34 years .....	7,439	6.2	119,690	150	507	766	1,502	4,514	17,025	43,840	37,000	11,884	2,115	306	81
35-39 years .....	3,762	7.6	49,812	54	325	449	752	2,182	7,242	17,467	15,053	5,028	1,072	148	40
40-44 years .....	881	9.0	9,819	19	70	112	196	484	1,484	3,323	2,864	1,014	197	44	12
45-49 years .....	37	8.6	433	3	-	1	9	24	71	143	133	37	4	7	1

- Quantity zero.

<sup>1</sup> Less than 2,500 grams.

<sup>2</sup> Equivalents of gram weights in terms of pounds and ounces are shown in Technical notes.

<sup>3</sup> Includes races other than white and black and origin not stated.

<sup>4</sup> Persons of Hispanic origin may be of any race.

**Table 46. Number and percent of births of low birthweight by race and Hispanic origin of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence. Low birthweight is birthweight of less than 2,500 grams (5 lb 8 oz)]

State	Number						Percent					
	All races <sup>1</sup>	White		Black		Hispanic <sup>2</sup>	All races <sup>1</sup>	White		Black		Hispanic <sup>2</sup>
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States <sup>3</sup> .....	287,230	195,819	149,839	77,255	75,706	44,012	7.4	6.3	6.4	13.0	13.1	6.3
Alabama .....	5,614	2,893	2,837	2,668	2,665	60	9.3	7.2	7.2	13.6	13.7	6.4
Alaska .....	549	339	318	51	48	39	5.5	5.0	5.1	12.1	12.4	6.0
Arizona .....	5,039	4,287	2,552	288	277	1,767	6.7	6.5	6.6	12.4	12.4	6.3
Arkansas .....	3,077	1,959	1,886	1,072	1,066	77	8.5	7.0	7.1	13.6	13.6	5.9
California .....	32,729	24,044	10,307	4,544	4,418	13,820	6.1	5.5	5.6	11.8	11.9	5.4
Colorado .....	4,906	4,334	3,253	387	370	1,064	8.8	8.5	8.4	15.0	15.1	8.6
Connecticut .....	3,203	2,417	1,792	674	633	494	7.2	6.4	5.9	12.9	13.1	8.7
Delaware .....	863	509	461	334	331	50	8.5	6.7	6.7	14.1	14.1	7.6
District of Columbia .....	1,196	148	88	1,034	1,026	62	14.3	7.2	7.1	16.7	16.7	8.0
Florida .....	14,868	9,348	7,159	5,171	5,067	2,281	7.9	6.6	6.6	12.2	12.3	6.4
Georgia .....	9,729	4,692	4,309	4,887	4,853	339	8.5	6.4	6.5	12.7	12.7	5.4
Hawaii .....	1,330	234	200	44	41	131	7.3	4.9	4.9	8.6	8.4	6.1
Idaho .....	1,071	1,023	863	3	3	146	5.8	5.7	5.5	*	*	6.7
Illinois .....	14,617	8,842	6,940	5,246	5,221	1,919	8.0	6.3	6.4	14.5	14.5	5.8
Indiana .....	6,327	5,040	4,820	1,217	1,210	208	7.6	6.9	6.9	13.9	13.9	7.1
Iowa .....	2,359	2,125	2,003	154	145	88	6.4	6.0	6.0	14.7	14.8	5.9
Kansas .....	2,545	2,107	1,896	370	370	194	6.9	6.4	6.5	13.4	13.5	6.0
Kentucky .....	4,144	3,499	3,456	616	613	41	7.9	7.4	7.4	12.7	12.7	7.4
Louisiana .....	6,440	2,561	2,500	3,777	3,769	66	9.9	6.9	6.9	14.3	14.3	5.2
Maine .....	809	786	766	12	12	6	5.9	5.8	5.9	*	*	*
Maryland .....	6,158	2,914	2,692	3,064	3,018	201	8.6	6.3	6.4	13.4	13.4	6.2
Massachusetts .....	5,069	4,082	3,510	750	655	613	6.4	6.0	5.7	10.4	11.2	8.0
Michigan .....	10,187	6,717	6,044	3,268	3,198	306	7.7	6.4	6.4	13.6	13.5	6.1
Minnesota .....	3,707	3,094	2,866	373	370	137	5.8	5.4	5.7	12.0	12.1	5.9
Mississippi .....	4,047	1,571	1,555	2,440	2,439	17	9.9	7.3	7.4	12.9	12.9	*
Missouri .....	5,540	4,012	3,911	1,428	1,425	96	7.5	6.5	6.5	12.8	12.9	6.3
Montana .....	694	593	544	5	5	24	6.4	6.2	6.1	*	*	8.1
Nebraska .....	1,462	1,287	1,150	129	128	119	6.3	6.0	6.0	10.7	10.7	6.4
Nevada .....	1,960	1,528	1,100	276	271	430	7.5	6.8	7.2	14.0	14.0	6.2
New Hampshire .....	695	673	631	8	7	15	4.8	4.7	4.6	*	*	*
New Jersey .....	8,741	5,499	4,129	2,677	2,592	1,380	7.7	6.4	6.2	13.1	13.5	7.1
New Mexico .....	2,046	1,741	732	63	58	1,021	7.5	7.5	7.3	13.5	13.3	7.7
New York .....	20,231	12,487	7,211	6,575	5,915	3,970	7.7	6.5	6.1	11.9	12.3	7.5
North Carolina .....	9,115	5,022	4,702	3,767	3,755	335	8.7	6.8	6.9	13.9	13.9	6.2
North Dakota .....	479	423	411	9	8	9	5.7	5.7	5.8	*	*	*
Ohio .....	11,387	8,326	8,111	2,901	2,891	205	7.5	6.5	6.5	13.2	13.2	6.8
Oklahoma .....	3,372	2,487	2,299	582	579	192	7.4	6.8	6.8	13.1	13.1	6.8
Oregon .....	2,325	2,099	1,776	100	100	323	5.3	5.2	5.1	11.2	11.5	5.9
Pennsylvania .....	11,153	8,028	7,397	2,891	2,850	638	7.5	6.5	6.3	14.1	14.1	9.5
Rhode Island .....	869	723	502	112	90	122	6.9	6.5	6.1	12.0	12.1	7.4
South Carolina .....	4,698	2,263	2,202	2,374	2,370	62	9.2	7.0	7.0	13.2	13.2	6.4
South Dakota .....	611	506	495	8	8	11	5.8	5.8	5.8	*	*	*
Tennessee .....	6,515	4,148	4,047	2,272	2,268	99	8.8	7.3	7.3	14.2	14.2	7.0
Texas .....	23,782	18,326	8,934	4,803	4,770	9,392	7.2	6.5	6.4	12.4	12.4	6.6
Utah .....	2,790	2,625	2,299	39	38	322	6.6	6.6	6.4	12.0	15.1	8.2
Vermont .....	417	412	383	1	1	4	6.2	6.2	6.0	*	*	*
Virginia .....	7,056	4,205	3,838	2,546	2,538	369	7.7	6.3	6.2	12.2	12.2	7.2
Washington .....	4,327	3,572	2,951	333	313	489	5.6	5.3	5.2	10.8	10.9	5.5
West Virginia .....	1,653	1,554	1,550	92	92	6	8.0	7.8	7.8	12.4	12.5	*
Wisconsin .....	4,200	3,219	3,019	814	810	203	6.3	5.6	5.5	12.7	12.7	6.5
Wyoming .....	529	496	442	6	6	50	8.4	8.3	8.1	*	*	9.6
Puerto Rico .....	6,569	6,030	---	534	---	---	10.4	10.4	---	10.7	---	---
Virgin Islands .....	142	19	2	119	103	16	7.5	*	*	7.9	7.6	*
Guam .....	304	11	10	3	3	1	7.2	*	*	*	*	*

\* Figure does not meet standards of reliability or precision.  
 --- Data not available.  
<sup>1</sup> Includes races other than white and black and origin not stated.  
<sup>2</sup> Persons of Hispanic origin may be of any race.  
<sup>3</sup> Excludes data for Puerto Rico, Virgin Islands, and Guam.

**Table 47. Number and percent of births of very low birthweight by race and Hispanic origin of mother: United States and each State, Puerto Rico, Virgin Islands, and Guam, 1996**

[By place of residence. Very low birthweight is birthweight of less than 1,500 grams (3 lb 4 oz)]

State	Number						Percent					
	All races <sup>1</sup>	White		Black		Hispanic <sup>2</sup>	All races <sup>1</sup>	White		Black		Hispanic <sup>2</sup>
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States <sup>3</sup>	53,425	33,573	25,365	17,758	17,419	7,829	1.4	1.1	1.1	3.0	3.0	1.1
Alabama	1,166	536	520	623	621	18	1.9	1.3	1.3	3.2	3.2	*
Alaska	98	52	46	15	13	14	1.0	0.8	0.7	*	*	*
Arizona	842	709	407	68	67	306	1.1	1.1	1.1	2.9	3.0	1.1
Arkansas	596	350	339	238	235	13	1.6	1.3	1.3	3.0	3.0	*
California	5,813	4,238	1,675	971	944	2,571	1.1	1.0	0.9	2.5	2.5	1.0
Colorado	715	634	466	61	58	159	1.3	1.2	1.2	2.4	2.4	1.3
Connecticut	653	459	323	171	160	105	1.5	1.2	1.1	3.3	3.3	1.9
Delaware	183	99	92	79	79	7	1.8	1.3	1.3	3.3	3.4	*
District of Columbia	296	20	15	274	271	7	3.5	1.0	*	4.4	4.4	*
Florida	2,831	1,606	1,210	1,172	1,148	413	1.5	1.1	1.1	2.8	2.8	1.2
Georgia	1,915	797	725	1,099	1,094	63	1.7	1.1	1.1	2.9	2.9	1.0
Hawaii	196	45	42	9	8	17	1.1	0.9	1.0	*	*	*
Idaho	158	148	122	1	1	21	0.8	0.8	0.8	*	*	1.0
Illinois	2,759	1,545	1,219	1,141	1,136	330	1.5	1.1	1.1	3.2	3.2	1.0
Indiana	1,168	890	834	270	270	50	1.4	1.2	1.2	3.1	3.1	1.7
Iowa	449	396	368	40	39	15	1.2	1.1	1.1	3.8	4.0	*
Kansas	508	402	363	94	94	35	1.4	1.2	1.2	3.4	3.4	1.1
Kentucky	715	581	572	131	131	8	1.4	1.2	1.2	2.7	2.7	*
Louisiana	1,233	410	405	808	806	8	1.9	1.1	1.1	3.1	3.1	*
Maine	167	162	157	3	3	1	1.2	1.2	1.2	*	*	*
Maryland	1,357	511	462	816	808	44	1.9	1.1	1.1	3.6	3.6	1.4
Massachusetts	907	693	585	181	164	105	1.1	1.0	0.9	2.5	2.8	1.4
Michigan	1,989	1,210	1,094	745	727	60	1.5	1.1	1.2	3.1	3.1	1.2
Minnesota	706	571	536	89	87	30	1.1	1.0	1.1	2.9	2.9	1.3
Mississippi	787	246	245	533	533	1	1.9	1.1	1.2	2.8	2.8	*
Missouri	944	631	608	302	302	22	1.3	1.0	1.0	2.7	2.7	1.5
Montana	121	105	90	-	-	6	1.1	1.1	1.0	*	*	*
Nebraska	290	255	227	31	31	26	1.2	1.2	1.2	2.6	2.6	1.4
Nevada	283	209	163	52	52	46	1.1	0.9	1.1	2.6	2.7	0.7
New Hampshire	118	115	103	-	-	3	0.8	0.8	0.8	*	*	*
New Jersey	1,765	1,016	755	673	656	253	1.5	1.2	1.1	3.3	3.4	1.3
New Mexico	312	261	107	12	12	158	1.1	1.1	1.1	*	*	1.2
New York	3,923	2,130	1,172	1,630	1,486	729	1.5	1.1	1.0	2.9	3.1	1.4
North Carolina	1,864	908	860	891	888	54	1.8	1.2	1.3	3.3	3.3	1.0
North Dakota	73	62	59	2	1	2	0.9	0.8	0.8	*	*	*
Ohio	2,143	1,450	1,405	674	672	42	1.4	1.1	1.1	3.1	3.1	1.4
Oklahoma	518	333	313	137	136	21	1.1	0.9	0.9	3.1	3.1	0.7
Oregon	392	349	288	18	18	62	0.9	0.9	0.8	*	*	1.1
Pennsylvania	2,070	1,390	1,280	650	637	114	1.4	1.1	1.1	3.2	3.2	1.7
Rhode Island	129	98	64	27	22	21	1.0	0.9	0.8	2.9	3.0	1.3
South Carolina	922	384	367	531	531	16	1.8	1.2	1.2	3.0	3.0	*
South Dakota	101	79	79	2	2	1	1.0	0.9	0.9	*	*	*
Tennessee	1,255	712	701	531	531	11	1.7	1.3	1.3	3.3	3.3	*
Texas	4,121	3,019	1,452	1,011	1,004	1,571	1.2	1.1	1.0	2.6	2.6	1.1
Utah	457	417	363	12	12	53	1.1	1.0	1.0	*	*	1.3
Vermont	63	63	53	-	-	1	0.9	0.9	0.8	*	*	*
Virginia	1,418	726	657	651	646	70	1.5	1.1	1.1	3.1	3.1	1.4
Washington	788	642	528	80	75	87	1.0	1.0	0.9	2.6	2.6	1.0
West Virginia	253	233	232	18	18	2	1.2	1.2	1.2	*	*	*
Wisconsin	829	612	563	190	189	49	1.2	1.1	1.0	3.0	3.0	1.6
Wyoming	66	64	54	1	1	8	1.1	1.1	1.0	*	*	*
Puerto Rico	841	773	---	67	---	---	1.3	1.3	---	1.3	---	---
Virgin Islands	39	3	-	35	27	4	2.0	*	*	2.3	2.0	*
Guam	32	2	1	-	-	1	0.8	*	*	*	*	*

\* Figure does not meet standards of reliability or precision.  
 - Quantity zero.  
 --- Data not available.  
<sup>1</sup> Includes races other than white and black and origin not stated.  
<sup>2</sup> Persons of Hispanic origin may be of any race.  
<sup>3</sup> Excludes data for Puerto Rico, Virgin Islands, and Guam.

**Table 48. Live births with selected abnormal conditions of the newborn and rates by age of mother, by race of mother: United States, 1996**

[Rates are number of live births with specified abnormal condition per 1,000 live births in specified group]

Abnormal condition and race of mother	All births <sup>1</sup>	Abnormal condition reported	Age of mother						Not stated	
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years		40-49 years
<b>All races<sup>2</sup></b>										
Anemia .....	3,891,494	4,240	1.1	1.2	1.1	1.1	1.1	1.2	1.2	70,766
Birth injury <sup>3</sup> .....	3,457,526	10,676	3.2	3.1	3.2	3.4	3.1	2.9	2.7	71,053
Fetal alcohol syndrome <sup>4</sup> .....	3,824,388	276	0.1	*	0.1	0.1	0.1	0.1	*	71,923
Hyaline membrane disease/RDS .....	3,891,494	25,266	6.6	7.9	6.8	6.3	6.0	6.5	6.7	70,766
Meconium aspiration syndrome .....	3,891,494	9,483	2.5	2.7	2.6	2.4	2.3	2.5	2.8	70,766
Assisted ventilation less than 30 minutes <sup>5</sup> .....	3,768,538	77,028	20.9	21.6	20.0	20.5	20.9	22.5	24.4	78,493
Assisted ventilation 30 minutes or longer <sup>5</sup> .....	3,768,538	31,996	8.7	10.5	8.7	8.1	8.0	8.9	10.9	78,493
Seizures .....	3,891,494	2,380	0.6	0.7	0.7	0.6	0.6	0.6	0.8	70,766
<b>White</b>										
Anemia .....	3,093,062	3,101	1.0	1.1	1.0	1.0	1.0	1.1	1.1	56,048
Birth injury <sup>3</sup> .....	2,720,759	9,011	3.4	3.6	3.5	3.6	3.2	3.0	2.8	57,240
Fetal alcohol syndrome <sup>4</sup> .....	3,035,128	156	0.1	*	0.0	0.1	0.0	0.1	*	57,151
Hyaline membrane disease/RDS .....	3,093,062	20,349	6.7	8.1	6.9	6.5	6.1	6.5	6.7	56,048
Meconium aspiration syndrome .....	3,093,062	7,208	2.4	2.7	2.5	2.3	2.2	2.4	2.6	56,048
Assisted ventilation less than 30 minutes <sup>5</sup> .....	3,023,488	61,757	20.9	21.1	19.7	20.6	21.0	22.7	24.8	62,637
Assisted ventilation 30 minutes or longer <sup>5</sup> .....	3,023,488	24,616	8.3	10.2	8.3	7.8	7.7	8.5	10.5	62,637
Seizures .....	3,093,062	1,826	0.6	0.6	0.6	0.6	0.6	0.6	0.8	56,048
<b>Black</b>										
Anemia .....	594,782	914	1.6	1.4	1.4	1.7	1.6	1.8	2.4	10,838
Birth injury <sup>3</sup> .....	547,344	934	1.7	1.8	1.7	1.8	1.7	1.7	*	9,999
Fetal alcohol syndrome <sup>4</sup> .....	588,351	98	0.2	*	*	0.2	0.4	*	*	10,875
Hyaline membrane disease/RDS .....	594,782	4,178	7.2	7.6	7.0	6.9	6.7	8.1	8.0	10,838
Meconium aspiration syndrome .....	594,782	1,883	3.2	2.9	2.9	3.5	3.6	3.6	4.9	10,838
Assisted ventilation less than 30 minutes <sup>5</sup> .....	554,031	12,026	22.2	22.6	21.3	21.2	22.8	25.2	25.4	11,327
Assisted ventilation 30 minutes or longer <sup>5</sup> .....	554,031	6,085	11.2	11.2	10.3	11.2	11.7	13.1	17.1	11,327
Seizures .....	594,782	467	0.8	0.8	0.8	0.8	0.8	0.8	*	10,838

\* Figure does not meet standards of reliability or precision.  
 0.0 Quantity more than zero but less than 0.05.  
<sup>1</sup> Total number of births to residents of areas reporting specified condition.  
<sup>2</sup> Includes races other than white and black.  
<sup>3</sup> Massachusetts, Nebraska, and Texas do not report this condition.  
<sup>4</sup> Wisconsin does not report this condition.  
<sup>5</sup> New York City does not report this condition.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 49. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States and the District of Columbia, 1996**

[Rates are number of live births with specified congenital anomaly per 100,000 live births in specified group]

Congenital anomaly and race of mother	All births <sup>1</sup>	Congenital anomaly reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	
<b>All races<sup>2</sup></b>										
Anencephalus .....	3,864,266	486	12.8	14.1	12.0	13.0	13.3	12.0	*	56,424
Spina bifida/Meningocele .....	3,864,266	984	25.8	27.1	31.0	27.0	21.7	18.2	*	56,424
Hydrocephalus .....	3,864,266	1,047	27.5	33.6	28.6	26.1	24.5	22.5	56.1	56,424
Microcephalus .....	3,864,266	310	8.1	9.8	7.1	8.2	7.7	8.7	*	56,424
Other central nervous system anomalies .....	3,864,266	854	22.4	26.7	23.1	22.3	19.0	22.3	28.7	56,424
Heart malformations .....	3,864,266	4,398	115.5	107.3	111.9	111.2	117.7	128.5	182.0	56,424
Other circulatory/respiratory anomalies .....	3,864,266	5,234	137.5	143.8	143.0	126.0	133.5	145.6	192.9	56,424
Rectal atresia/stenosis .....	3,864,266	343	9.0	11.0	8.9	7.5	9.1	10.7	*	56,424
Tracheo-esophageal fistula/Esophageal atresia .....	3,864,266	562	14.8	14.9	13.5	13.9	16.8	14.3	*	56,424
Omphalocele/Gastroschisis .....	3,864,266	1,029	27.0	52.1	35.0	22.3	14.8	17.7	*	56,424
Other gastrointestinal anomalies .....	3,864,266	1,259	33.1	37.9	30.8	34.5	29.0	35.8	42.4	56,424
Malformed genitalia .....	3,864,266	2,875	75.5	79.0	69.8	74.8	76.7	84.4	72.5	56,424
Renal agenesis .....	3,864,266	511	13.4	15.1	11.5	15.4	12.6	12.0	*	56,424
Other urogenital anomalies .....	3,864,266	4,505	118.3	106.7	106.6	116.9	129.1	134.8	146.4	56,424
Cleft lip/palate .....	3,864,266	3,307	86.8	91.6	91.9	84.6	83.5	85.0	72.5	56,424
Polydactyly/Syndactyly/Adactyly .....	3,864,266	3,242	85.1	111.4	94.4	78.4	74.0	73.4	83.5	56,424
Clubfoot .....	3,864,266	2,224	58.4	61.9	60.3	64.1	51.7	49.4	57.5	56,424
Diaphragmatic hernia .....	3,864,266	499	13.1	15.1	11.8	11.9	12.9	17.1	*	56,424
Other musculoskeletal/integumental anomalies .....	3,864,266	7,775	204.2	223.4	201.3	197.3	202.0	207.5	218.9	56,424
Down's syndrome .....	3,864,266	1,676	44.0	26.7	24.4	26.4	44.5	101.1	350.3	56,424
Other chromosomal anomalies .....	3,864,266	1,463	38.4	32.4	34.7	33.8	35.7	60.6	105.4	56,424
<b>White</b>										
Anencephalus .....	3,069,862	393	13.0	16.4	12.0	13.4	12.6	12.4	*	45,436
Spina bifida/Meningocele .....	3,069,862	833	27.5	31.4	34.2	28.7	22.8	17.7	*	45,436
Hydrocephalus .....	3,069,862	866	28.6	36.3	32.0	27.1	24.3	22.0	55.9	45,436
Microcephalus .....	3,069,862	219	7.2	7.3	7.2	6.9	8.1	7.1	*	45,436
Other central nervous system anomalies .....	3,069,862	691	22.8	25.5	23.2	23.6	19.4	23.6	*	45,436
Heart malformations .....	3,069,862	3,612	119.4	112.8	118.0	115.1	121.8	125.3	176.1	45,436
Other circulatory/respiratory anomalies .....	3,069,862	4,264	141.0	152.7	151.5	127.7	134.6	146.7	188.0	45,436
Rectal atresia/stenosis .....	3,069,862	291	9.6	12.9	9.3	7.9	9.6	12.1	*	45,436
Tracheo-esophageal fistula/Esophageal atresia .....	3,069,862	467	15.4	16.1	14.8	13.6	17.8	14.6	*	45,436
Omphalocele/Gastroschisis .....	3,069,862	794	26.3	56.3	34.9	21.7	13.8	16.8	*	45,436
Other gastrointestinal anomalies .....	3,069,862	1,024	33.9	36.6	33.0	35.6	28.8	38.5	40.6	45,436
Malformed genitalia .....	3,069,862	2,453	81.1	87.0	75.5	79.9	82.3	88.1	79.6	45,436
Renal agenesis .....	3,069,862	430	14.2	16.7	11.7	15.9	13.5	13.3	*	45,436
Other urogenital anomalies .....	3,069,862	3,910	129.3	118.1	122.4	124.5	139.1	141.8	155.8	45,436
Cleft lip/palate .....	3,069,862	2,881	95.3	110.5	100.8	91.3	89.7	93.4	77.9	45,436
Polydactyly/Syndactyly/Adactyly .....	3,069,862	1,838	60.8	70.6	64.5	56.4	57.3	61.4	62.7	45,436
Clubfoot .....	3,069,862	1,939	64.1	74.7	66.6	70.1	55.4	51.5	62.7	45,436
Diaphragmatic hernia .....	3,069,862	425	14.1	15.5	13.7	12.8	12.8	18.6	*	45,436
Other musculoskeletal/integumental anomalies .....	3,069,862	5,980	197.7	222.4	195.9	190.2	195.0	199.8	208.3	45,436
Down's syndrome .....	3,069,862	1,467	48.5	31.4	26.2	28.4	49.5	108.0	372.6	45,436
Other chromosomal anomalies .....	3,069,862	1,182	39.1	34.3	34.8	35.3	35.9	60.8	93.1	45,436

See footnotes at end of table.

**Table 49. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States and the District of Columbia, 1996 --Con.**

[Rates are number of live births with specified congenital anomaly per 100,000 live births in specified group]

Congenital anomaly and race of mother	All births <sup>1</sup>	Congenital anomaly reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	
Black										
Anencephalus .....	594,314	70	11.9	*	*	*	*	*	*	7,759
Spina bifida/Meningocele .....	594,314	114	19.4	17.9	18.1	19.8	*	*	*	7,759
Hydrocephalus .....	594,314	136	23.2	23.9	17.0	22.1	28.0	*	*	7,759
Microcephalus .....	594,314	77	13.1	15.7	*	16.0	*	*	*	7,759
Other central nervous system anomalies .....	594,314	119	20.3	26.9	19.8	17.5	*	*	*	7,759
Heart malformations .....	594,314	586	99.9	92.5	88.2	90.6	102.2	164.7	253.8	7,759
Other circulatory/respiratory anomalies .....	594,314	598	102.0	103.7	96.1	98.2	104.4	109.1	*	7,759
Rectal atresia/stenosis .....	594,314	34	5.8	*	*	*	*	*	*	7,759
Tracheo-esophageal fistula/Esophageal atresia .....	594,314	64	10.9	*	*	*	*	*	*	7,759
Omphalocele/Gastroschisis .....	594,314	187	31.9	38.8	32.8	30.5	22.6	*	*	7,759
Other gastrointestinal anomalies .....	594,314	187	31.9	39.5	24.9	32.0	34.4	*	*	7,759
Malformed genitalia .....	594,314	311	53.0	60.4	44.1	48.7	58.1	67.3	*	7,759
Renal agenesis .....	594,314	63	10.7	*	*	*	*	*	*	7,759
Other urogenital anomalies .....	594,314	423	72.1	79.1	50.9	75.4	86.1	99.8	*	7,759
Cleft lip/palate .....	594,314	264	45.0	43.3	53.1	42.6	43.0	*	*	7,759
Polydactyly/Syndactyly/Adactyly .....	594,314	1,291	220.1	220.8	219.9	228.5	222.8	183.3	241.7	7,759
Clubfoot .....	594,314	216	36.8	30.6	34.5	38.8	37.7	53.4	*	7,759
Diaphragmatic hernia .....	594,314	55	9.4	14.9	*	*	*	*	*	7,759
Other musculoskeletal/integumental anomalies .....	594,314	1,089	185.7	190.2	182.0	178.2	200.2	181.0	*	7,759
Down's syndrome .....	594,314	155	26.4	16.4	18.7	16.8	22.6	62.6	362.5	7,759
Other chromosomal anomalies .....	594,314	203	34.6	25.4	31.1	25.9	43.0	67.3	*	7,759

\* Figure does not meet standards of reliability or precision.  
 1 Total number of births.  
 2 Includes races other than white and black.

NOTES: Excludes data for New Mexico, which did not report congenital anomalies. Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

**Table 50. Live births by plurality of birth and ratios, by age and race and Hispanic origin of mother: United States, 1996**

Plurality and race and Hispanic origin of mother	All ages	Age of mother									
		Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
			Total	15-17 years	18-19 years						
Number											
<b>All live births</b>											
All races <sup>1</sup>	3,891,494	11,148	491,577	185,721	305,856	945,210	1,071,287	897,913	399,510	71,804	3,045
White, total	3,093,057	5,526	344,685	123,376	221,309	726,669	878,449	747,436	329,782	58,062	2,448
White, non-Hispanic	2,358,989	2,532	225,197	75,069	150,128	508,056	683,376	616,224	274,431	47,215	1,958
Black, total	594,781	5,193	130,596	56,026	74,570	179,361	133,204	94,295	43,716	8,124	292
Black, non-Hispanic	578,099	5,084	127,616	54,802	72,814	174,958	129,002	91,050	42,279	7,835	275
Hispanic <sup>2</sup>	701,339	3,056	118,878	48,344	70,534	214,173	185,478	119,690	49,812	9,819	433
<b>Live births in single deliveries</b>											
All races <sup>1</sup>	3,784,805	11,006	484,339	183,342	300,997	925,704	1,042,220	866,404	383,310	69,127	2,695
White, total	3,007,997	5,463	340,201	122,001	218,200	712,980	855,027	720,655	315,836	55,712	2,123
White, non-Hispanic	2,288,581	2,498	222,149	74,189	147,960	497,986	663,952	592,987	262,206	45,149	1,654
Black, total	577,057	5,122	128,049	55,087	72,962	174,193	128,606	90,800	42,106	7,900	281
Black, non-Hispanic	560,801	5,014	125,124	53,886	71,238	169,877	124,519	87,676	40,708	7,619	264
Hispanic <sup>2</sup>	687,916	3,026	117,436	47,839	69,597	210,682	181,786	116,603	48,354	9,603	426
<b>Live births in twin deliveries</b>											
All races <sup>1</sup>	100,750	139	7,161	2,359	4,802	19,134	27,612	28,963	14,958	2,467	316
White, total	79,677	63	4,448	1,363	3,085	13,400	22,120	24,390	12,813	2,152	291
White, non-Hispanic	65,523	34	3,029	880	2,149	9,824	18,260	21,031	11,185	1,890	270
Black, total	17,285	68	2,510	931	1,579	5,088	4,470	3,388	1,538	212	11
Black, non-Hispanic	16,873	67	2,458	908	1,550	5,002	4,355	3,268	1,508	204	11
Hispanic <sup>2</sup>	13,014	30	1,422	493	929	3,451	3,572	2,950	1,377	205	7
<b>Live births in higher-order multiple deliveries <sup>3</sup></b>											
All races <sup>1</sup>	5,939	3	77	20	57	372	1,455	2,546	1,242	210	34
White, total	5,383	-	36	12	24	289	1,302	2,391	1,133	198	34
White, non-Hispanic	4,885	-	19	-	19	246	1,164	2,206	1,040	176	34
Black, total	439	3	37	8	29	80	128	107	72	12	-
Black, non-Hispanic	425	3	34	8	26	79	128	106	63	12	-
Hispanic <sup>2</sup>	409	-	20	12	8	40	120	137	81	11	-
Ratio per 1,000 live births											
<b>All multiple births</b>											
All races <sup>1</sup>	27.4	12.7	14.7	12.8	15.9	20.6	27.1	35.1	40.5	37.3	114.9
White, total	27.5	11.4	13.0	11.1	14.0	18.8	26.7	35.8	42.3	40.5	132.8
White, non-Hispanic	29.8	13.4	13.5	11.7	14.4	19.8	28.4	37.7	44.5	43.8	155.3
Black, total	29.8	13.7	19.5	16.8	21.6	28.8	34.5	37.1	36.8	27.6	*
Black, non-Hispanic	29.9	13.8	19.5	16.7	21.6	29.0	34.8	37.1	37.2	27.6	*
Hispanic <sup>2</sup>	19.1	9.8	12.1	10.4	13.3	16.3	19.9	25.8	29.3	22.0	*
<b>Twin births</b>											
All races <sup>1</sup>	25.9	12.5	14.6	12.7	15.7	20.2	25.8	32.3	37.4	34.4	103.8
White, total	25.8	11.4	12.9	11.0	13.9	18.4	25.2	32.6	38.9	37.1	118.9
White, non-Hispanic	27.8	13.4	13.5	11.7	14.3	19.3	26.7	34.1	40.8	40.0	137.9
Black, total	29.1	13.1	19.2	16.6	21.2	28.4	33.6	35.9	35.2	26.1	*
Black, non-Hispanic	29.2	13.2	19.3	16.6	21.3	28.6	33.8	35.9	35.7	26.0	*
Hispanic <sup>2</sup>	18.6	9.8	12.0	10.2	13.2	16.1	19.3	24.6	27.6	20.9	*
Ratio per 100,000 live births											
<b>Higher-order multiple births <sup>3</sup></b>											
All races <sup>1</sup>	152.6	*	15.7	10.8	18.6	39.4	135.8	283.5	310.9	292.5	1116.6
White, total	174.0	*	10.4	*	10.8	39.8	148.2	319.9	343.6	341.0	1388.9
White, non-Hispanic	207.1	*	*	*	*	48.4	170.3	358.0	379.0	372.8	1736.5
Black, total	73.8	*	28.3	*	38.9	44.6	96.1	113.5	164.7	*	*
Black, non-Hispanic	73.5	*	26.6	*	35.7	45.2	99.2	116.4	149.0	*	*
Hispanic <sup>2</sup>	58.3	*	16.8	*	*	18.7	64.7	114.5	162.6	*	*

- Quantity zero.  
 \* Figure does not meet standards of reliability or precision.  
<sup>1</sup> Includes races other than white and black and origin not stated.  
<sup>2</sup> Persons of Hispanic origin may be of any race.  
<sup>3</sup> Births in greater than twin deliveries.



## Technical notes

### Source of data

Data shown in this report for 1996 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). In 1984 and earlier years, the VSCP included varying numbers of States that provided data based on 100 percent of their birth certificates. Data for States not in the VSCP were based on a 50-percent sample of birth certificates filed in those States. Information on sampling procedures and sampling errors for 1984 and earlier years is provided in the annual report, *Vital Statistics of the United States*, Volume I, Natality (3). Information on the percent of records with missing information for maternal and infant characteristics included in this report is shown by State in [table I](#). Data are not shown for the variables race, age, and marital status of mother. Missing data are imputed in these cases; see separate sections in the [Technical notes](#) for more information.

### Age of mother

Age of mother is computed in most cases from the mother's and infant's dates of birth as reported on the birth certificate. The mother's age is directly reported by six States (Hawaii, Kentucky, Nevada, North Dakota, Virginia, and Wyoming). Since 1964, mother's age has been edited for ages 10–49 years. Births reported to occur to mothers younger than age 10 or older than age 49 years have had age imputed according to the age of mother from the previous record with the same race and total birth order (total of live births and fetal deaths). As noted in the text section, "Births and birth rates," a small number of babies have been born to women aged 50 years and over, a consequence of the increased use of fertility-enhancing therapies. For this report, a limited analysis was done of the birth records for which the mother's age was reported as 50 years or over. It was not possible to verify independently the reported age for these records. Based on this analysis, about 100 women aged 50

years and over gave birth in 1996. The vast majority of these births were to women aged 50–54 years. Beginning with 1997 data, editing procedures will be revised to take into account recent changes in childbearing patterns by age. In 1996 age of mother was not reported on 0.02 percent of the records; for these records age of mother was imputed according to the last record with the same race of mother and total birth order.

### Race and Hispanic origin

Race and Hispanic origin are reported separately on the birth certificate. Beginning with the 1989 data year, NCHS is tabulating its birth data primarily by race of the mother. In 1988 and prior years, births were tabulated by the race of the child, which was determined from the race of the parents as entered on the birth certificate.

Trend data by race shown in this report are by race of mother for all years beginning with the 1980 data year. In order to facilitate continuity and analysis of the data, trend tables showing data for years prior to 1980 show data for both race of mother and race of child for 1980. This makes it possible to distinguish the effects of this change from real changes in the data. The text discussions of data by race are based on tabulations by race of mother. Text references to white births and white mothers or black births and black mothers are used interchangeably for ease in writing.

The factors influencing the decision to tabulate births by race of the mother have been discussed in detail elsewhere (85). They include the recent revision of the birth certificate, effective with the 1989 data year, which includes many more health questions that are directly associated with the mother. In all these instances, it is more appropriate to tabulate births by the mother's race. Another factor influencing the decision to tabulate births by race of mother is the large proportion of births with race of father not stated, 15 percent in 1996. Although this proportion has stabilized and declined slightly in the 1990's, it is still much higher than in 1976, 10 percent. The high proportion of records with the father's race not reported reflects the increase in the proportion of births to unmarried

women; in many such cases, no information is reported on the father. These births are already assigned the race of the mother because there is no alternative. Tabulating all births by race of mother, therefore, provides for a more uniform approach, rather than a necessarily arbitrary combination of parental races.

In 1996 race of mother was not reported for 0.7 percent of births. In these cases, if the race of the father was known, the race of the father was assigned to the mother. When information was not available for either parent, the race of the mother was imputed electronically according to the specific race of the mother on the preceding record with a known race of mother. This was necessary for just 0.3 percent of births in 1996.

Hispanic origin and race are reported independently on the birth certificate, as noted previously. In tabulations of birth data by race only, data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race. In tabulations of birth data by race and Hispanic origin, data for persons of Hispanic origin are not further classified by race because the vast majority of births to Hispanic women are reported as white. In these tabulations, data for non-Hispanic persons are classified according to the race of the mother, because there are substantial differences in fertility and maternal and infant health between Hispanic and non-Hispanic white women.

Items asking for the Hispanic origin of the mother and the father have been included on the birth certificates of all States and the District of Columbia, the Virgin Islands, and Guam since 1993. Puerto Rico does not collect this information. In 1989 Louisiana, New Hampshire, and Oklahoma did not report this information; in 1990 New Hampshire and Oklahoma did not report, and in 1991–92 New Hampshire did not report Hispanic origin. The percent of records for which Hispanic origin of the parents was not reported in 1996 is shown by State in [table I](#).

### Marital status

National estimates of births to unmarried women are based on two methods of determining marital status. For 1994

**Table I. Percent of birth records on which specified items were not stated: United States and each State, Puerto Rico, Virgin Islands, and Guam: 1996**

[By place of residence]

Area	Number of births	Place of birth	Attendant at birth	Mother's birth-place	Father's age	Father's race	Hispanic origin		Educational attainment Mother	Live-birth order	Length of Gestation	Month prenatal care began	Number of prenatal visits
							Mother	Father					
Total of reporting areas <sup>1</sup> . . . . .	3,891,494	0.0	0.1	0.3	14.8	14.9	1.5	15.6	1.4	0.6	1.0	2.6	3.5
Alabama . . . . .	60,488	—	—	0.1	25.5	25.6	0.0	25.5	0.4	0.0	0.1	0.7	1.0
Alaska . . . . .	10,037	—	0.0	0.2	12.1	13.8	0.2	12.8	1.3	0.2	0.3	1.3	1.1
Arizona . . . . .	75,322	0.0	0.1	0.3	25.5	29.0	0.2	29.1	1.7	0.1	0.1	1.1	2.7
Arkansas . . . . .	36,371	0.0	0.1	0.5	20.0	20.3	0.1	20.2	1.0	0.3	0.4	2.0	2.5
California . . . . .	539,433	0.0	0.4	0.0	5.8	3.8	0.4	3.4	1.2	0.1	<sup>2</sup> 4.8	1.2	2.7
Colorado . . . . .	55,807	0.0	—	0.2	11.1	11.8	0.6	12.3	1.1	0.4	0.0	1.0	1.3
Connecticut . . . . .	44,469	0.0	0.0	0.3	9.5	11.1	4.8	13.6	5.5	11.6	4.0	7.9	10.9
Delaware . . . . .	10,155	—	0.0	0.3	24.9	29.9	0.2	29.7	0.3	0.1	0.1	1.0	1.1
District of Columbia . . . . .	8,390	—	—	1.4	51.6	57.7	1.0	51.3	7.5	1.3	0.6	16.2	15.7
Florida . . . . .	189,392	0.0	—	0.1	18.5	18.6	0.1	20.4	0.4	0.1	0.1	1.1	1.8
Georgia . . . . .	114,043	0.0	0.0	0.3	18.9	19.2	0.9	19.5	1.1	0.3	0.1	1.8	1.4
Hawaii . . . . .	18,401	0.0	0.0	0.1	10.4	10.5	0.1	9.4	0.3	0.1	5.8	2.9	3.2
Idaho . . . . .	18,625	—	0.0	0.2	8.2	10.8	1.4	11.3	5.6	1.6	1.4	3.8	11.4
Illinois . . . . .	183,180	0.0	0.0	0.1	16.6	17.4	0.1	17.5	0.7	0.1	0.2	1.8	2.1
Indiana . . . . .	83,513	0.0	0.1	0.2	12.9	12.9	0.3	12.9	1.3	0.7	0.1	2.3	3.8
Iowa . . . . .	37,139	0.0	0.0	0.3	13.4	14.8	1.3	15.6	1.9	0.1	0.1	1.6	5.2
Kansas . . . . .	36,651	—	0.0	0.0	11.2	11.6	0.9	12.5	0.3	0.0	0.1	0.4	1.1
Kentucky . . . . .	52,706	0.0	0.0	0.0	21.5	22.3	0.1	29.4	0.3	0.4	0.1	1.0	1.0
Louisiana . . . . .	65,204	0.1	0.1	0.0	24.8	25.0	0.1	24.9	0.1	0.1	0.2	0.3	0.5
Maine . . . . .	13,774	—	0.0	—	11.6	15.0	3.0	17.6	0.4	0.1	0.1	0.3	0.8
Maryland . . . . .	71,533	0.0	0.0	0.9	8.7	10.2	1.4	7.0	3.8	5.3	1.3	10.8	16.9
Massachusetts . . . . .	80,276	0.0	0.1	0.4	8.8	8.2	1.2	7.3	1.1	1.3	1.0	1.7	2.1
Michigan . . . . .	133,387	0.0	0.1	0.1	17.8	19.8	4.8	23.5	1.1	1.0	0.1	3.6	5.0
Minnesota . . . . .	63,700	0.1	0.1	0.0	9.2	11.9	6.3	16.7	2.2	0.3	1.3	4.5	3.8
Mississippi . . . . .	40,987	0.0	0.0	0.1	26.1	25.8	0.1	25.9	0.2	0.1	0.2	0.6	0.6
Missouri . . . . .	73,832	0.0	—	0.2	18.7	20.8	0.1	20.8	0.9	0.3	0.2	1.9	2.8
Montana . . . . .	10,856	—	0.7	0.0	9.5	11.1	3.1	13.9	0.2	0.1	0.1	0.5	0.4
Nebraska . . . . .	23,286	—	—	0.0	12.4	12.9	1.9	14.2	0.1	0.0	0.0	0.3	0.5
Nevada . . . . .	26,125	—	0.1	0.6	23.0	23.8	0.5	22.6	2.1	0.7	0.2	2.7	5.4
New Hampshire . . . . .	14,520	—	0.0	0.0	7.7	8.7	2.5	10.3	0.5	0.1	0.3	2.7	1.7
New Jersey . . . . .	114,306	0.1	0.1	0.4	9.7	11.6	1.0	10.7	2.2	0.1	0.2	3.9	5.0
New Mexico . . . . .	27,228	—	—	1.3	26.1	25.6	0.0	25.6	2.9	0.6	0.2	3.7	4.1
New York . . . . .	263,963	0.1	0.2	0.6	18.6	19.0	10.4	27.0	2.1	0.4	0.3	7.6	5.5
North Carolina . . . . .	104,470	0.0	0.0	0.0	18.0	18.0	0.0	18.0	0.2	0.1	0.1	0.5	0.6
North Dakota . . . . .	8,347	—	—	—	9.2	10.4	1.7	12.0	0.2	0.0	0.0	0.3	0.3
Ohio . . . . .	151,692	0.0	0.0	0.3	12.9	13.7	0.2	11.0	0.4	0.0	0.0	1.0	1.6
Oklahoma . . . . .	46,193	—	0.0	0.0	17.5	19.3	0.1	19.1	4.0	0.6	4.7	10.1	11.0
Oregon . . . . .	43,658	—	0.8	0.1	11.4	4.3	0.1	4.9	0.8	0.0	0.0	0.3	0.4
Pennsylvania . . . . .	148,338	0.0	0.0	0.7	6.1	3.1	0.3	2.6	2.0	0.2	0.2	2.2	2.6
Rhode Island . . . . .	12,652	—	—	0.2	14.6	15.1	12.2	23.5	3.0	2.2	0.7	8.5	9.1
South Carolina . . . . .	51,117	0.0	0.0	0.2	29.0	28.9	0.1	28.9	4.1	0.1	0.2	1.2	1.2
South Dakota . . . . .	10,473	—	—	2.0	12.4	12.6	0.1	12.9	0.5	0.0	0.1	0.7	0.9
Tennessee . . . . .	73,754	0.0	0.0	0.1	16.3	16.5	0.1	16.4	0.2	0.1	0.2	1.4	1.7
Texas . . . . .	330,406	0.0	0.0	0.4	16.0	15.9	0.2	15.8	1.1	1.3	0.6	2.5	5.1
Utah . . . . .	42,087	0.0	0.0	0.1	9.2	9.9	0.3	8.1	0.7	0.2	0.1	0.7	0.8

See footnotes at end of table.

**Table I. Percent of birth records on which specified items were not stated: United States and each State, Puerto Rico, Virgin Islands, and Guam: 1996—Con.**

[By place of residence]

Area	Number of births	Place of birth	Attendant at birth	Mother's birth-place	Father's age	Father's race	Hispanic origin		Educational attainment Mother	Live-birth order	Length of Gestation	Month prenatal care began	Number of prenatal visits
							Mother	Father					
Vermont . . . . .	6,767	0.0	0.0	0.1	4.4	5.6	4.4	8.5	2.7	0.1	0.1	2.8	0.7
Virginia . . . . .	92,354	0.0	0.0	0.1	18.7	19.3	0.1	18.8	0.5	0.2	0.2	0.8	3.0
Washington . . . . .	77,945	0.0	0.0	0.6	12.8	12.0	3.1	12.8	9.0	1.8	1.5	7.6	12.2
West Virginia . . . . .	20,750	0.0	0.0	0.1	13.4	16.8	0.1	16.7	0.4	0.2	0.3	3.3	2.7
Wisconsin . . . . .	67,106	0.0	0.0	0.0	27.1	27.1	0.0	27.1	0.1	0.0	0.1	0.2	0.3
Wyoming . . . . .	6,286	—	—	0.0	13.5	13.7	0.1	13.6	0.4	0.1	0.0	0.5	0.6
Puerto Rico . . . . .	63,141	—	0.0	—	2.5	3.1	—	—	0.2	0.0	0.1	0.2	0.1
Virgin Islands . . . . .	1,905	—	—	—	28.7	30.1	4.1	33.2	1.9	0.6	0.6	3.4	4.8
Guam . . . . .	4,254	0.1	0.1	0.6	27.4	56.3	0.6	27.8	2.8	1.0	3.9	5.3	5.3

See footnotes at end of table.

Table I. Percent of birth records on which specified items were not stated: United States and each State, Puerto Rico, Virgin Islands, and Guam: 1996—Con.

[By place of residence]

Area	Number of births	Birth weight	5-minute Apgar score	Medical risk factors	Tobacco use	Alcohol use	Weight gain	Obstetric procedures	Complications of labor and/or delivery	Method of delivery	Abnormal conditions of newborn	Congenital anomalies
Total of reporting areas <sup>1</sup> . . . .	3,891,494	0.1	0.7	1.3	1.6	1.5	8.6	0.8	1.1	0.9	1.8	1.5
Alabama . . . . .	60,488	0.1	0.2	<sup>3</sup> 0.3	0.4	0.4	5.8	0.2	0.3	0.1	1.0	0.6
Alaska . . . . .	10,037	0.1	0.4	0.1	0.4	0.4	2.0	0.1	0.1	0.2	0.1	0.1
Arizona . . . . .	75,322	0.2	0.5	0.0	0.5	0.5	13.6	0.0	0.0	0.3	0.0	0.4
Arkansas . . . . .	36,371	0.2	3.7	0.5	0.5	0.5	6.4	0.3	0.5	0.4	0.4	0.5
California . . . . .	539,433	0.0	---	0.0	---	---	---	0.0	0.0	0.0	0.0	0.0
Colorado . . . . .	55,807	0.0	0.3	0.0	0.4	0.3	4.8	0.0	0.0	0.0	0.0	0.1
Connecticut . . . . .	44,469	0.0	4.3	15.2	13.0	12.7	28.4	14.0	15.5	8.0	21.3	22.4
Delaware . . . . .	10,155	0.1	0.2	0.0	0.2	0.2	1.3	<sup>7</sup> 0.0	0.0	0.1	0.1	0.1
District of Columbia . . . . .	8,390	0.0	1.2	—	0.2	0.2	14.2	—	—	0.0	—	—
Florida . . . . .	189,392	0.0	0.2	0.0	0.1	0.1	4.5	0.0	0.0	0.5	0.0	0.0
Georgia . . . . .	114,043	0.0	0.5	0.4	0.3	0.3	5.0	0.0	0.0	0.3	0.0	0.0
Hawaii . . . . .	18,401	0.9	7.5	0.4	0.3	0.3	14.1	0.1	0.3	0.6	0.6	0.6
Idaho . . . . .	18,625	0.1	0.5	4.4	1.9	2.0	9.7	3.9	4.1	0.4	3.9	3.8
Illinois . . . . .	183,180	0.1	0.3	0.1	1.0	0.2	4.6	0.1	0.1	0.4	0.1	0.1
Indiana . . . . .	83,513	0.6	0.5	0.2	---	0.5	4.6	0.1	0.3	0.4	0.7	0.7
Iowa . . . . .	37,139	0.0	0.5	0.1	2.1	2.5	6.8	0.0	0.0	0.3	0.1	0.1
Kansas . . . . .	36,651	0.0	0.3	<sup>4</sup> 4.4	0.6	0.5	0.7	0.3	0.4	2.4	0.4	0.4
Kentucky . . . . .	52,706	0.1	0.4	6.1	4.7	4.5	8.9	3.8	6.8	4.6	10.3	9.7
Louisiana . . . . .	65,204	0.1	0.4	0.1	0.2	0.2	6.5	0.1	0.2	0.2	0.2	0.1
Maine . . . . .	13,774	0.1	0.2	0.1	3.4	4.4	0.1	0.0	0.0	0.2	0.1	0.1
Maryland . . . . .	71,533	0.0	0.5	0.0	2.6	2.9	12.3	0.0	0.0	0.2	0.0	0.0
Massachusetts . . . . .	80,276	1.2	1.3	4.2	1.3	1.3	2.9	4.0	4.1	3.5	<sup>8</sup> 7.0	4.7
Michigan . . . . .	133,387	0.3	0.5	0.2	2.2	1.9	10.1	0.2	0.2	0.6	0.2	0.2
Minnesota . . . . .	63,700	0.0	0.7	5.8	4.5	4.7	15.1	3.9	5.0	3.6	6.4	6.6
Mississippi . . . . .	40,987	0.0	0.6	0.1	0.3	0.3	4.0	0.1	0.1	0.1	0.1	0.1
Missouri . . . . .	73,832	0.0	0.4	0.1	0.6	0.6	3.6	0.0	0.0	0.4	0.1	0.1
Montana . . . . .	10,856	0.1	0.4	0.1	0.8	1.0	1.1	0.1	0.1	0.5	0.1	0.1
Nebraska . . . . .	23,286	0.0	0.2	0.0	1.0	0.9	1.6	0.0	0.0	0.1	<sup>8</sup> 0.0	0.0
Nevada . . . . .	26,125	0.0	1.5	1.7	1.6	1.7	8.9	0.3	1.3	0.9	1.9	2.3
New Hampshire . . . . .	14,520	0.4	0.6	0.4	0.2	0.2	5.6	0.4	0.4	0.4	0.5	0.4
New Jersey . . . . .	114,306	0.2	0.3	1.5	1.3	1.2	6.1	0.2	<sup>9</sup> 1.0	0.4	14.9	2.7
New Mexico . . . . .	27,228	0.1	3.4	0.0	1.3	1.4	10.1	0.0	0.0	0.4	0.0	---
New York . . . . .	263,963	0.1	0.4	2.2	<sup>5</sup> 5.2	0.9	11.3	1.2	1.4	0.5	<sup>10</sup> 2.2	2.4
North Carolina . . . . .	104,470	0.0	0.4	0.0	0.1	0.1	4.5	0.0	0.0	0.3	0.0	0.0
North Dakota . . . . .	8,347	0.0	0.2	0.4	0.4	0.5	1.4	0.1	0.4	0.3	0.5	0.4
Ohio . . . . .	151,692	0.1	0.4	0.1	0.4	0.3	3.4	0.1	0.1	0.5	0.2	0.2
Oklahoma . . . . .	46,193	0.8	5.5	28.8	20.5	20.9	31.1	25.0	28.5	21.6	33.8	34.5
Oregon . . . . .	43,658	0.0	0.4	0.6	0.6	0.7	2.5	0.0	0.0	0.2	0.0	0.0
Pennsylvania . . . . .	148,338	0.1	0.3	0.1	0.6	0.3	5.8	0.0	0.0	0.2	0.4	0.4
Rhode Island . . . . .	12,652	0.3	0.4	4.8	2.3	2.5	9.0	4.8	4.9	0.2	12.7	12.6
South Carolina . . . . .	51,117	0.0	0.3	0.0	0.3	0.3	2.0	0.0	0.0	0.5	0.0	0.0
South Dakota . . . . .	10,473	0.0	0.4	0.1	---	---	2.3	0.1	0.1	0.1	0.1	0.1
Tennessee . . . . .	73,754	0.0	0.4	0.0	0.4	0.5	3.1	0.0	0.0	0.5	0.0	0.0
Texas . . . . .	330,406	0.1	---	<sup>6</sup> 1.8	0.3	0.3	20.1	0.1	<sup>11</sup> 0.1	0.6	<sup>8</sup> 0.1	0.1
Utah . . . . .	42,087	0.0	0.3	0.2	0.4	0.4	1.8	0.0	0.1	0.0	0.2	0.4

See footnotes at end of table.

**Table I. Percent of birth records on which specified items were not stated: United States and each State, Puerto Rico, Virgin Islands, and Guam: 1996—Con.**

[By place of residence]

Area	Number of births	Birth weight	5-minute Apgar score	Medical risk factors	Tobacco use	Alcohol use	Weight gain	Obstetric procedures	Complications of labor and/or delivery	Method of delivery	Abnormal conditions of newborn	Congenital anomalies
Vermont . . . . .	6,767	0.2	0.3	0.1	0.6	0.4	1.7	0.1	0.1	0.1	0.2	0.2
Virginia . . . . .	92,354	0.2	0.3	0.1	0.1	0.2	5.9	0.1	0.1	0.3	0.1	0.1
Washington . . . . .	77,945	0.2	0.4	0.6	4.0	13.0	19.4	0.3	0.6	0.4	0.8	0.7
West Virginia . . . . .	20,750	0.1	0.3	0.5	0.8	2.7	6.8	0.2	0.6	0.3	1.0	0.5
Wisconsin . . . . .	67,106	0.0	0.4	3.5	0.1	0.1	1.6	0.0	3.8	0.0	<sup>12</sup> 0.1	0.1
Wyoming . . . . .	6,286	0.0	0.4	0.0	1.3	1.3	1.4	0.0	0.0	0.2	0.0	0.0
Puerto Rico . . . . .	63,141	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Virgin Islands . . . . .	1,905	0.1	3.9	14.6	2.1	2.3	16.1	8.6	16.4	3.3	17.6	15.7
Guam . . . . .	4,254	0.3	2.8	5.9	3.4	3.9	43.0	3.6	13.9	3.7	5.0	5.4

0.0 Quantity more than zero but less than 0.05.

— Quantity zero.

— - - Data not available.

<sup>1</sup>Excludes data for Puerto Rico, Virgin Islands, and Guam.

<sup>2</sup>California reports date last normal menses began but does not report clinical estimate of gestation.

<sup>3</sup>Alabama does not report renal disease.

<sup>4</sup>Kansas does not report Rh sensitization.

<sup>5</sup>New York city (but not New York State) reports tobacco use.

<sup>6</sup>Texas does not report genital herpes and uterine bleeding.

<sup>7</sup>Delaware does not report ultrasound.

<sup>8</sup>Massachusetts, Nebraska, and Texas do not report birth injury.

<sup>9</sup>New Jersey does not report other excessive bleeding.

<sup>10</sup>New York City does not report assisted ventilation less than 30 minutes or assisted ventilation of 30 minutes or more.

<sup>11</sup>Texas does not report anesthetic complications and fetal distress.

<sup>12</sup>Wisconsin does not report fetal alcohol syndrome.

through 1996, birth certificates in 45 states and the District of Columbia included a question about the mother's marital status. (Beginning in 1997, all but four States (Connecticut, Michigan, Nevada, and New York) include a direct question on their birth certificates.) In 1996 the mother's marital status was inferred in five states (California, Connecticut, Michigan, Nevada, and New York) by comparing the parents' and child's surnames and other information concerning the father. This procedure represents a substantial departure from the method used before 1980 to prepare national estimates of births to unmarried women, which assumed that the incidence of births to unmarried women in States with no direct question on marital status was the same as the incidence in reporting States in the same geographic division (27).

In the five States that used inferential procedures to compile birth statistics by marital status in 1996, there are several basic criteria. A birth is inferred as nonmarital if any of these factors, listed in priority-of-use order, is present: a paternity acknowledgment was received, the father's name is missing, or the father's and mother's current surnames are different. In addition, criteria that are particularly applicable for a given State are also applied as necessary. For example, special procedures were used in California to compare the parents' surnames when hyphenated if the parents were born in countries where naming practices can identify the parents' marital status. This procedure was in effect for many years for Asian mothers and for 1995-96 for Hispanic mothers (51).

Although Nevada's birth certificate does not include a direct question on the mother's marital status, Nevada has implemented procedures to identify the mother's marital status more accurately from the electronic birth registration process. All of Nevada's birth records are now received electronically. In New York (excluding New York City) mother's marital status is inferred as "Unmarried" if the father's name is missing, or if the father's name is given and a paternity acknowledgment is filed.

The current method represents an attempt to use related information on the birth certificate to improve the quality of

national data as well as to provide data for the individual nonreporting States. An evaluation of this method and its validity for California (the largest nonreporting State) has been published (86). Because of the continued substantial increases in nonmarital childbearing throughout the 1980's, the data have been intensively evaluated by the Division of Vital Statistics, NCHS. There has been continuing concern that the current method might overstate the number of births to unmarried women because it incorporates data based on a comparison of surnames. This is because women who have retained their maiden surname after marriage and who are frequently older, well-educated women, would be classified as unmarried. The results of this evaluation for changes during 1995-96 differ slightly for the States reporting marital status and the States inferring this information. Nonmarital births in States reporting mother's marital status directly on the birth certificate increased about 1 percent, while nonmarital births in the 5 nonreporting States declined 2 percent. Trends in birth rates for unmarried women for rates computed on the basis of estimated data and on the basis of inferred data are fairly similar.

One consequence of using nonmarital birth data based on the inferential procedures is the need to monitor continuously the validity of the procedures used by the States to infer mother's marital status. In particular, in recent years, a number of States have extended their efforts to identify the fathers when the parents are not married in order to enforce child-support obligations. The presence of a paternity acknowledgment therefore is the most reliable indicator that the birth is nonmarital in the States not reporting this information directly. Changes in reporting procedures in Michigan and Texas, related to paternity acknowledgment, were reported for 1994; the impact of those changes on trends in nonmarital births has been described elsewhere (87).

The mother's marital status was not reported in 1996 on 0.3 percent of the birth records in the 45 States and the District of Columbia where this information is obtained by a direct question. Marital status was imputed as "married" for these records.

## Gestation

The 1989 revision of the U.S. Standard Certificate of Live Birth includes a new item, "clinical estimate of gestation," that is being compared with length of gestation computed from the date of the last normal menstrual period (LMP) began when the latter appears to be inconsistent with birthweight. This is done for normal weight births of apparently short gestations and very low birthweight births reported to be full term. The clinical estimate was also used if the LMP date was not reported. The period of gestation for 4.6 percent of the births in 1996 was based on the clinical estimate of gestation. For 97 percent of these records, the clinical estimate was used because the LMP date was not reported. For the remaining 3 percent, the clinical estimate was used because it was compatible with the reported birthweight, whereas the LMP-based gestation was not. In cases where the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, the LMP-computed gestation was used and birthweight was reclassified as "not stated." This was necessary for fewer than 400 births or less than 0.01 percent of all birth records in 1996. The levels of the adjustments in 1996 data were similar to those for 1995 and earlier years (51).

## Birthweight

Birthweight is reported in some areas in pounds and ounces rather than in grams. However, the metric system has been used in tabulating and presenting the statistics to facilitate comparison with data published by other groups. Equivalents of the gram weights in terms of pounds and ounces are as follows:

Less than 500 grams = 1 lb 1 oz or less  
 500-999 grams = 1 lb 2 oz-2 lb 3 oz  
 1,000-1,499 grams = 2 lb 4 oz-3 lb 4 oz  
 1,500-1,999 grams = 3 lb 5 oz-4 lb 6 oz  
 2,000-2,499 grams = 4 lb 7 oz-5 lb 8 oz  
 2,500-2,999 grams = 5 lb 9 oz-6 lb 9 oz  
 3,000-3,499 grams = 6 lb 10 oz-7 lb 11 oz  
 3,500-3,999 grams = 7 lb 12 oz-8 lb 13 oz  
 4,000-4,499 grams = 8 lb 14 oz-9 lb 14 oz  
 4,500-4,999 grams = 9 lb 15 oz-11 lb 0 oz  
 5,000 grams or more = 11 lb 1 oz or more

## Method of delivery

Several rates are computed for method of delivery. The overall cesarean section rate or *total cesarean* rate is computed as the percent of all births that were delivered by cesarean section. The *primary cesarean* rate is a measure which relates the number of women having a first cesarean delivery to all women giving birth who have never had a cesarean delivery. The denominator for this rate includes all births less those with method of delivery classified as repeat cesarean, vaginal birth after previous cesarean, or method not stated. The rate for *vaginal birth after previous cesarean* (VBAC) delivery is computed by relating all VBAC deliveries to the sum of VBAC and repeat cesarean deliveries, that is, to women with a previous cesarean section.

## Computations of percents, percent distributions, and medians

Births for which a particular characteristic is unknown were subtracted from the figures for total births that were used as denominators before percents, percent distributions, and medians were computed. The percent of records with missing information for each item is shown by State in [table I](#). The median number of prenatal visits also excludes births to mothers who had no prenatal care. Computations of the median years of school completed and the median number of prenatal visits were based on ungrouped data. An asterisk is shown in place of any derived statistic based on fewer than 20 births in the numerator or denominator.

## Population denominators

Birth and fertility rates for 1996 shown in [tables 1, 3–6, 8–9, and 13–14](#) are based on populations estimated as of July 1, 1996. These populations are shown in [tables II and III](#). The population estimates have been published by the U.S. Bureau of the Census (4) and are based on the 1990 census counts by race and age, which were modified to be consistent with Office of Management and Budget racial categories and historical categories for birth data, and in the case of age, to reflect age as of the census reference

date. The modification procedures are described in detail in a census report (88).

Birth and fertility rates by State shown in [table 10](#) are based on State-level population estimates provided by the U.S. Bureau of the Census which are consistent with the U.S. populations (89). Rates by State shown in this report may differ from rates computed on the basis of other population estimates. Birth and fertility rates by month shown in [table 15](#) are based on monthly population estimates also based on the 1996 estimates. Rates for unmarried women shown in [table B](#) and [tables 17 and 18](#) are based on distributions of the population by marital status as of March 1996 provided by the U.S. Bureau of the Census (90) which have been adjusted to July 1996 population levels (4) by the Division of Vital Statistics, NCHS (27).

Birth and fertility rates for the Hispanic population, shown in [tables 6, 8, 9, and 14](#), are based on estimates of the total Hispanic population as of July 1, 1996 (4). Rates for Hispanic subgroups are based on special population estimates which are presented in [table III](#) in the [Technical notes](#) (91).

## Computation of rates

In computing birth rates by live-birth order, births with birth order not stated were distributed in the same proportion as births of known live-birth order. This procedure is done separately by race.

In computing birth and fertility rates for the Hispanic population, births with origin of mother not stated are included with non-Hispanic births rather than being distributed. Thus, rates for the U.S. Hispanic population are underestimates of the true rates to the extent that the births with origin of mother not stated (1.5 percent) were actually to Hispanic mothers (see [table I](#)). The population with origin not stated was imputed. The effect on the rates is believed to be small.

*Age of father*—Information on age of father is often missing on birth certificates of children born to unmarried women, greatly inflating the number of

“not stated” in all tabulations by age of father ([table I](#)). In computing birth rates by age of father, births tabulated as age of father not stated are distributed in the same proportions as births with known age within each 5-year age classification of mother. This procedure is followed because, while father’s age is missing on 15 percent of the birth certificates, one third of these were on records where the mother is a teenager. This distribution procedure is done separately by race. The resulting distributions are summed to form a composite frequency distribution that is the basis for computing birth rates by age of father. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded.

## Graphic presentation

Trend data shown in [figures 2–4, 6, 8, and 9](#) are plotted using a logarithmic scale. This approach is taken to facilitate comparison of the relative change in rates over time for each series of rates as well as the differentials among rates for different series. The trend lines in [figure 2](#), for example, show that women 40–44 years of age experienced the most change of any group over the period, and also that they had the greatest increase in rates since 1985.

## Random variation and relative standard error

Although the birth data in this report for births since 1985 are not subject to sampling error, they may be affected by random variation in the number of births involved. When the number of events is small (perhaps less than 100) and the probability of such an event is small, considerable caution must be observed in interpreting the data. Events of rare nature may be assumed to follow a Poisson probability distribution. For this distribution, a simple approximation may be used to estimate the error as follows:

If  $N$  is the number of births and  $R$  is the corresponding rate, the chances are 19 in 20 that

1. The “true” number of events lies between

$$N - 2\sqrt{N} \quad \text{and} \quad N + 2\sqrt{N}$$

**Table II. Estimated total population by race and estimated female population by age and race: United States, 1996**

[Populations estimated as of July 1]

Age	All races	White	Black	American Indian	Asian or Pacific Islander
Total population . . . . .	265,283,783	219,748,786	33,503,435	2,288,119	9,743,443
Female population					
15-44 years . . . . .	59,605,680	48,120,469	8,417,957	551,329	2,515,925
10-14 years . . . . .	9,254,087	7,333,823	1,429,905	116,875	373,484
15-19 years . . . . .	9,043,011	7,160,695	1,429,238	104,571	348,507
15-17 years . . . . .	5,487,920	4,338,419	866,386	66,612	216,503
18-19 years . . . . .	3,555,091	2,822,276	562,852	37,959	132,004
20-24 years . . . . .	8,561,003	6,776,483	1,311,468	90,650	382,402
25-29 years . . . . .	9,468,735	7,565,285	1,356,975	89,812	456,663
30-34 years . . . . .	10,708,232	8,665,054	1,490,099	92,056	461,023
35-39 years . . . . .	11,318,443	9,274,835	1,503,357	91,513	448,738
40-44 years . . . . .	10,506,256	8,678,117	1,326,820	82,727	418,592
45-49 years . . . . .	9,375,827	7,867,198	1,084,574	67,222	356,833

SOURCE: Deardorff KE, Hollmann FW. U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1996. U.S. Bureau of the Census. PPL-57. Washington: U.S. Department of Commerce, 1997.

**Table III. Estimated total population by specified Hispanic origin and estimated female population, by age and specified Hispanic origin and by race for women of non-Hispanic origin: United States, 1996**

[Populations estimated as of July 1]

Age	Hispanic					Non-Hispanic		
	Total	Mexican	Puerto Rican	Cuban	Other Hispanic <sup>1</sup>	Total <sup>2</sup>	White	Black
Total population . . . . .	28,268,886	17,874,569	3,067,943	1,174,341	6,152,033	237,014,884	193,977,657	31,912,232
Female population								
15-44 years . . . . .	6,686,603	4,104,663	769,594	214,210	1,598,136	52,919,075	42,043,406	8,031,963
10-14 years . . . . .	1,194,035	814,491	162,660	23,597	193,287	8,060,050	6,253,560	1,361,190
15-19 years . . . . .	1,167,775	716,759	150,219	27,688	273,109	7,875,232	6,098,670	1,363,307
15-17 years . . . . .	700,824	422,667	100,487	16,386	161,284	4,787,091	3,702,432	826,813
18-19 years . . . . .	466,951	294,092	49,732	11,302	111,825	3,088,141	2,396,238	536,494
20-24 years . . . . .	1,130,349	765,125	111,481	30,012	223,731	7,430,645	5,743,986	1,249,649
25-29 years . . . . .	1,152,322	732,714	119,537	31,724	268,347	8,316,420	6,518,857	1,290,748
30-34 years . . . . .	1,220,578	736,932	143,891	45,258	294,497	9,487,650	7,556,628	1,417,990
35-39 years . . . . .	1,103,646	642,658	134,155	45,007	281,826	10,214,804	8,273,748	1,437,673
40-44 years . . . . .	911,933	510,475	110,311	34,521	256,626	9,594,324	7,851,517	1,272,596
45-49 years . . . . .	714,593	402,214	85,375	44,925	182,079	8,661,227	7,217,808	1,042,865

<sup>1</sup>Includes Central and South American and other and unknown Hispanic.

<sup>2</sup>Includes races other than white and black.

SOURCE: Population estimates based on unpublished tabulations prepared by the Housing and Household Economic Statistics Division, U.S. Bureau of the Census. Totals for Hispanic population and non-Hispanic population by race are consistent with figures published in Deardorff KE, Hollmann FW. U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1996. U.S. Bureau of the Census. PPL-57. Washington: U.S. Department of Commerce, 1997.

2. The “true” rate lies between

$$R - 2 \frac{R}{\sqrt{N}} \text{ and } R + 2 \frac{R}{\sqrt{N}}$$

If the rate  $R_1$  corresponding to  $N_1$  events is compared to the rate  $R_2$  corresponding to  $N_2$  events, the difference between the two rates may be regarded as statistically significant if it exceeds

$$2 \sqrt{\frac{R_1^2}{N_1} + \frac{R_2^2}{N_2}}$$

For example, the proportion of mothers receiving first trimester care for area A for 1996 was 63.9 percent and this

proportion or rate was based on 53 recorded births. Given prevailing conditions, the chances are 19 in 20 that the “true” or underlying proportion of women receiving early prenatal care in area A lies between 46.3 and 81.5 percent. The 1995 proportion receiving early care in area A was 78.7 based on 70 recorded births. The difference between the rates is 14.8 which is less than twice the standard error of the difference

$$2 \sqrt{\frac{(63.9)^2}{53} + \frac{(78.7)^2}{70}}$$

of the two rates that is computed to be 25.7. From this, it is concluded that

the difference between the proportions receiving early prenatal care in 1995 and 1996 is not statistically significant. More information on this topic is included in the Technical Appendix of the annual report, *Vital Statistics of the United States*, 1992, Volume I, Natality (3). In addition, the relative standard errors for birth rates for Hispanic subgroups, particularly Puerto Rican, Cuban, and “other” Hispanic women, may be somewhat higher than if based only on the number of births. This reflects the considerable sampling variability in the population estimates for these groups (91).



## Definitions of medical terms

The 1989 revision of the U.S. Standard Certificate of Live Birth includes several maternal and infant health items in checkbox format, including obstetric procedures, medical risk factors, complications of labor and delivery, abnormal conditions of the newborn, and congenital anomalies of the child (figure I). The definitions which follow are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the National Association of Public Health Statistics and Information Systems, formerly known as the Association for Vital Records and Health Statistics (92).

### Medical risk factors for this pregnancy

*Anemia*—Hemoglobin level of less than 10.0 g/dL during pregnancy or a hematocrit of less than 30 percent during pregnancy.

*Cardiac disease*—Disease of the heart.

*Acute or chronic lung disease*—Disease of the lungs during pregnancy.

*Diabetes*—Metabolic disorder characterized by excessive discharge of urine and persistent thirst; includes juvenile onset, adult onset, and gestational diabetes during pregnancy.

*Genital herpes*—Infection of the skin of the genital area by herpes simplex virus.

*Hydramnios/oligohydramnios*—Any noticeable excess (hydramnios) or lack (oligohydramnios) of amniotic fluid.

*Hemoglobinopathy*—A blood disorder caused by alteration in the genetically determined molecular structure of hemoglobin (example: sickle cell anemia).

*Hypertension, chronic*—Blood pressure persistently greater than 140/90, diagnosed prior to onset of pregnancy or before the 20th week of gestation.

*Hypertension, pregnancy-associated*—An increase in blood pressure of at least 30 mm Hg systolic or 15 mm Hg diastolic on two measurements taken 6 hours apart after the 20th week of gestation.

*Eclampsia*—The occurrence of convulsions and/or coma unrelated to other cerebral conditions in women with signs and symptoms of preeclampsia.

*Incompetent cervix*—Characterized by painless dilation of the cervix in the second trimester or early in the third trimester of pregnancy, with premature expulsion of membranes through the cervix and ballooning of the membranes into the vagina, followed by rupture of the membranes and subsequent expulsion of the fetus.

*Previous infant 4,000+ grams*—The birthweight of a previous live-born child was over 4,000+ grams (8 pounds 14 ounces).

*Previous preterm or small-for-gestational-age infant*—Previous birth of an infant prior to term (before 37 completed weeks of gestation) or of an infant weighing less than the tenth percentile for gestational age using a standard weight for age chart.

*Renal disease*—Kidney disease.

*Rh sensitization*—The process or state of becoming sensitized to the Rh factor as when an Rh-negative woman is pregnant with an Rh-positive fetus.

*Uterine bleeding*—Any clinically significant bleeding during the pregnancy taking into consideration the stage of pregnancy; any second or third trimester bleeding of the uterus prior to the onset of labor.

### Obstetric procedures

*Amniocentesis*—Surgical transabdominal perforation of the uterus to obtain amniotic fluid to be used in the detection of genetic disorders, fetal abnormalities, and fetal lung maturity.

*Electronic fetal monitoring*—Monitoring with external devices applied to the maternal abdomen or with internal devices with an electrode attached to the fetal scalp and a catheter through the cervix into the uterus, to detect and record fetal heart tones and uterine contractions.

*Induction of labor*—The initiation of uterine contractions before the spontaneous onset of labor by medical and/or surgical means for the purpose of delivery.

*Stimulation of labor*—Augmentation of previously established labor by use of oxytocin.

*Tocolysis*—Use of medications to inhibit preterm uterine contractions to extend the length of pregnancy and, therefore, avoid a preterm birth.

*Ultrasound*—Visualization of the fetus and the placenta by means of sound waves.

### Complications of labor and/or delivery

*Febrile*—A fever greater than 100 degrees F. or 38 C. occurring during labor and/or delivery.

*Meconium, moderate/heavy*—Meconium consists of undigested debris from swallowed amniotic fluid, various products of secretion, excretion, and shedding by the gastrointestinal tract; moderate to heavy amounts of meconium in the amniotic fluid noted during labor and/or delivery.

*Premature rupture of membranes (more than 12 hours)*—Rupture of the membranes at any time during pregnancy and more than 12 hours before the onset of labor.

*Abruptio placenta*—Premature separation of a normally implanted placenta from the uterus.

*Placenta previa*—Implantation of the placenta over or near the internal opening of the cervix.

*Other excessive bleeding*—The loss of a significant amount of blood from conditions other than abruptio placenta or placenta previa.

*Seizures during labor*—Maternal seizures occurring during labor from any cause.

*Precipitous labor (less than 3 hours)*—Extremely rapid labor and delivery lasting less than 3 hours.

*Prolonged labor (more than 20 hours)*—Abnormally slow progress of labor lasting more than 20 hours.

*Dysfunctional labor*—Failure to progress in a normal pattern of labor.

*Breech/malpresentation*—At birth, the presentation of the fetal buttocks rather than the head, or other malpresentation.

*Cephalopelvic disproportion*—The relationship of the size, presentation, and position of the fetal head to the maternal pelvis which prevents dilation of the cervix and/or descent of the fetal head.

*Cord prolapse*—Premature expulsion of the umbilical cord in labor before the fetus is delivered.

<p><b>38a. MEDICAL RISK FACTORS FOR THIS PREGNANCY</b> (Check all that apply)</p> <p>Anemia (Hct. &lt; 30/Hgb. &lt; 10) . . . . . 01 <input type="checkbox"/></p> <p>Cardiac disease . . . . . 02 <input type="checkbox"/></p> <p>Acute or chronic lung disease . . . . . 03 <input type="checkbox"/></p> <p>Diabetes . . . . . 04 <input type="checkbox"/></p> <p>Genital herpes . . . . . 05 <input type="checkbox"/></p> <p>Hydramnios/Oligohydramnios . . . . . 06 <input type="checkbox"/></p> <p>Hemoglobinopathy . . . . . 07 <input type="checkbox"/></p> <p>Hypertension, chronic . . . . . 08 <input type="checkbox"/></p> <p>Hypertension, pregnancy-associated . . . . . 09 <input type="checkbox"/></p> <p>Eclampsia . . . . . 10 <input type="checkbox"/></p> <p>Incompetent cervix . . . . . 11 <input type="checkbox"/></p> <p>Previous infant 4000+ grams . . . . . 12 <input type="checkbox"/></p> <p>Previous preterm or small-for-gestational-age infant . . . . . 13 <input type="checkbox"/></p> <p>Renal disease . . . . . 14 <input type="checkbox"/></p> <p>Rh sensitization . . . . . 15 <input type="checkbox"/></p> <p>Uterine bleeding . . . . . 16 <input type="checkbox"/></p> <p>None . . . . . 00 <input type="checkbox"/></p> <p>Other . . . . . 17 <input type="checkbox"/></p> <p>(Specify)</p>	<p><b>40. COMPLICATIONS OF LABOR AND/OR DELIVERY</b> (Check all that apply)</p> <p>Ferile (<math>&gt; 100^{\circ}\text{F.}</math> or <math>38^{\circ}\text{C.}</math>) . . . . . 01 <input type="checkbox"/></p> <p>Meconium, moderate/heavy . . . . . 02 <input type="checkbox"/></p> <p>Premature rupture of membrane (<math>&gt; 12</math> hours) . . . . . 03 <input type="checkbox"/></p> <p>Abruptio placenta . . . . . 04 <input type="checkbox"/></p> <p>Placenta previa . . . . . 05 <input type="checkbox"/></p> <p>Other excessive bleeding . . . . . 06 <input type="checkbox"/></p> <p>Seizures during labor . . . . . 07 <input type="checkbox"/></p> <p>Precipitous labor (<math>&lt; 3</math> hours) . . . . . 08 <input type="checkbox"/></p> <p>Prolonged labor (<math>&gt; 20</math> hours) . . . . . 09 <input type="checkbox"/></p> <p>Dysfunctional labor . . . . . 10 <input type="checkbox"/></p> <p>Breech/Malpresentation . . . . . 11 <input type="checkbox"/></p> <p>Cephalopelvic disproportion . . . . . 12 <input type="checkbox"/></p> <p>Cord prolapse . . . . . 13 <input type="checkbox"/></p> <p>Anesthetic complications . . . . . 14 <input type="checkbox"/></p> <p>Fetal distress . . . . . 15 <input type="checkbox"/></p> <p>None . . . . . 00 <input type="checkbox"/></p> <p>Other . . . . . 16 <input type="checkbox"/></p> <p>(Specify)</p>	<p><b>43. CONGENITAL ANOMALIES OF CHILD</b> (Check all that apply)</p> <p>Anencephalus . . . . . 01</p> <p>Spina bifida/Meningocele . . . . . 02</p> <p>Hydrocephalus . . . . . 03</p> <p>Microcephalus . . . . . 04</p> <p>Other central nervous system anomalies (Specify) . . . . . 05</p> <p>Heart malformations . . . . . 06</p> <p>Other circulatory/respiratory anomalies (Specify) . . . . . 07</p> <p>Rectal atresia/stenosis . . . . . 08</p> <p>Tracheo-esophageal fistula/ Esophageal atresia . . . . . 09</p> <p>Omphalocele/ Gastroschisis . . . . . 10</p> <p>Other gastrointestinal anomalies (Specify) . . . . . 11</p> <p>Malformed genitalia . . . . . 12</p> <p>Renal agenesis . . . . . 13</p> <p>Other urogenital anomalies (Specify) . . . . . 14</p> <p>Cleft lip/palate . . . . . 15</p> <p>Polydactyly/Syndactyly/Adactyly . . . . . 16</p> <p>Club foot . . . . . 17</p> <p>Diaphragmatic hernia . . . . . 18</p> <p>Other musculoskeletal/integumental anomalies (Specify) . . . . . 19</p> <p>Down's syndrome . . . . . 20</p> <p>Other chromosomal anomalies (Specify) . . . . . 21</p> <p>None . . . . . 00</p> <p>Other . . . . . 22</p> <p>(Specify)</p>
<p><b>38b. OTHER RISK FACTORS FOR THIS PREGNANCY</b> (Complete all items)</p> <p>Tobacco use during pregnancy . . . . . Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Average number cigarettes per day _____</p> <p>Alcohol use during pregnancy . . . . . Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Average number drinks per week _____</p> <p>Weight gained during pregnancy _____ lbs.</p>	<p><b>41. METHOD OF DELIVERY</b> (Check all that apply)</p> <p>Vaginal . . . . . 01 <input type="checkbox"/></p> <p>Vaginal birth after previous C-section . . . . . 02 <input type="checkbox"/></p> <p>Primary C-section . . . . . 03 <input type="checkbox"/></p> <p>Repeat C-section . . . . . 04 <input type="checkbox"/></p> <p>Forceps . . . . . 05 <input type="checkbox"/></p> <p>Vacuum . . . . . 06 <input type="checkbox"/></p>	
<p><b>39. OBSTETRIC PROCEDURES</b> (Check all that apply)</p> <p>Amniocentesis . . . . . 01 <input type="checkbox"/></p> <p>Electronic fetal monitoring . . . . . 02 <input type="checkbox"/></p> <p>Induction of labor . . . . . 03 <input type="checkbox"/></p> <p>Stimulation of labor . . . . . 04 <input type="checkbox"/></p> <p>Tocolysis . . . . . 05 <input type="checkbox"/></p> <p>Ultrasound . . . . . 06 <input type="checkbox"/></p> <p>None . . . . . 00 <input type="checkbox"/></p> <p>Other . . . . . 07 <input type="checkbox"/></p> <p>(Specify)</p>	<p><b>42. ABNORMAL CONDITIONS OF THE NEWBORN</b> (Check all that apply)</p> <p>Anemia (Hct. &lt; 39/Hgb. &lt; 13) . . . . . 01 <input type="checkbox"/></p> <p>Birth injury . . . . . 02 <input type="checkbox"/></p> <p>Fetal alcohol syndrome . . . . . 03 <input type="checkbox"/></p> <p>Hyaline membrane disease/RDS . . . . . 04 <input type="checkbox"/></p> <p>Meconium aspiration syndrome . . . . . 05 <input type="checkbox"/></p> <p>Assisted ventilation <math>&lt; 30</math> min . . . . . 06 <input type="checkbox"/></p> <p>Assisted ventilation <math>\geq 30</math> min . . . . . 07 <input type="checkbox"/></p> <p>Seizures . . . . . 08 <input type="checkbox"/></p> <p>None . . . . . 00 <input type="checkbox"/></p> <p>Other . . . . . 09 <input type="checkbox"/></p> <p>(Specify)</p>	

Figure 1. Selected maternal and infant health items from the 1989 revision of the U.S. Standard Certificate of Live Birth

**Anesthetic complications**—Any complication during labor and/or delivery brought on by an anesthetic agent or agents.

**Fetal distress**—Signs indicating fetal hypoxia (deficiency in amount of oxygen reaching fetal tissues).

### Abnormal conditions of the newborn

**Anemia**—Hemoglobin level of less than 13.0 g/dL or a hematocrit of less than 39 percent.

**Birth injury**—Impairment of the infant's body function or structure due to adverse influences which occurred at birth.

**Fetal alcohol syndrome**—A syndrome of altered prenatal growth and development occurring in infants born of women who consumed excessive amounts of alcohol during pregnancy.

**Hyaline membrane disease/RDS**—A disorder primarily of prematurity, manifested clinically by respiratory distress

and pathologically by pulmonary hyaline membranes and incomplete expansion of the lungs at birth.

**Meconium aspiration syndrome**—Aspiration of meconium by the fetus or newborn, affecting the lower respiratory system.

**Assisted ventilation (less than 30 minutes)**—A mechanical method of assisting respiration for newborns with respiratory failure.

**Assisted ventilation (30 minutes or more)**—Newborn placed on assisted ventilation for 30 minutes or longer.

**Seizures**—A seizure of any etiology.

### Congenital anomalies of child

**Anencephalus**—Absence of the cerebral hemispheres.

**Spina bifida/meningocele**—Developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude.

**Hydrocephalus**—Excessive accumulation of cerebrospinal fluid within the ventricles of the brain with consequent enlargement of the cranium.

**Microcephalus**—A significantly small head.

**Other central nervous system anomalies**—Other specified anomalies of the brain, spinal cord, and nervous system.

**Heart malformations**—Congenital anomalies of the heart.

**Other circulatory/respiratory anomalies**—Other specified anomalies of the circulatory and respiratory systems.

**Rectal atresia/stenosis**—Congenital absence, closure, or narrowing of the rectum.

**Tracheo-esophageal fistula/esophageal atresia**—An abnormal passage between the trachea and the esophagus; esophageal atresia is the congenital absence or closure of the esophagus.

**Omphalocele/gastroschisis**—An omphalocele is a protrusion of variable

amounts of abdominal viscera from a midline defect at the base of the umbilicus. In gastroschisis, the abdominal viscera protrude through an abdominal wall defect, usually on the right side of the umbilical cord insertion.

*Other gastrointestinal anomalies*—Other specified congenital anomalies of the gastrointestinal system.

*Malformed genitalia*—Congenital anomalies of the reproductive organs.

*Renal agenesis*—One or both kidneys are completely absent.

*Other urogenital anomalies*—Other specified congenital anomalies of the organs concerned in the production and excretion of urine, together with organs of reproduction.

*Cleft lip/palate*—Cleft lip is a fissure or elongated opening of the lip; cleft palate is a fissure in the roof of the mouth. These are failures of embryonic development.

*Polydactyly/syndactyly/adactyly*—Polydactyly is the presence of more than five digits on either hands and/or feet; syndactyly is having fused or webbed fingers and/or toes; adactyly is the absence of fingers and/or toes.

*Club foot*—Deformities of the foot, which is twisted out of shape or position.

*Diaphragmatic hernia*—Herniation of the abdominal contents through the diaphragm into the thoracic cavity usually resulting in respiratory distress.

*Other musculoskeletal/integumental anomalies*—Other specified congenital anomalies of the muscles, skeleton, or skin.

*Down's syndrome*—The most common chromosomal defect with most cases resulting from an extra chromosome (trisomy 21).

*Other chromosomal anomalies*—All other chromosomal aberrations.

## Related reports

Many of the topics discussed in this report are covered in more analytic detail in other reports published by NCHS. Topics of reports published in the past 5 years include Hispanic origin births (2), triplet births (74), teenage birth rates by State (11), birth rates by educational attainment of the mother (28), cesarean deliveries (65,93), birth and fertility rates for States (20), births to unmarried mothers (27), characteristics of births in Asian or Pacific Islander population subgroups (19), trends in pregnancies and pregnancy rates (10), and prenatal care (94).

This report presents summary tabulations from the final natality statistics for 1996. The National Center for Health Statistics will respond to requests for unpublished data whenever possible.

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