National Vital Statistics Reports

From the CENTERS FOR DISEASE CONTROL AND PREVENTION
National Center for Health Statistics
National Vital Statistics System

Volume 47, Number 18 April 29, 1999

Births: Final Data for 1997

by Stephanie J. Ventura, M.A.; Joyce A. Martin, M.P.H.; Sally C. Curtin, M.A.; and T.J. Mathews, M.S., Division of Vital Statistics

Errata

Tables 17 and 18 have been changed to correct the birth rates for non-Hispanic white women in 1997 and 1998. See highlighted text. 3/19/2001

Table 32 - revised as of 3/24/03. See yellow highlights.

Abstract

Objectives—This report presents 1997 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, and 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 1997 are presented.

Results—Birth and fertility rates declined very slightly in 1997. Birth rates for teenagers fell 3 to 5 percent. Rates for women in their twenties changed very little, whereas rates for women in their thirties rose 2 percent. The number of births and the birth rate for unmarried women each declined slightly in 1997 while the percent of births that were to unmarried women was unchanged. Smoking by pregnant women overall dropped again in 1997, but continued to increase among teenagers. Improvements in prenatal care utilization continued. The cesarean delivery rate increased slightly after declining for 7 consecutive years. The proportion of multiple births continued to rise; higher order multiple births (e.g., triplets, quadruplets) rose by 14 percent in 1997, following a 20 percent rise from 1995 to 1996. Key measures of birth outcome—the percents of low birthweight and preterm births—increased, with particularly large increases in the preterm rate. These changes are 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 1997, to 3,880,894, the lowest number since 1987. The **birth rate** also dropped in 1997, to 14.5 births per 1,000 total population, a record low for the Nation. The **fertility rate**, which relates births to the number of women of childbearing age, declined in 1997 to 65.0 births per 1,000 women aged 15–44 years, matching the record low reported in 1976.

Fertility rates for women in racial and Hispanic origin subgroups increased for Puerto Rican, American Indian, and Asian or Pacific Islander women, but declined for other groups by up to 3 percent. Rates differ considerably among groups, with Mexican women having the highest rate, 116.6 per 1,000 aged 15–44 years. Rates are successively lower for non-Hispanic black, Puerto Rican, American Indian, Asian or Pacific Islander, Cuban and non-Hispanic white women.

The birth rate for teenagers continued to decline in 1997, falling 4 percent to 52.3 births per 1,000 women aged 15–19 years. The rate for young teenagers 15–17 years declined 5 percent to 32.1 per 1,000, while the rate for older teenagers 18–19 years declined 3 percent to 83.6. During 1991–97, the rate for ages 15–19 years dropped 16 percent, while rates for teenagers 15–17 and 18–19 years fell 17 and

Acknowledgments

This report was prepared under the general direction of Kenneth G. Keppel, Acting Chief of the Reproductive Statistics Branch (RSB). Nicholas F. Pace, Chief of the Systems, Programming, and Statistical Resources Branch (SPSRB), and Manju Sharma and Jaleh Mousavi of SPSRB provided computer programming support and statistical tables. Thomas D. Dunn and Vanetta Harrington of SPSRB and Melissa Park of RSB provided content review. Staff of the Data Acquisition and Evaluation Branch carried out quality evaluation and acceptance procedures for the State data files on which this report is based. The Registration Methods staff of the Division of Vital Statistics consulted with State vital statistics offices regarding the collection of birth certificate data. This report was edited by Demarius V. Miller, typeset by Jacqueline M. Davis, and graphics were produced by Jarmila Ogburn of the Publications Branch, Division of Data Services.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

11 percent, respectively. From 1991 to 1997, the rates for non-Hispanic black and Puerto Rican teenagers dropped 24 to 27 percent. Teenage birth rates fell significantly in all but one State during 1991–97. The teenage pregnancy rate has continued to fall in the 1990's, as reflected in concurrent declines in birth and abortion rates.

Birth rates for women in their twenties, the peak childbearing ages, changed little in 1997. The rate for women 20–24 years declined slightly to 110.0 per 1,000, while the rate for women 25–29 years rose 1 percent to 113.8 per 1,000. Birth rates for women in their twenties have been relatively stable over the past two decades.

Birth rates for women in their thirties increased 2 percent in 1997, to 85.3 per 1,000 for women aged 30–34 years, and to 36.1 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 years** also increased in 1997, to 7.1 per 1,000.

The **first birth rate** declined in 1997 to its lowest level ever, 26.5 first births per 1,000 women aged 15–44 years. Among teenagers, first birth rates declined 3 to 5 percent. Rates for second births to teenagers who have had one birth changed little in 1997, after dropping substantially from 1991 to 1996. First birth rates for women in their thirties rose again in 1997, continuing a long-term trend.

The birth rate for unmarried women in 1997 was 44.0 births per 1,000 unmarried women aged 15–44 years, 2 percent lower than in 1996 and 6 percent lower than its highest level, 46.9 in 1994. The number of births to unmarried women declined slightly to 1,257,444 in 1997, while the percent of all births occurring to unmarried women was unchanged at 32.4 percent. The birth rate for unmarried teenagers fell 2 percent in 1997 to 42.2 per 1,000, down 9 percent from its 1994 high, 46.4.

Cigarette smoking during pregnancy continued to decline in 1997, to 13.2 percent of women giving birth. Tobacco use during pregnancy has fallen steadily since 1989. However, smoking among pregnant teenagers increased again in 1997, with particularly large increases for black and Puerto Rican teenagers. 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 1997, 12.1 percent of births to smokers compared with 7.1 percent of births to nonsmokers weighed less than 2,500 grams (5 lb 8 oz).

First trimester prenatal care improved for the 8th consecutive year, rising from 81.9 in 1996 to 82.5 percent in 1997. Timely care has risen among all race/ethnic groups for the 1990's, but gains have been the most pronounced among groups with lower levels of care. Since 1989, first trimester care has risen by at least 20 percent among Mexican, Puerto Rican, Central and South American, and non-Hispanic black women, and by more than 15 percent among American Indian and Hawaiian mothers. Despite these improvements, rates of first trimester care are still low for American Indian, Mexican, and non-Hispanic black women.

Data on **method of delivery** show that the rate of cesarean delivery increased slightly between 1996 and 1997 (from 20.7 to 20.8 percent) after declining for 7 consecutive years. The rate in 1997 was 9 percent lower than in 1989 (22.8 percent). The primary cesarean rate was also 9 percent lower in 1996 and 1997 than in 1989 (14.6 first cesareans per 100 women who had no previous cesarean in 1996 and 1997 compared with 16.1 in 1989). The rate of vaginal birth following a previous cesarean delivery (VBAC) increased 50 percent between 1989 (18.9) and 1996 (28.3) but fell 3 percent from 1996 to 1997 (27.4). The percent of births delivered by forceps continued to decline (2.8 percent in 1997) while the percent by vacuum extraction rose (6.2 percent in 1997).

The remarkable rise in **multiple births** continued in 1997; the number of twin births rose 3 percent (from 100,750 to 104,137), and the number of triplets climbed 16 percent (from 5,298 to 6,148). Births in quadruplet and quintuplet and other higher order births were down slightly, however. The twinning rate has increased 11 percent since 1990 (from 22.6 to 26.8 per 1,000), and by 42 percent since 1980 (from 18.9 per 1,000). The higher order multiple birth rate has more than doubled just since 1991 (from 81.4 to 173.6 per 100,000), and has quadrupled since 1980 (from 37.0 per 100,000).

The rate of **preterm birth** (less than 37 completed weeks of gestation) increased sharply from 11.0 percent in 1996 to 11.4 percent in 1997. The percent of births born preterm has risen 8 percent since 1990, and more than 20 percent since 1981 (from 9.4 percent). The recent upward trend in this rate has been partly driven by the rise in multiple births that are at much greater risk of shorter gestations than singletons. (The preterm rate for singletons was 10.0 percent compared with 54.9 percent for twins, and 93.6 percent for higher order multiples.) The preterm birth rate was up for most racial/ethnic groups, but the largest rise (4 percent) was observed among births to non-Hispanic white mothers (from 9.5 to 9.9 percent).

The proportion of infants born **low birthweight** (LBW) rose again for 1997 to 7.5 percent (from 7.4 percent for 1996), the highest level reported since 1973. This rate has risen slowly over the last decade. Low birthweight was up slightly among non-Hispanic white (6.4 to 6.5 percent) and Hispanic mothers (6.3 to 6.4 percent). The current year rise in LBW was only partly attributable to the increase in multiple births; low birthweight among singleton births rose from 6.03 percent in 1996 to 6.08 percent in 1997. The 1997 level of low birthweight was unchanged among non-Hispanic black mothers from the previous year at 13.1 percent.

Introduction

This report presents detailed data on numbers and characteristics of births in 1997, 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 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 1997 presented data on selected topics based on a substantial sample (about 99 percent) of the 1997 birth file (1). The selected measures included birth rates by age, race, and Hispanic origin of mother, and by live-birth order, and births by marital status, prenatal care, cesarean delivery, and low birthweight. Findings for these selected measures based on the preliminary data are essentially identical to those presented here based on final data.

In addition to the tabulations included in this report, more detailed analysis is possible by using the natality public-use data tape, which is issued for each year. Birth data are also available in CD-ROM format since 1991 (2).

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 that show data by State also provide separate information for Puerto Rico, Virgin Islands, Guam, and American Samoa; however, data for these areas are not included in totals for the United States. Data for American Samoa are available for the first time in 1997.

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. Text references to black births and black mothers or white births and white mothers are used interchangeably.

Race and Hispanic origin are reported independently on the birth certificate. In tabulations of birth data by race and Hispanic origin, data for Hispanic persons are not further classified by race because the vast majority of women of Hispanic origin are reported as white. Most tables in this report show data for these categories: white, total; white, non-Hispanic; black, total; black, non-Hispanic; and Hispanic. When data other than birth rates for Hispanic subgroups are shown, they are presented for the following five groups: Mexican, Puerto Rican, Cuban, Central and South American, and other and unknown Hispanic. When reporting birth rates for Hispanic subgroups, births to Central and South American women are added to births to other and unknown Hispanic women because more detailed population data for Central and South American women are not separately available. Data are shown for five Asian or Pacific Islander (API) subgroups: Chinese, Japanese, Hawaiian, Filipino, and "other" API. In addition, eight States report data on API subgroups included in the "other" API category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API); see Technical notes. A report on births in 1992 to women in these API subgroups has been published (4).

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 birthweight; 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, or 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 1997. (See Technical notes for additional information.) All other maternal and infant characteristics (except items on which length of gestation is calculated) are not imputed; see Technical notes. Births for which a particular characteristic is unknown are subtracted from the figures for total births that are used as denominators before percents, percent distributions, and medians are computed. Thus, for example, the proportion of women receiving care in the first trimester of pregnancy is computed on the basis of births for which month pregnancy prenatal care began was reported. Levels of nonreporting vary substantially by specific item and by State. Table I in the Technical notes provides information on the percent of records with missing information for each item by State for 1997. Readers should note that the levels of incomplete reporting for some of the medical items are quite high in some States. Data for Connecticut, Hawaii, and Oklahoma are of particular concern.

Demographic characteristics

Births and birth rates

Number of births

The number of births in the United States declined very slightly in 1997, to 3,880,894, compared with 3,891,494 in 1996. Between 1995 and 1997 the number of births fell less than half of 1 percent. The 1997 total is 7 percent fewer than the number in 1990, the most recent high point in U.S. births and is the lowest recorded in a decade **(see tables 1–12 for national and State birth data by age, live-birth order, race, and Hispanic origin)**. According to provisional data for 1998, births have increased about 2 percent.

The **number of births for most race and Hispanic origin groups increased in 1997 (tables 1 and 6)**. Increases of 1 to 2 percent were reported for non-Hispanic black, Puerto Rican, American Indian, Filipino, Mexican, and Cuban births. The small overall decline in U.S. births reflects almost entirely the 1-percent decline in the number of births to non-Hispanic white women. Births to Central and South American, Chinese, and Japanese women also declined—by less than 1 percent. Hawaiian births fell 4 percent.

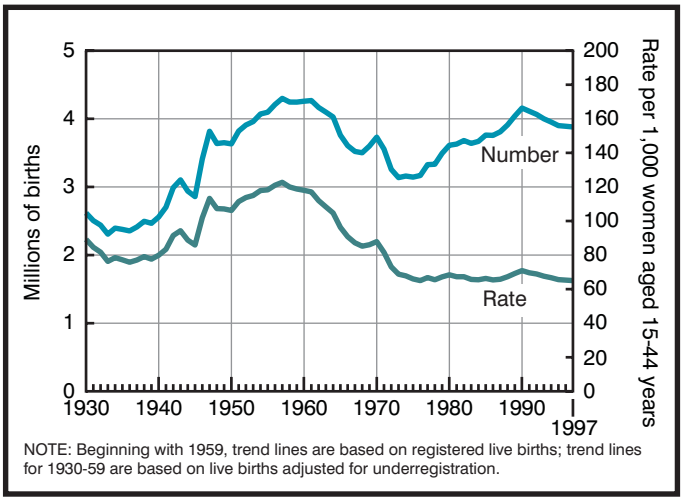
Crude birth rate

The crude birth rate in 1997 was 14.5 live births per 1,000 total population, a record low for the Nation. The 1997 rate was 1 percent lower than in 1996 and 13 percent lower than in 1990 (16.7). The previous low point for the U.S. birth rate was recorded in 1975 and 1976 (14.6). Provisional data for 1998 suggest a small increase in the birth rate.

Fertility rate

The fertility rate, which relates births to the number of women in the childbearing ages, was 65.0 live births per 1,000 women aged 15–44 years in 1997, less than 1 percent below the 1996 rate (65.3). The fertility rate for 1997 was 8 percent below the rate in 1990 (70.9), and matched the previous low recorded in 1976 (**table 1 and figure 1**). The decline in the fertility rate in the 1990's reverses an 8-percent rise from 1986 to 1990. Provisional data for 1998 indicate an increase in the fertility rate.

Fertility rates for most race and Hispanic origin groups declined in 1997 (tables 1 and 6). Rates declined less than 1 percent



NOTE: Beginning with 1959, trend lines are based on registered live births; trend lines for 1930-59 are based on live births adjusted for underregistration.

Figure 1. Live births and fertility rates: United States, 1930–97

each for non-Hispanic black (72.4 per 1,000) and non-Hispanic white women (57.0). The rates for Mexican women (116.6), Cuban women (57.4), and "other" Hispanic women (which includes all births to Central and South American and other and unknown Hispanic women) (87.6) fell by 2 to 3 percent each. The rates for Puerto Rican (71.7), American Indian (69.1), and API women (66.3) increased 1 percent each.

The modest reductions in fertility rates for non-Hispanic white and black women indicate a slowdown in the steady downward trend in these rates in the 1990's. During the years 1990–96, the fertility rate for non-Hispanic white women declined 9 percent, and the rate for non-Hispanic black women fell 19 percent. The increases in fertility rates for American Indian and API women in 1997 mark a halt, even if temporarily, in the general downward trend in these rates during the 1990's.

The fertility rate for Hispanic women in 1997 was the lowest reported since 1989 when data accounting for virtually all Hispanic births in the United States first became available. Trends in fertility for Hispanic women by subgroup for 1989–95 are presented in more detail in a recent report (5).

Age of mother

Teenagers—The **birth rate for the youngest teenagers** was 1.1 births per 1,000 females 10–14 years in 1997, matching the rate reported in 1980–83 (**table 4**). This rate has declined steadily since 1994 (the rate was 1.4 in each year 1989 through 1994). The number of births to 10–14-year-olds fell 9 percent from 1996 to 1997, to 10,121, the lowest total reported since 1984 (9,965). 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 has increased steadily in the 1990's (6).

The **birth rate for teenagers 15–19 years** fell 4 percent to 52.3 per 1,000. This rate was 16 percent lower than the rate in 1991 (62.1) (**table A**). The recent declines in the teenage birth rate partly reverse the 24-percent increase that occurred from 1986 to 1991. State-specific birth rates for teenagers are discussed in the section "Births and birth rates by State."

Birth rates for teenage subgroups 15–17 and 18–19 years also fell between 1996 and 1997. The rate for teenagers 15–17 years declined 5 percent to 32.1 per 1,000. This rate fell by 17 percent from

Table A. Birth rates for teenagers by age, race, and Hispanic origin of mother: United States, 1991, 1996, and 1997

[Rates per 1,000 women in specified group]

Year and age	Total[1]	Non-Hispanic		Hispanic
		White	Black	
10–14 years				
1997	1.1	0.4	3.4	2.3
1996	1.2	0.4	3.8	2.6
1991[2]	1.4	0.5	4.9	2.4
15–19 years				
1997	52.3	36.0	90.8	97.4
1996	54.4	37.6	94.2	101.8
1991[2]	62.1	43.4	118.9	106.7
15–17 years				
1997	32.1	19.4	62.6	66.3
1996	33.8	20.6	66.6	69.0
1991[2]	38.7	23.6	86.7	70.6
18–19 years				
1997	83.6	61.9	134.0	144.3
1996	86.0	63.7	136.6	151.1
1991[2]	94.4	70.5	163.1	158.5

[1]Includes races other than white and black and origin not stated.
[2]See reference 5 for information on reporting areas in 1991.

1991 (38.7) to 1997 (**table 4 and figure 2**). The number of births to teenagers 15–17 years fell 3 percent from 1996 to 1997 to 180,154.

The birth rate for older teenagers 18–19 years declined 3 percent to 83.6 per 1,000. This rate fell 12 percent from 94.5 in 1992 (its recent high) to 1997. The number of births to older teenagers dropped just 1 percent in 1997 to 303,066.

Teenage birth rates by race and Hispanic origin vary substantially (**tables 3, 4, 8, and 9**). Rates in 1997 were highest for Mexican, non-Hispanic black, Puerto Rican, and American Indian teenagers and lowest for non-Hispanic white, Cuban, and API teenagers, a pattern that has been observed since 1994. Between 1996 and 1997, teenage birth rates declined for all race and Hispanic origin groups except Cuban and "other" Hispanic teenagers. Rates dropped 7 to 9 percent for Mexican and Puerto Rican teenagers, and 3 to 4 percent for American Indian, API, non-Hispanic white, and non-Hispanic black teenagers.

From 1991, when rates for teenagers generally were at a peak, to 1997, birth rates fell 24 to 27 percent for non-Hispanic black and Puerto Rican teenagers. Rates dropped 14 to 17 percent for non-Hispanic white, American Indian, and API teenagers. The rate for Mexican teenagers has declined 4 percent since 1991.

The factors accounting for the current downturn in teenage birth rates are discussed in a recent report (6). Briefly, the proportion of teenagers who are sexually experienced has stabilized in the mid-1990's, reversing the steady increases over the past two decades. Moreover, teenagers are more likely to use contraceptives at first intercourse, especially condoms (7,8).

Teenage pregnancy rates (based on the sum of live births, induced abortions, and fetal losses) have also declined in recent years (6, 9, 10, 11). The pregnancy rate for teenagers 15–19 years fell 12 percent from 117 per 1,000 in 1991 to 103 in 1995, reversing an 11-percent rise from 1986 to 1991 (6, 10). Further declines in the teenage pregnancy rate

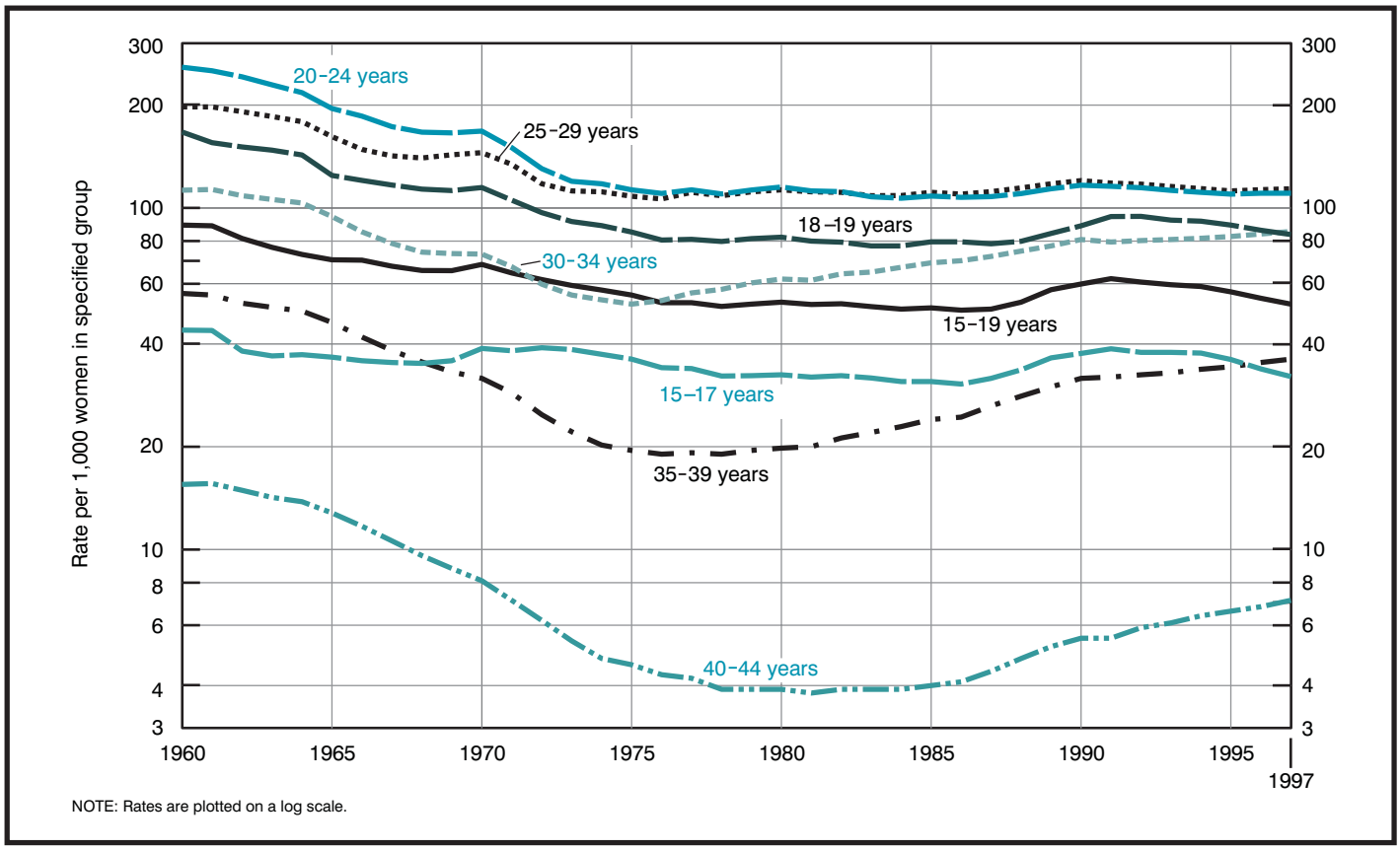


Figure 2. Birth rates by age of mother: United States, 1960–97

since 1995 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—The birth rate for women aged 20–24 years declined slightly in 1997, resuming the steady decline reported for 1990–95 (**tables 3, 4, 8, and 9**). The rate for women aged 20–24 years was 110.0 per 1,000 in 1997. The birth rate for women aged 25–29 years rose 1 percent in 1997 to 113.8 per 1,000; this rate increased for 2 consecutive years, following steady declines during 1990–95. The rates for women in their twenties, the principal childbearing ages, have been relatively stable over the past two decades.

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, 204.9 per 1,000, was nearly three times the rate for API women in this age group (70.5).

Women in their thirties—Birth rates for women in their thirties rose 2 percent in 1997. 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** increased in 1997 to 85.3 per 1,000. This rate increased by 63 percent since 1975. Most of this increase occurred by 1990. The number of births to women aged 30–34 years dropped 1 percent in 1997, reflecting the 3-percent reduction in the number of women (13).

The **birth rate for women in their late thirties** increased 2 percent to 36.1 per 1,000 women aged 35–39 years. This rate has increased without interruption since 1978 (19.0) by 90 percent. Although the pace of increase slowed in the 1990's, the 1997 rate was still 14 percent higher than the rate in 1990 (31.7). Because the birth rate and the number of women each increased, the number of births to women aged 35–39 years rose again in 1997, to a record high, 409,710 (13). Among women in their thirties, birth rates were highest for API, Mexican, and "other" Hispanic women (**tables 3 and 8**).

Women in their forties—The **birth rate for women aged 40–44 years** increased from 6.8 per 1,000 to 7.1 in 1997. This rate rose 29 percent from 1990 (5.5) to 1997. From 1981 to 1997, the rate increased by 87 percent; the 1997 rate matches the previous high recorded in 1971. The number of births in this age group rose 6 percent to 76,084, the highest number reported since 1965.

The **birth rate for women aged 45–49 years** increased from 0.3 births per 1,000 in 1996 to 0.4 in 1997. The number of births to women in this age group rose 9 percent to 3,333, the highest number recorded since 1969 (3,398).

Births to women aged 50 years and over—In this report, statistics are shown for births to women aged 50–54 years in 1997, the first time this information is available since 1963. For the years 1964–96, mother's age was edited for ages 10–49 years (3). Additional information on the editing procedures is presented in the Technical notes. Because of the recent advances in fertility-enhancing therapies, an increasing number of women are giving birth at age 50 years and over. In 1997, 144 births were reported to women aged 50–54 years (**tables 2 and 7**). This number is too small for computing an age-specific birth rate. Therefore, in computing birth rates by age of mother, births to women aged 50–54 years have been included with births to women aged 45–49 years; the denominator for the rate is women aged 45–49 years.

Although sustained increases in birth rates have been most long-lasting for women aged 30 years and over (14), the pace of increase has slowed since 1990 as noted above (table 4). Among the factors contributing to the slowdown include declining birth expectations among childless women and relatively high proportions of currently childless women aged 35–44 years reporting impaired fecundity according to the 1995 National Survey of Family Growth (7, 15, 16).

Live-birth order

The first birth rate dropped 1 percent in 1997 to 26.5 first births per 1,000 women aged 15–44 years (**table 5**). This was the lowest level ever recorded. The first birth rate dropped 9 percent compared with 1990 (29.0), its recent high point. The rate for third births rose slightly. Birth rates for other birth orders were unchanged.

While the first birth rate declined 1 percent overall, there were substantial differences in the trends by age of mother (**table 3**; tabular data not shown for 1996 and earlier years). Rates declined for teenage subgroups 15–17 and 18–19 years and for women aged 20–24 years by 3 to 5 percent; the rate was unchanged for women aged 25–29 years. In contrast, first birth rates rose 3 percent for women in their thirties. Reflecting these variations by age, the proportion of all first births occurring to women aged 30 years and over increased slightly in 1997 to 23 percent compared with just 5 percent in 1975 (14). First birth rates for API women aged 30–34 and 35–39 years were substantially higher in 1997 than for any other group.

The **birth rate for second births to teenagers** who have had a first birth was essentially unchanged in 1997 compared with 1996, after falling 21 percent from 1991 to 1996 (6). All of the decline in teenage birth rates in 1997 was thus due to declines in first birth rates.

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 is not affected by changes over time in age composition.

The TFR in 1997 was 2,032.5, less than 1 percent higher than in 1996 (**tables 4 and 9**). The TFR has increased from 1995—by 1 percent overall—following a 3-percent decline from 1990 to 1995. The increase in the TFR resulted from the rise in age-specific birth rates for all women in age groups 25–49 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 1997, as in recent years, the TFR was above "replacement" for Mexican, non-Hispanic black, and Puerto Rican women. Rates were below "replacement" for American Indian, API , Cuban, and non-Hispanic white women (**tables 4, 9, 13, and 14**). Changes between 1996 and 1997 in most TFR's were 2 percent or less. State-specific TFR's for 1997 are discussed in the next section.

Births and birth rates by State

Birth data by race and by Hispanic origin for 1997 are shown in **tables 10–12** for the 50 States and the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and American Samoa. The American Indian, Asian or Pacific Islander (API) and Hispanic populations (and Hispanic subgroups) are highly concentrated geographically.

The **number of births** increased in 28 States and Puerto Rico, the Virgin Islands, and Guam and declined in 22 States and the District of Columbia. Increases and declines of up to 2 percent were found in 41 of the States, Puerto Rico, and Guam. The number increased 4 percent in Georgia and Oklahoma and 6 percent in the Virgin Islands and declined 6 percent in Hawaii and the District of Columbia.

Crude birth rates by State ranged from 11 births per 1,000 population (Maine, Vermont, and West Virginia) to 21 per 1,000 (Utah) (**table 10**). Birth rates per 1,000 total population declined in 32 States and the District of Columbia, increased in 9 States, Puerto Rico, the Virgin Islands, and Guam, and were unchanged in 9 States; changes were no more than 2 percent in most States. Changes were not significant in 29 of the States and the District of Columbia or in Puerto Rico, the Virgin Islands, and Guam. Statistically significant declines of 4 to 5 percent were recorded for California, Hawaii, and South Dakota, whereas Oklahoma recorded a significant increase of 4 percent.

Fertility rates per 1,000 women aged 15–44 years ranged from a low of 50 (Maine and Vermont) to a high of 89 (Utah) (**table 10**). Rates declined in 21 States and the District of Columbia, increased in 25 States, Puerto Rico, the Virgin Islands, and Guam, and were unchanged in 4 States. Changes in most States were no more than 2 percent and were not statistically significant in 33 States and the District of Columbia, Puerto Rico, the Virgin Islands, and Guam. Significant declines of 5 percent each were reported for Hawaii and South Dakota, while a 4-percent increase was found for Oklahoma.

State-specific **total fertility rates** for 1997 are shown in **table 10**. These rates provide a summary measure of lifetime fertility at the State level; rates for 1980, 1990, and 1996 have been published (17–19). Rates by State for 1997 vary substantially, from a low of 1,573.5 (or 1.57 births per woman) for Vermont to a high of 2,632.0 (2.63 births per woman) for Utah. Differences in the TFR's and changes between 1996 and 1997 by State are quite similar to those in the general fertility rate.

Birth rates for teenagers

Birth rates for teenagers by age group and State are shown for 1997 in table 10. Rates per 1,000 women aged 15–19 years ranged by State from 26.9 (Vermont) to 73.7 (Mississippi). The highest rate was reported for Guam, 106.3. Birth rates for teenagers have been declining in the United States since 1991. Between 1991 and 1997, teenage birth rates fell in all States and the District of Columbia and the Virgin Islands; declines were statistically significant in all States except for Rhode Island (**table B**). Declines exceeded 20.0 percent in 10 States and the District of Columbia. More detailed information on current trends and variations in State-specific teenage birth rates by age, race, and Hispanic origin is presented in a recent report (6).

Sex ratio

There were 1,985,596 male live births in 1997 compared with 1,895,298 female live births. These numbers yielded a sex ratio of

Table B. Birth rates for teenagers 15–19 years by State, 1991 and 1997, and percent change, 1991–97: United States and each State, Puerto Rico, Virgin Islands, Guam, and American Samoa

[Birth rates per 1,000 estimated female population aged 15–19 years in each area]

State	1991	1997	Percent change, 1991–97	State	1991	1997	Percent change, 1991–97
United States[1]	62.1	52.3	–15.8	Nebraska	42.4	37.2	–12.3
				Nevada	75.3	67.7	–10.1
Alabama	73.9	66.6	–9.9	New Hampshire	33.3	28.6	–14.1
Alaska	65.4	44.6	–31.8	New Jersey	41.6	35.0	–15.9
Arizona	80.7	69.7	–13.6	New Mexico	79.8	68.4	–14.3
Arkansas	79.8	72.9	–8.6	New York	46.0	38.8	–15.7
California	74.7	57.3	–23.3	North Carolina	70.5	61.3	–13.0
Colorado	58.2	48.2	–17.2	North Dakota	35.6	30.1	–15.4
Connecticut	40.4	36.1	–10.6	Ohio	60.5	49.8	–17.7
Delaware	61.1	55.8	–8.7	Oklahoma	72.1	64.3	–10.8
District of Columbia	114.4	91.0	–20.5	Oregon	54.9	46.9	–14.6
Florida	68.8	57.7	–16.1	Pennsylvania	46.9	37.3	–20.5
Georgia	76.3	67.2	–11.9	Rhode Island	45.4	42.7	–5.9**
Hawaii	58.7	43.8	–25.4	South Carolina	72.9	61.4	–15.8
Idaho	53.9	43.3	–19.7	South Dakota	47.5	39.7	–16.4
Illinois	64.8	54.7	–15.6	Tennessee	75.2	64.5	–14.2
Indiana	60.5	54.2	–10.4	Texas	78.9	71.7	–9.1
Iowa	42.6	35.7	–16.2	Utah	48.2	42.6	–11.6
Kansas	55.4	48.5	–12.5	Vermont	39.2	26.9	–31.4
Kentucky	68.9	59.6	–13.5	Virginia	53.5	44.2	–17.4
Louisiana	76.1	66.3	–12.9	Washington	53.7	42.5	–20.9
Maine	43.5	32.0	–26.4	West Virginia	57.8	49.1	–15.1
Maryland	54.3	43.9	–19.2	Wisconsin	43.7	35.9	–17.8
Massachusetts	37.8	31.7	–16.1	Wyoming	54.2	43.3	–20.1
Michigan	59.0	43.9	–25.6				
Minnesota	37.3	32.0	–14.2	Puerto Rico	72.4	77.8	7.5
Mississippi	85.6	73.7	–13.9	Virgin Islands	77.9	66.0	–15.3
Missouri	64.5	51.5	–20.2	Guam	95.7	106.3	11.1**
Montana	46.7	37.6	–19.5	American Samoa	- - -	43.9	- - -

** Not significant at $p < 0.05$.

- - - Data not available.

[1]Excludes data for Puerto Rico, Virgin Islands, Guam, and American Samoa.

1,048 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 1,047 in 1996. Similar to previous years, Asian or Pacific Islander mothers had the highest sex ratio (1,072), followed by non-Hispanic white mothers (1,052), Hispanic mothers (1,040), American Indian mothers (1,036), and non-Hispanic black mothers (1,031).

Month of birth

Monthly birth rates in 8 months of 1997 were below the rates for the same months observed in 1996. The peak months of occurrence of births in 1997 were July, August, and September (**table 15**). When the seasonal component is removed from the monthly birth rates, the underlying trends can be observed. All months except for April, June, and December had the lowest seasonally adjusted birth rates in at least 20 years. The rate for August 1997 was the lowest observed in the more than 60 years for which monthly seasonal adjustments are available (3, 20).

Day of the week of birth

Variation in the daily pattern of births can be measured by an index of occurrence. In 1997 the Sunday index was 73.2, an indication that there were nearly 27 percent fewer births on Sundays than the daily average, considered to be 100.0. The Saturday index was 81.5. As in past years, births occurred most frequently on Tuesdays with an index of 113.8 in 1997 (**table 16**).

A weekend deficit is apparent for vaginal and cesarean deliveries, but is far larger for cesarean deliveries, particularly repeat cesareans. In 1997 the Sunday index for vaginal births was 78.2, compared with 63.9 for primary cesareans and 37.7 for repeat cesareans.

Births to unmarried women

The **birth rate for unmarried women** in 1997 was 44.0 births per 1,000 unmarried women aged 15–44 years, 2 percent lower than in 1996 (44.8), and 6 percent below its highest level, 46.9 in 1994. The **number of births to unmarried women** declined slightly, to 1,257,444 in 1997. The **percent of all births occurring to unmarried women** was unchanged at 32.4 percent in 1997. (See **table C and tables 17 and 18**.)

The procedures for reporting the mother's marital status changed in California, Nevada, and New York City beginning January 1, 1997. California and Nevada now report the mother's marital status from a direct question. The question is on the California birth certificate. Nevada obtains this information from the electronic birth registration process; the question does not appear on certified or paper copies of the Nevada certificate. New York City infers marital status and changed its procedures beginning in 1997. The reporting changes in California and New York City, which account for 17 percent of U.S. births, are

Table C. Number, rate, and percent of births to unmarried women, and birth rate for married women: United States, 1980 and 1985–97

Year	Births to unmarried women			Birth rate for married women[3]
	Number	Rate[1]	Percent[2]	
1997	1,257,444	44.0	32.4	84.3
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

[1]Births to unmarried women per 1,000 unmarried women aged 15–44 years.
[2]Percent of all births to unmarried women.
[3]Births to married women per 1,000 married women aged 15–44 years.

discussed in some detail in this section (and the Technical notes) because of their potential impact on national statistics on births to unmarried women. Prior to 1997, the mother's marital status was inferred in California by comparing the surnames of the mother, father, and child. Beginning in 1997, two changes were implemented. First, a law went into effect mandating that the father's name could not be included on the birth certificate unless the parents were married or a paternity affidavit was filed. Second, a direct question on the mother's marital status, similar to the one in effect in most other States, was added to the California birth certificate (see Technical notes). Reporting procedures for marital status in California, as well as the procedures in Nevada, are now essentially the same as those in most other States.

The mother's marital status is inferred in New York City, but the procedures for inferring this information changed beginning in 1997. Beginning in 1997, the mother is assumed to be unmarried if the father's name is missing from the birth certificate, or if a paternity affidavit was filed; these are the same procedures that have been in effect in the balance of New York for many years. Prior to 1997, the inferential criteria in New York City had also included a comparison of the surnames of the mother and father.

A comparison of the changes in nonmarital births for the entire United States and for California and New York City separately shows that these changes had little impact on the national totals and relatively little impact on the total numbers for California. As a direct result of the reporting changes in California, the national numbers and proportions of nonmarital births tended to increase for women aged 15–24 years and to decline for women aged 25 years and over. When the inferential procedures were in effect prior to 1997, births to older women who had retained their birth surname after marriage were often erroneously inferred as nonmarital because the parents' current surnames did not match. For California, the changes in nonmarital birth patterns by age were compensating, so that the overall levels of nonmarital births are only modestly higher in 1997 compared with 1996. There is a similar effect for Nevada, although the percent unmarried based on the direct question is somewhat lower than the percent based on the inferential procedures; see Technical notes. The reporting changes in New York City affected the overall data and the data by age, with large decreases found for all age groups. If these reporting changes had not occurred, statistics for nonmarital births would have been unchanged in New York City (21, 22). It is important to note that as a result of the changes implemented by California, Nevada, and New York City, their birth data by marital status are more accurate in 1997 than in prior years. The factors affecting the birth data by marital status are discussed in more detail in the Technical notes.

Birth rates for unmarried women vary considerably by race and Hispanic origin. In 1997 the rates per 1,000 unmarried women were 27.6 per 1,000 for non-Hispanic white women, 73.4 for black women, and 91.4 for Hispanic women. The birth rate for unmarried black women has declined 19 percent since 1989 (90.7). The birth rate for unmarried Hispanic women in 1997, 91.4 per 1,000, was at its lowest level since 1990 (89.6).

Birth rates for unmarried women by age continue to be highest for women aged 18–19 and 20–24 years, followed closely by women aged 25–29 years (**figure 3**). Rates for younger teenagers and women in age groups 30 years and over are considerably lower (tables 17 and 18). Among teenagers and women aged 20–24 years, rates for unmarried black and Hispanic women on average were 3 to 4 times the rates for non-Hispanic white women in the same age groups. Among age groups 25–29 years and over, rates were considerably higher for Hispanic women than for black or non-Hispanic white women.

Changes in age-specific birth rates for unmarried women have been affected by the changes in reporting procedures for California and New York City described above. However, in most cases, the one-year changes for 1996–97 reinforce and enhance changes already underway since 1994. Therefore this summary of trends will focus on the longer-term changes since 1994. The birth rates for unmarried teenagers 15–17 and 18–19 years declined 12 and 7 percent, respectively, from 1994. The rate for young black teenagers has dropped steeply, by 19 percent since 1994. Birth rates for women in age groups 20–24 through 40–44 years have fluctuated since 1994; rates in 1997 were 2 to 5 percent lower than in 1994. These patterns were generally found for all population groups.

The **proportion of all births occurring to unmarried women** was unchanged at 32.4 percent in 1997. The proportions for subgroups in 1997 were 21.5 percent, non-Hispanic white; 69.4 percent, non-Hispanic black; and 40.9 percent, Hispanic; each changed very little in recent years (see tables 13, 14, 17, and 19 for 1997 data).

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 (**table C**). The proportion of births to unmarried women has changed very little since 1994 even though the number and rate of births for unmarried women have generally declined, because total births— mostly births to married women—have also declined. Trends in the factors affecting the proportion of births to unmarried women should be kept in mind when examining trends in the proportion (23).

The **numbers and proportions of births to unmarried women by State** and by race and Hispanic origin for 1997 are shown in **table 19** for the 50 States and the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and American Samoa. The numbers increased in 32 States, Puerto Rico, the Virgin Islands, and Guam and declined in 18

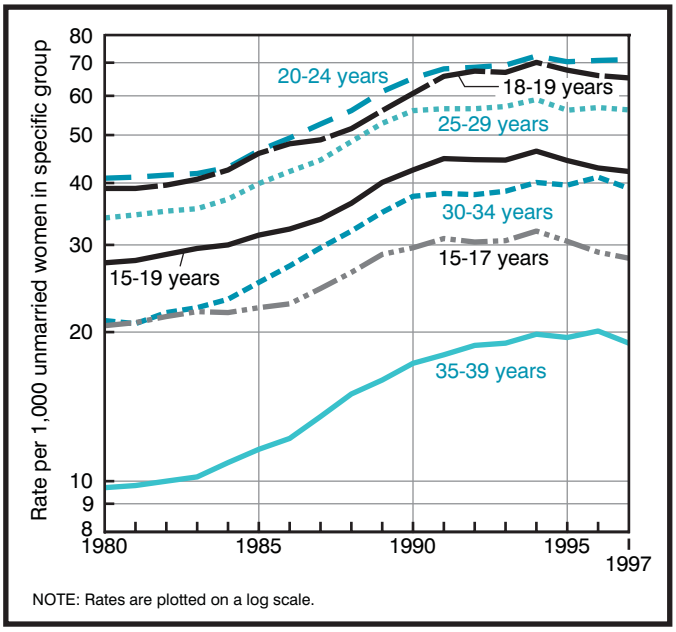


Figure 3. Birth rates for unmarried women, by age of mother: United States, 1980–97

States and the District of Columbia. Similarly, increases in the proportions exceeded declines: the proportion increased in 32 States, Puerto Rico, the Virgin Islands, and Guam, declined in 15 States and the District of Columbia, and was unchanged in three States.

Age of father

The **birth rate per 1,000 men aged 15–54 years** declined for the seventh straight year in 1997 to 50.4 (**table 20**). This rate fell by 14 percent between 1990 and 1997, 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. Age of father was not reported for 15 percent of births in 1997. The procedures for computing birth rates by age of father are described in the Technical notes.

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 that are detrimental to birth outcome (discussed in later sections).

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 (24). More than three-fourths of women who gave birth in 1997 had at least 12 years of schooling (78 percent) and 23 percent had at least 4 years of college (**table 21**). The percent of mothers with at least a high school diploma increased with advancing age, to 90 percent for women who gave birth in their thirties, and then declined slightly for mothers 40 years of age and over (88 percent). The percent of mothers with at least 4 years of college was highest for mothers 35 years of age and over (42 percent). The median educational attainment for all mothers in 1997 was 12.8 years.

There is considerable variation in educational attainment among race and Hispanic origin groups. Among women giving birth in 1997, 87 percent of non-Hispanic white mothers had completed high school, compared with 73 percent of non-Hispanic black mothers, and 50 percent of Hispanic mothers. Although the overall proportion of Hispanic mothers with at least 12 years of schooling was low, there was tremendous variation among Hispanic subgroups, ranging from 44 percent of Mexican mothers to 86 percent of Cuban mothers (**table 14**). Thirty percent of non-Hispanic white mothers had at least 4 years of college compared with 11 percent of non-Hispanic black mothers and 7 percent of Hispanic mothers. Only two-thirds of American Indian mothers had 12 or more years of schooling, whereas nearly all Japanese (98 percent) and Filipino mothers (93 percent) had attained this educational level, the highest of any group (**table 13**).

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 (25). In 1990 the National Academy of Sciences published weight-gain guidelines that varied according to mother'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 (26).

Information on maternal weight gain is collected on the birth certificate, but information on the mother's prepregnancy weight and height is not. 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 maternal height and prepregnancy weight.

In 1997 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 1997 the majority of women (64 percent) gained 26 pounds or more during pregnancy (**table 22**). The **median weight gain** was 30.5 pounds in 1997 and changed very little during the 1989–97 period. Despite the consistency of the median weight gain, the percent of mothers who gained at either end of the weight gain spectrum was higher in 1997 than in 1989—weight gains of less than 16 pounds increased from 9.4 percent in 1989 to 11.1 percent in 1997 while weight gains of 46 pounds or more increased from 9.1 percent in 1989 to 11.4 percent in 1997.

The **weight gain of the mother during pregnancy varied considerably by period of gestation**. Mothers who had preterm infants (gestations of under 37 completed weeks) gained about 3 pounds less during pregnancy (27.4 pounds) than mothers who had babies with gestations of 40 weeks and over (30.8 pounds). The median weight gain for non-Hispanic white women (30.8 pounds) was about a pound higher than for either non-Hispanic black women (29.6 pounds) or Hispanic women (29.8 pounds).

The percent of non-Hispanic black, American Indian, and Mexican mothers who had weight gains of less than 16 pounds (16.7, 15.3, and

14.8 percent, respectively) was much higher than for Chinese (6.4 percent), Cuban (7.3 percent), Filipino (8.4 percent), or non-Hispanic white mothers (9.4 percent) (**tables 24 and 25**). These differences in weight gain are reflected in differences among groups in the percent of births born preterm. Data on weight gain for Hawaiians (table 24) are unreliable because of incomplete reporting in Hawaii.

Within Hispanic subgroups, the percent of Mexican mothers who gained less than 16 pounds (14.8 percent) was twice as high as for Cuban mothers (7.3 percent) while the remaining groups were intermediate (**table 25**).

Maternal weight gain has been shown to have a positive correlation with the birthweight of the infant (27). This relationship is substantiated by the data in **table 23**. The percent of infants with low birthweight drops steadily with increasing weight gain through 45 pounds, from 14.5 to 4.8 percent, and then increases slightly for mothers who gained 46 pounds or more (5.3 percent). This pattern is generally replicated when the data are examined according to the period of gestation.

Medical risk factors

Maternal medical risk factors can severely complicate pregnancy and result in poor birth outcomes, particularly when not adequately treated (28–30). Sixteen medical risk factors affecting pregnancy are separately identified on the birth certificate. Although data for this item were missing from only 1.2 percent of records for 1997, birth certificate data may underreport medical risk factor prevalence (31). Also, rates for less common medical risk factors and for smaller population groups can vary widely from year to year and should be used with caution.

The rate of **pregnancy-associated hypertension**, the most frequently reported medical risk factor, rose for the sixth consecutive year, from 35.9 to 36.8 per 1,000 for 1996–97. (See **table 26** for 1997 data.) The rate for this risk factor has risen among all age and race and ethnic groups since the early 1990's. Rates for the related hypertensive disorders, **chronic hypertension and eclampsia**, were largely unchanged for 1997, at 6.9 and 3.3 per 1,000, respectively, and have not risen notably during the 1990's.

Diabetes and **anemia** are the second and third most frequently reported complications of pregnancy. The diabetes rate was 26.4 per 1,000 for the current year compared with 26.3 for 1996, and the anemia rate was 20.2, compared with 19.6 per 1,000.

The prevalence of acute or chronic **lung disease** (e.g., asthma, tuberculosis) was 9.7 per 1,000 for 1997, higher than the 1996 level of 8.3. Although still quite rare, the level of lung disease has more than tripled since 1990 (3.0) with large increases found among all age and racial/ethnic groups. The reported rate of **hydramnios/oligohydramnios** (the excess or shortage of amniotic fluid) has also been on the rise since data on this risk factor first became available and has more than doubled during the 1990's (from 5.9 to 13.0 between 1990 and 1997).

Medical risk factor rates often differ widely by **maternal age**. Anemia, for example, is more common among younger mothers (28.6 for mothers under 20 years of age compared with 17.3 for mothers 40 years of age and over), but younger mothers are much less likely to have chronic conditions such as diabetes (8.2 compared with 64.9). Some risk factors, however, such as pregnancy-associated hypertension, follow a U-shaped pattern, with the highest levels at the extremes of the maternal age distribution.

Medical risk factors during pregnancy can also vary greatly by **race/ethnicity**. For example, for 1997, pregnancy-associated hypertension complicated nearly 5 percent of American Indian pregnancies, but less than 2 percent of Japanese (**tables 27 and 28**).

Tobacco use during pregnancy

Smoking during pregnancy continued to decline according to birth certificate data. In 1997, 13.2 percent of women giving birth were reported to have smoked, down 3 percent compared with 1996 (13.6 percent) and 32 percent since 1989 (19.5 percent), when this information first became available on the birth certificate (32). Tobacco use was reported in a comparable manner on the birth certificate in 1997 by 46 States, the District of Columbia, and New York City, comprising 80 percent of U.S. births. Comparable information was not available for California, Indiana, South Dakota, and the remainder of New York State. (See **tables 24, 25, and 29–32** for 1997 data.)

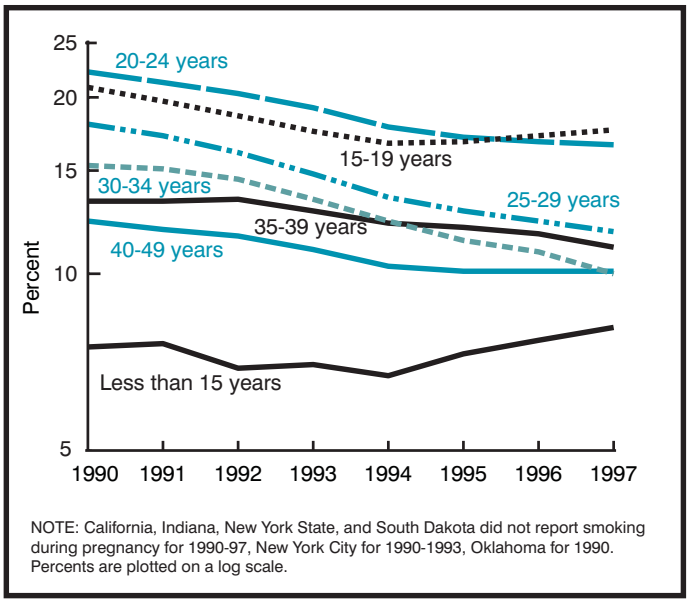
Some studies have suggested that smoking may be underreported on birth certificates due to a variety of factors, including the lack of a specific time reference for smoking status, variations in the source of this information for each birth, and the growing stigma associated with smoking (33–36). Nevertheless, 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, and variations in smoking among population subgroups found in birth certificate data have been corroborated in other studies (7, 37–39).

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 (40–42).

Maternal smoking declined or was unchanged in most racial and Hispanic origin groups; smoking rates increased for Chinese and Hawaiian women. As in previous years, rates were highest for non-Hispanic white, American Indian, and Hawaiian women, and lowest for Mexican, Cuban, Central and South American, and Asian or Pacific Islander women (API) (except Hawaiian) (**tables 24 and 25**). The generally very low smoking rates found for Mexican, Central and South American, Chinese, and Filipino women from birth certificate data have been confirmed by other studies (38, 39). Women born in the 50 States and the District of Columbia had substantially higher smoking rates than women born outside these areas, a pattern that has been described elsewhere (**tables 24 and 25**) (43).

Maternal smoking among teenagers rose about 2 percent overall, the third consecutive year of increase (**figure 4**) (35). The smoking rate among non-Hispanic black teenagers 15–19 years rose 12 percent from 1996 to 1997 (6.6 percent) and has increased by one-third since 1994 (5.0 percent) (see **table 30** for 1997 data). The rate for non-Hispanic white teenagers increased 2 percent (29.2 percent); their rates are 4 to 5 times the rates for non-Hispanic black teenagers. Non-Hispanic white women aged 18–19 years had the highest smoking rate of any group, 29.6 percent (**table 30**). Smoking rates rose as well in 1997 for Puerto Rican teenagers. Smoking during pregnancy generally declined for women in age groups 20–39 years. Patterns of smoking rates and trends by age, race, and Hispanic origin are described in detail in a recent NCHS report (35).

Among smokers, the **proportion smoking at least half a pack of cigarettes daily** has declined steadily in recent years—to 32 percent in 1997 (compared with 42 percent in 1989) (32). Non-Hispanic white



NOTE: California, Indiana, New York State, and South Dakota did not report smoking during pregnancy for 1990-97, New York City for 1990-1993, Oklahoma for 1990. Percents are plotted on a log scale.

Figure 4. Percent of mothers who smoked during pregnancy by age: Total reporting areas, 1990–97

mothers and older mothers are more likely than other mothers to smoke half a pack or more (**tables 29 and 31**).

Rates of **smoking by maternal educational attainment** are persistently highest for women with 9–11 years of education, 26 percent in 1997, and lowest for women with 4 years or more of college, 2 percent (**table 31**). Even among women aged 20 years and over, smoking rates were highest for mothers who attended but did not graduate from high school—30 percent overall and 48 percent of non-Hispanic white women (tabular data not shown).

Babies born to mothers who smoke during pregnancy are at greatly elevated risk of low birthweight (LBW), a finding documented in birth certificate data as well as in numerous other studies (40, 44, 45). In 1997, 12.1 percent of infants born to smokers weighed less than 2,500 grams (5 lb 8 oz) compared with 7.1 percent of births to nonsmokers (**table 32**). This substantial differential is found for every race and Hispanic origin group. The LBW risk is heightened as the number of cigarettes increases, although LBW is elevated even among babies born to the lightest smokers (one to five cigarettes daily), 10.9 percent (tabular data not shown). Advancing maternal age exacerbates the risk, probably a consequence of the much greater cigarette consumption among older women (**table 29**).

Alcohol use during pregnancy

Pregnancy and birth outcome can be jeopardized by maternal alcohol use during pregnancy. Even low-to-moderate alcohol use has been shown to compromise birth outcome, independent of other risk factors such as tobacco use and other maternal risk factors (46, 47). All States except California and South Dakota included items on alcohol use on their birth certificates in 1997. This reporting area accounted for 86 percent of U.S. births.

Alcohol use during pregnancy is substantially underreported on the birth certificate (31). According to birth certificate data, alcohol use declined again in 1997 to just 1.2 percent of mothers reporting any alcohol use compared with 1.4 percent in 1996 and 4.1 percent in 1989, the first year this information was reported on the birth certificates (see **tables 24 and 25** for 1997 data) (19, 32). A recent study based on an analysis of responses by nearly 6,000 pregnant women in the Center for Disease Control and Prevention's nationally representative Behavioral Risk Factor Surveillance System, found that about 15 percent of women used alcohol during pregnancy in 1995. The researchers also reported that alcohol use declined from 1988 (23 percent) to 1992 (10 percent) before rising to 15 percent in 1995 (48).

The nature of the birth certificate questions on alcohol use apparently contribute to the underreporting 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 (25, 48).

Medical services utilization

Prenatal care

The percent of women beginning **prenatal care in the first trimester** of pregnancy rose to 82.5 for 1997, from 81.9 in 1996. Essentially stagnant during the 1980's, first trimester care has risen from 75.5 percent since 1989 (**table D**). The proportion of mothers **with delayed (care beginning in the third trimester) or no care**, was 3.9 percent for the current year, compared with 4.0 percent for 1996. The proportion of women with late or no care worsened during the 1980's, but has improved from the high of 6.4 percent reported for 1989 (49). (See **tables 33–35** for 1997 data.)

The effects of prenatal care are difficult to measure (50, 51), but early competent care can promote healthier pregnancies by detecting and managing preexisting medical conditions, providing health behavior advice, and assessing the risk of poor pregnancy outcome (52). 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 (51).

According to the **Adequacy of Prenatal Care Utilization Index** (APNCU), an alternative measure of prenatal care utilization (53), the

Table D. First trimester prenatal care by race and Hispanic origin of mother: United States, 1970, 1975, 1980, 1985, 1990–97

Year	All races[1]	Non-Hispanic		Hispanic[2]
		White	Black	
1997	82.5	87.9	72.3	73.7
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	- - -	- - -	- - -
1975	72.4	- - -	- - -	- - -
1970	68.0	- - -	- - -	- - -

- - - Data not available.
[1]Includes races other than white and black and origin not stated.
[2]Includes all persons of Hispanic origin of any race.

rise in prenatal care use for 1996–97 occurred among mothers with intensive use of care (women for whom the number of visits exceeded the American College of Obstetricians and Gynecologists recommendations by a ratio of observed-to-expected visits of at least 110 percent). (See **table E**.) Based on the APNCU, intensive use of prenatal care has risen 67 percent from 18.4 to 30.7 percent since 1981 (the first year comparable data on period of gestation used to compute this index became available), adequate care (not including intensive use of care) has declined 4 percent (from 45.1 to 43.5 percent), and less than adequate care has declined 29 percent (from 36.5 to 25.9 percent) (54).

Gains in the proportion of mothers with care beginning in the first trimester of pregnancy were observed for the current year among most **race and ethnic groups** (levels for Japanese and Hawaiian mothers did not rise for 1997). Improvement continues to be most pronounced among those with less favorable levels of care, somewhat reducing the considerable disparity among groups (**figure 5**). Since 1989 first trimester care has risen by more than 20 percent among Mexican (from 56.7 to 72.1 percent), Central and South American (from 60.8 to 76.9 percent), Puerto Rican (from 62.7 to 76.5 percent), and non-Hispanic black mothers (from 59.9 to 72.3 percent); and by less than 10 percent among Cuban (83.2 to 90.4 percent), Japanese (86.2 to 89.3 percent), and non-Hispanic white mothers (82.7 to 87.9 percent). (See **tables 24 and 25** for 1997 data.)

Most States reported higher levels of first trimester care for 1997 compared with 1996. Four New England States reported the highest proportions of mothers with first trimester care (89–90 percent), and the lowest proportions of mothers with late or no care (less than 2 percent) for 1997: Connecticut, Maine, New Hampshire, and Rhode Island (**table 34**).

Obstetric procedures

Six specific obstetric procedures are reported on the birth certificate. It has been shown that these procedures may be underreported on the birth certificate (31, 55). The most prevalent obstetric procedure in 1997 was **electronic fetal monitoring**, reported for over 3.2 million births, or 83 percent of all live births (**table 36**).

According to data from the birth certificate, 64 percent of mothers who had live births in 1997 received ultrasound. The overall rates of stimulation of labor and induction of labor in 1997 were 174 and 184, respectively, per 1,000 live births. The rates of both of these procedures have been rising annually since 1989 (56).

Table E. Adequacy of Prenatal Care Utilization Index: United States, 1981, 1985, 1990, and 1995–97

Year	Intensive Use	Adequate	Intermediate	Inadequate	No care
1997	30.7	43.5	16.3	8.4	1.2
1996	29.3	43.8	17.1	8.7	1.1
1995[1]	28.8	43.9	17.2	8.9	1.2
1990[1]	24.6	42.6	19.1	11.8	1.9
1985[1]	21.1	44.8	21.0	11.6	1.5
1981[1]	18.4	45.1	23.2	12.0	1.3

[1]See reference 54 for detailed data on trends.

NOTE: See reference 53 for information on calculation of this measure.

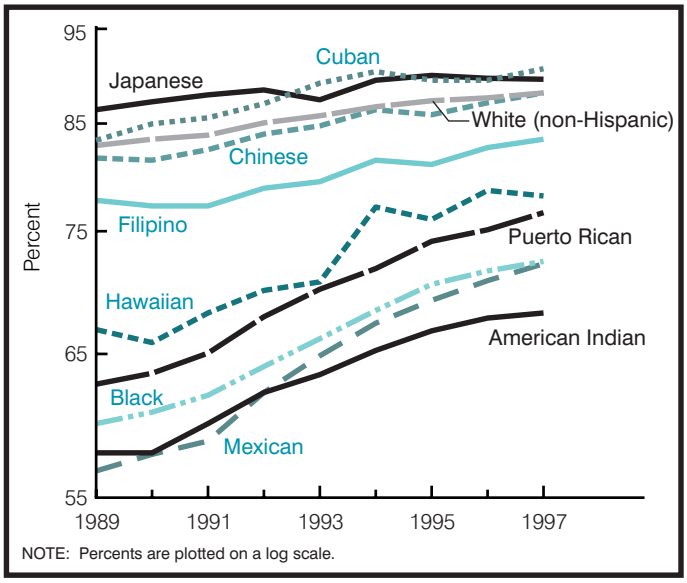


Figure 5. Percent of mothers with first trimester prenatal care by race and Hispanic origin of mother: United States, 1989–97

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 1997: Meconium, moderate/heavy (56 per 1,000), fetal distress (40 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 (55).

Attendant at birth and place of delivery

More than 9 out of 10 births in 1997 (92.3 percent) were attended by a physician in a hospital, making this arrangement by far the most typical (**table 38**). However, the percent of births attended by a physician in a hospital was slightly lower in 1997 than in 1996 (92.9 percent) and has declined from 98.4 percent in 1975. For physician-attended births, 4 percent were by doctors of osteopathy (DO's) while 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 1997 (7.0 percent). About 95 percent of midwife-attended births in 1997 were by **certified nurse midwives (CNM's).**

About 99 percent of births in 1997 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 93 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 90 percent of births to Hispanic women. Hispanic women were more likely to have midwife-attended hospital births (9 percent) than were either non-Hispanic black women (7 percent) or non-Hispanic white women (6 percent).

Method of delivery

The **rate of cesarean delivery** increased slightly between 1996 and 1997 (from 20.7 per 100 live births to 20.8) after falling each year during 1989–96 (**table F and table 39**). The 1997 rate was 9 percent lower than the rate of 22.8 in 1989, the first year this information was available on the birth certificate. The **primary cesarean rate** (first cesareans per 100 live births to women who had no previous cesarean) was unchanged between 1996 and 1997, at 14.6, after falling each year during 1989–96. The primary rate in 1997 was 9 percent lower than in 1989 (16.1). Concomitant with the decline in cesarean rates during the 1989–96 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. However, in 1997 the rate dropped to 27.4, a 3-percent decline from 1996.

Overall cesarean rates increased steadily by age of the mother and were more than twice as high for mothers 40–54 years of age (32.4) as for teenagers (14.3) (**table 40**). Primary cesarean rates increased with additional age after ages 20–24 years, to 22.6 for women 40–54 years of age. VBAC rates declined with increasing age—a third of teenagers who had a previous cesarean had a VBAC delivery (33.4 percent) compared with 20.5 percent of mothers 40–54 years of age.

Total and primary cesarean rates declined or held steady in 1997 compared with 1996 for all age groups under 30 years but increased between the 2 years for mothers in age groups of 30 years of age and over. All age groups experienced declines in VBAC rates between 1996 and 1997. Non-Hispanic black women had a higher cesarean rate in 1997 (21.8 per 100 live births) than either non-Hispanic white women (20.9) or Hispanic women (20.2). Similarly, the primary cesarean rate for non-Hispanic black women (15.6) was higher than the rate for non-Hispanic white women (14.8) and Hispanic women (13.4). The VBAC rate in 1997 was highest for non-Hispanic white women (28.5), lowest for Hispanic women (23.5), and intermediate for non-Hispanic black women (26.4).

Japanese, American Indian, Hawaiian, and Chinese mothers had lower cesarean rates (ranging from 15.1 to 19.1 per 100 live births) than Puerto Rican, non-Hispanic white, non-Hispanic black, Filipino, or Cuban mothers (ranging from 20.8 to 30.5) (**tables 24 and 25**).

Table F. Total and primary cesarean rates and vaginal birth after previous cesarean delivery rates: United States, 1989–97

Year	Cesarean rate		VBAC rate[3]
	Total[1]	Primary[2]	
1997	20.8	14.6	27.4
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

[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 (VBAC) delivery per 100 live births to women with a previous cesarean delivery.

There was **considerable variation in cesarean rates by State** ranging from a high of 26.7 per 100 live births in Mississippi to a low of 15.3 in Colorado (**table 41**). The rate for Puerto Rico was 33.4. There was also considerable variation in VBAC rates by State. Data for Hawaii (**table 41**) and for Hawaiian births (**table 24**) are unreliable because of incomplete reporting.

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 21.7 per 100 live births for mothers with Rh sensitization to 48.0 for mothers with eclampsia. Certain complications of labor and/or delivery are also associated with high cesarean rates. Nearly all births with cephalopelvic disproportion were cesarean deliveries (96.2), and the cesarean rates for breech/malpresentation (84.5) and placenta previa (82.0) were also very high.

During the 1989–97 period, the percent of births that were delivered by either forceps or vacuum extraction remained steady at about 9 percent. During that period, however, there was a shift as the number and percent of births delivered by forceps declined each year, whereas the use of vacuum extraction consistently increased. In 1997, 2.8 percent of births were delivered by forceps compared with 5.5 percent in 1989—a 49-percent decline. Vacuum extraction was used in 6.2 percent of births in 1997, a 77-percent increase compared with 1989 (3.5 percent).

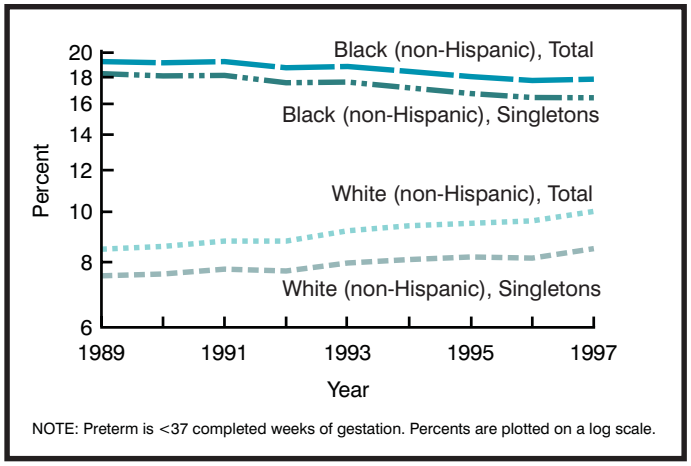
Infant health characteristics

Period of gestation

The **preterm birth rate** rose sharply for 1996–97, from 11.0 to 11.4 percent. The proportion of preterm births (infants born prior to 37 completed weeks of gestation) has risen 8 percent since 1990 (from 10.6 percent) and more than 20 percent since 1981 (from 9.4 percent). The current year rise included increases in both **very preterm births** (prior to 32 completed weeks of gestation) and **moderately preterm** (32–36 weeks) births. (See **tables 43 and 44**.) Preterm birth is a major cause of infant mortality and has been associated with long-term neurodevelopmental and respiratory disorders (57, 58).

The primary measure used to determine the infant's gestational age, the interval between the first day of the last normal menstrual period (LMP) and the date of birth, 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 (59). See Technical notes for additional information on procedures for measuring gestational age.

The increase in preterm births was most pronounced among **non-Hispanic white women**, for whom a rise of 4 percent (from 9.5 to 9.9 percent) was observed. The percent of births born very preterm was 1.49 for 1997 compared with 1.43 for 1996. Since 1989, the preterm rate among non-Hispanic white births has risen from 8.4 percent, and the very preterm rate from 1.34 percent. Recent increases in multiple births, which are disproportionately preterm, have particularly influenced the upward trend in preterm birth for this group. Analysis of only **non-Hispanic white singleton births** for 1989–97 reveals a 14 percent increase in moderately preterm births (compared with a 19-percent rise for all births) and essentially no change in the proportion of very preterm births (compared with a rise from 1.34 to 1.49 percent for all births) (**figure 6**) (60).



NOTE: Preterm is <37 completed weeks of gestation. Percents are plotted on a log scale.

Figure 6. Rate of preterm birth by plurality and race/Hispanic origin of mother: United States, 1989–97

The risk of preterm birth increased slightly among **non-Hispanic black births** for 1997 (17.6 percent) compared with 1996 (17.5 percent), checking the downturn observed since 1993 (18.6 percent). The very preterm birth rate was largely unchanged at 4.19 percent, but has declined from 4.68 percent since 1989. Among non-Hispanic black singleton births, however, levels of moderately and very preterm births were unchanged from the previous year (data not shown).

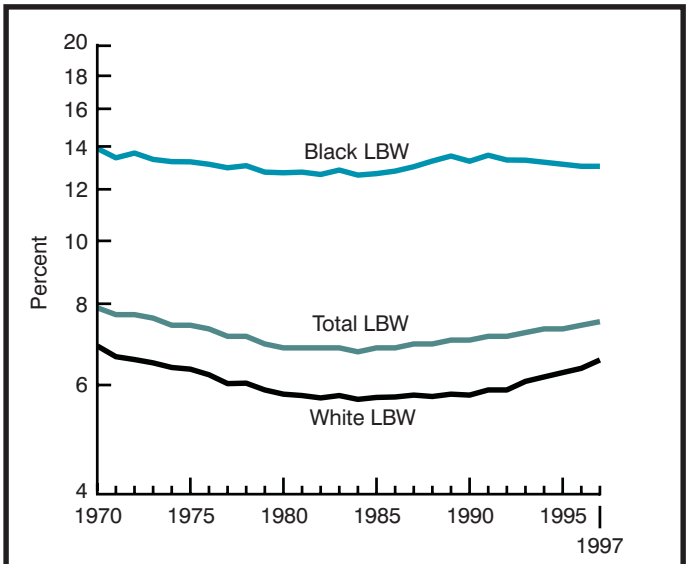
Preterm births also increased among **Hispanic women**, rising from 10.9 to 11.2 percent for 1996–97; the increase was concentrated among moderately preterm births (9.2–9.5 percent). The overall preterm rate has changed only slightly since 1989 (from 11.1 percent), and the very preterm rate has dipped from 1.76 to 1.68 percent. (Relative trends in preterm rates for Hispanic births are largely unaffected by trends in multiple births.) Preterm rates were up for most of the Hispanic subgroups between 1996 and 1997 **(tables 24 and 25).**

Birthweight

The rate of **low birthweight** (LBW) (less than 2,500 grams) rose to 7.5 percent for 1997, from 7.4 percent for 1996, the highest level reported since 1973. Low birthweight has risen slowly over the last decade (from 6.8 percent for 1986) after declining during the 1970's and early 1980's. (See **tables 43–47 and figure 7**.) The rise in multiple births, which are much more likely than singletons to be LBW, has influenced this upward trend; whereas overall LBW has risen 10 percent since 1986, LBW among singleton births has increased 4 percent (from 5.84 to 6.08 percent).

The percent of **very low birthweight** (VLBW) (less than1,500 grams) was 1.42 percent for 1997, compared with 1.37 for 1996. This level has also risen in recent years (from 1.15 percent in 1980). LBW infants, particularly VLBW infants, are at greater risk than heavier babies of long-term morbidity and early death (60). In 1996, VLBW infants accounted for about 1 percent of all births, but 50 percent of all infant deaths (infant deaths through 11 months per 1,000 live births) (58).

The proportion of **non-Hispanic white LBW** infants rose from 6.4 to 6.5 percent between 1996 and 1997. Since 1989 non-Hispanic white LBW has risen 16 percent (from 5.6 percent) and VLBW has increased from 0.93 to 1.12 percent. The sharp increase in the multiple birth rate explains some, but not all of the rise for non-Hispanic white births as **LBW among singleton births** has also risen over this period, but at



NOTE: Low birthweight (LBW) is less than 2,500 grams. Percents are plotted on a log scale.

Figure 7. Percent low birthweight by race: United States, 1970–97

a slower pace: from 4.90 to 4.95 percent for 1996–97, and from 4.60 percent since 1989 (see **table G**).

LBW among **non-Hispanic black infants** was unchanged for 1997 at 13.1 percent. LBW has declined somewhat among black births during the 1990's (from 13.6 for 1991), but the rate of VLBW has not improved; for 1997 the percent VLBW was 3.05, compared with the 1989 level of 2.97. Increases in multiple births have only moderately influenced trends in non-Hispanic black LBW; that is, the decline in LBW since 1993 is slightly steeper when only singletons are examined.

Overall **Hispanic LBW** was 6.4 percent in 1997 compared with 6.3 percent for the previous year. The percent VLBW among Hispanic births was essentially unchanged at 1.13 percent. Since 1989, when national data on Hispanic births first became available, Hispanic VLBW and LBW have shown a moderately upward trend (from 1.05 and 6.2 percent). LBW rates were up slightly for each Hispanic subgroup for

Table G. Percent low birthweight among singletons by race/Hispanic origin of mother: United States, 1989–97

Year	Total	Non-Hispanic White	Non-Hispanic Black	Hispanic
1997	6.08	4.95	11.46	5.43
1996	6.03	4.90	11.55	5.34
1995	6.05	4.87	11.66	5.36
1994	6.05	4.79	11.79	5.37
1993	6.05	4.70	11.90	5.34
1992[1]	5.93	4.59	11.91	5.22
1991[1]	5.99	4.61	12.15	5.29
1990[2]	5.90	4.56	11.92	5.23
1989[3]	6.00	4.60	12.22	5.35

[1]Excludes data for New Hampshire, which did not require reporting of Hispanic origin of mother.
[2]Excludes data for New Hampshire and Oklahoma which did not require reporting of Hispanic origin of mother.
[3]Excludes data for Louisiana, New Hampshire, and Oklahoma which did not require reporting of Hispanic origin of mother.

NOTE: Low birthweight is less than 2,500 grams or 5 lb 8 oz.

1997, and ranged from 6.0 percent for Mexican to 9.4 percent for Puerto Rican infants. (See **table 25**.)

For 1997, 6.8 percent of **American Indian births** were LBW. Among the Asian or Pacific Islander subgroups, LBW levels were generally up for the current year, and ranged from 5.1 for Chinese to 8.3 percent for Filipino births (**table 24**).

The percent **macrosomia** (birthweight of at least 4,000 grams) was 10.1, down slightly from the figure reported for 1996 (10.2 percent). Macrosomic births have been declining since 1991, after peaking at about 11 percent in the 1980's.

The **median birthweight** for all births for 1997 was 3,350 grams (7 lbs, 7 oz.) unchanged from 1996. The median for white births was 3,390 grams, and for black births 3,180 grams.

LBW and VLBW risk varies by State; among non-Hispanic white births for 1997, LBW levels ranged from a low of 5.1 percent in Hawaii to a high of 9.0 percent for Wyoming. Among States with at least 1,000 births to non-Hispanic black mothers, the proportion of LBW for this population ranged from 10.2 percent in Iowa and Washington to 16.2 percent for the District of Columbia (**table 46**).

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 (61). 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 five components and a score of 7 or better indicates that the baby is in good-to-excellent physical condition. The 5-minute Apgar score is based on an assessment 5 minutes after delivery and used to predict the newborn's chance of survival.

In 1997 all States except California and Texas collected information on the 5-minute Apgar score. 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 since 1993 (**tables 24 and 25**).

Of all racial groups, Asian or Pacific Islander babies were in the best physical condition shortly after delivery—only 1 percent had scores less than 7. The percent of babies with low scores was intermediate for non-Hispanic white and Hispanic women (1.2 each) while 2.5 percent of non-Hispanic black babies had low 5-minute scores.

Abnormal conditions of the newborn

Of the eight specific abnormal conditions reported on the birth certificate, the rates per 1,000 live births in 1997 were highest for assisted ventilation less than 30 minutes (22 per 1,000), assisted ventilation 30 minutes or longer (9 per 1,000), and hyaline membrane disease/respiratory distress syndrome (RDS) (6 per 1,000) (**table 48**). It has been shown that these conditions may be underreported on the birth certificate (55).

Congenital anomalies

In 1997 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 (55, 62).

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 (**table 49**). 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.

Multiple births

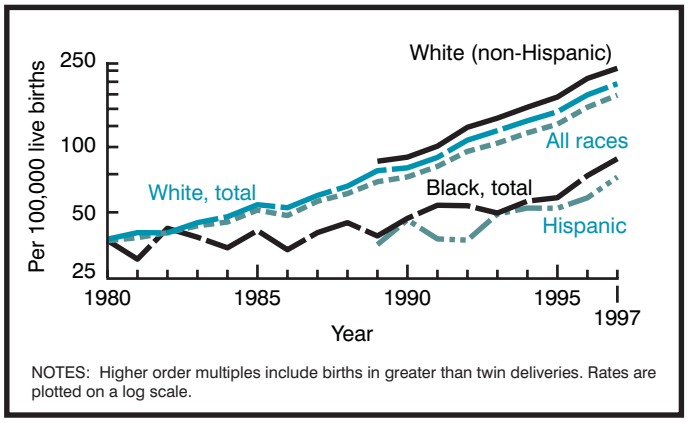
The number of births in multiple deliveries climbed to 110,874 for 1997 and included 104,137 twins, 6,148 triplets, 510 quadruplets, and 79 quintuplets and other higher order multiple births, representing a 3-percent increase in the number of twins, and a 16-percent jump in the number of triplet births over 1996. (See **table 50** for 1997 data.) Slightly fewer births were reported in quadruplet and quintuplet and other higher order multiple deliveries for 1997 (**table H**). Since 1980 the number of twins has risen 52 percent (from 68,339) and the number of triplets and other higher order multiple births by 404 percent (from 1,337) (63, 64).

The twin birth rate (the number of twin births per 1,000 live births) rose 3 percent for 1996–97, to 26.8 (or 2.7 percent of all births). Since 1980 the twinning rate has risen 42 percent (from 18.9 per 1,000). After a rise of 20 percent for 1995–96, **the higher order multiple birth rate** (the number of triplet, quadruplet and quintuplet, and other higher order multiples per 100,000 live births), jumped another 14 percent for 1997, to 173.6 per 100,000. The higher order multiple birth rate has more than doubled since 1991 (from 81.4), and quadrupled since 1980 (from 37.0) (**figure 8**). Put another way, one in every 576 births was a triplet or other higher order multiple in 1997, compared with about one of every 2,700 births in 1980. Older maternal age (women in their thirties are more likely to have a multiple birth than those in their twenties, even without the use of fertility therapy), and the more widespread use of fertility-enhancing therapies (fertility drugs and techniques such as in vitro fertilization), have been associated with the unprecedented rise in multiple births (64–66).

Twinning rates rose among the three largest **racial and ethnic groups** for 1996–97, but continue to be highest for non-Hispanic black women (30.0 compared with 28.8 for non-Hispanic white, and 19.5 for Hispanic women). In contrast, and despite substantial increases in higher order multiple births among non-Hispanic black women

Table H. Numbers of twin, triplet, quadruplet and quintuplet, and other higher order multiple births: United States, 1989–97

Year	Twins	Triplets	Quadruplets	Quintuplets and other higher order multiples
1997	104,137	6,148	510	79
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



NOTES: Higher order multiples include births in greater than twin deliveries. Rates are plotted on a log scale.

Figure 8. Higher order multiple birth rates by race and Hispanic origin of mother, 1980–97

(64 percent) and Hispanic women (93 percent) since 1991, non-Hispanic white women were more than twice as likely as non-Hispanic black women, and more than three times as likely as Hispanic women to have a triplet, quadruplet, or quintuplet birth (230.8 compared with 90.0 and 72.7 per 100,000, respectively) in 1997. Non- Hispanic white mothers tend to be older, and are more likely than their black and Hispanic counterparts, to seek infertility services (16).

Multiple birth rates generally rise with increasing **maternal age** (there is a slight dip at age 40–44 years), with rates peaking for older mothers 45 to 54 years of age. For 1997, 16.6 percent of births to mothers aged 45 years and over was a multiple, a level 10 times higher than that for mothers under 20 years of age (1.5 percent) and more than 3 times higher than that for women in their thirties (3.9 percent).

Multiple births are more likely than singletons to be born **preterm** (57 versus 10 percent) or **LBW** (56 versus 6 percent). Multiples comprised only 3 percent of all births in 1997, but 21 percent of all LBW infants, 24 percent of VLBW, 14 percent of preterm, and 20 percent of very preterm infants. The rising multiple birth rate and the accompanying high risk for these births has increasingly influenced measures of perinatal health at the national and State level (60, 67). Thus, it can be important when analyzing trends in these measures, to do so by plurality (see gestation and birthweight sections).

References

1. Ventura SJ, Anderson RN, Martin JA, Smith BL. Births and deaths: Preliminary data for 1997. National vital statistics reports; vol 47 no 4. Hyattsville, Maryland: National Center for Health Statistics. 1998.
2. National Center for Health Statistics. Natality public-use tape and CD-ROM. Hyattsville, Maryland: National Center for Health Statistics. Annual products.
3. National Center for Health Statistics. Vital statistics of the United States, Vol I, natality. Hyattsville, Maryland. Annual issues, 1980–92. Issue for 1993 in press.
4. Martin JA. Birth characteristics for Asian or Pacific Islander subgroups, 1992. Monthly vital statistics report; vol 43 no 10, supp. Hyattsville, Maryland: National Center for Health Statistics. 1995.
5. Mathews TJ, Ventura SJ, Curtin SC, Martin JA. Births of Hispanic origin, 1989–95. Monthly vital statistics report; vol 46, no 6, supp. Hyattsville, Maryland: National Center for Health Statistics. 1998.
6. Ventura SJ, Mathews TJ, Curtin SC. Declines in teenage birth rates, 1991–97: National and State patterns. National vital statistics reports; vol 47 no 12. Hyattsville, Maryland: National Center for Health Statistics. 1998.
7. Abma JC, Chandra A, Mosher WD, Peterson LS, Piccinino LJ. Fertility, family planning, and women's health: New data from the 1995 National Survey of Family Growth. National Center for Health Statistics. Vital Health Stat 23(19). 1997.
8. Piccinino LJ, Mosher WD. Trends in contraceptive use in the United States: 1982–1995. Fam Plann Persp 30(1):4–10, 46. 1998.
9. Ventura SJ, Curtin SC. Recent trends in teen births in the United States. Stat Bulletin 80(1):2–12. 1999.
10. Ventura SJ, Taffel SM, Mosher WD, Wilson JB, Henshaw S. Trends in pregnancies and pregnancy rates: Estimates for the United States, 1980–92. Monthly vital statistics report; vol 43 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1995.
11. Henshaw SK. U.S. Teenage pregnancy statistics. New York, New York: The Alan Guttmacher Institute. 1998.
12. Centers for Disease Control and Prevention. Abortion surveillance: Preliminary analysis—United States, 1996. MMWR 47(47):1025–28, 1035. 1998.
13. Hollmann FW, Kuzmeskus LB, Perkins RC, Weber EA. U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. PPL-91R. U.S. Bureau of the Census. Rounded populations consistent with U.S. Bureau of the Census file NESTV97. 1998.
14. Ventura SJ. Trends and variations in first births to older women, 1970–86. National Center for Health Statistics. Vital Health Stat 21(47). 1989.
15. Bachu A. Fertility of American women: June 1992. Current population reports; series P-20—470. Washington: U.S. Department of Commerce. 1993.
16. Chandra A, Stephen EH. Impaired fecundity in the United States: 1982–1995. Fam Plann Persp 30(1):34–42. 1998.
17. Clarke SC, Ventura SJ. Birth and fertility rates for States: United States, 1990. National Center for Health Statistics. Vital Health Stat 21(52). 1994.
18. Taffel SM. Birth and fertility rates for States: United States, 1980. National Center for Health Statistics. Vital Health Stat 21(42). 1984.
19. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Report of final natality statistics, 1996. Monthly vital statistics report; vol 46 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1998.
20. Rosenberg HM. Seasonal variation of births: United States, 1933–63. National Center for Health Statistics. Vital Health Stat 21(9). 1966.
21. Office of Vital Statistics and Epidemiology. Summary of Vital Statistics 1997—The City of New York. New York, New York: New York City Department of Health. 1998.
22. Berenson L, Office of Vital Statistics and Epidemiology, New York City Department of Health. Personal communication. February 1999.
23. Ventura SJ. Births to unmarried mothers: United States, 1980–92. National Center for Health Statistics. Vital Health Stat 21(53). 1995.
24. U. S. Bureau of the Census. Educational attainment in the United States: March 1998 (Update). Detailed tables and documentation for P20–513. Washington: U.S. Government Printing Office. 1998.
25. Chomitz VR, Cheung LWY, Lieberman E. The role of lifestyle in preventing low birth weight. In: The Future of Children: Low Birthweight. Vol 5(1):121–38. Los Altos, California: Center for the Future of Children, The David and Lucile Packard Foundation. 1995.
26. Institute of Medicine. Subcommittee on Nutritional Status and Weight Gain During Pregnancy. Nutrition during pregnancy. National Academy of Sciences. Washington: National Academy Press. 1990.
27. Abrams B, Selvin S. Maternal weight gain pattern and birth weight. Am J Obstet Gynecol. 86(2):163–9. 1995.

28. Velentgas P, Benga-De E, Williams MA. Chronic hypertension, pregnancy-induced hypertension, and low birthweight. Epidemiology 5(3):345–48. 1993.
29. Cunningham FG, Lindheimer MD. Hypertension in pregnancy. NEJM 326(14):927–32. 1992.
30. DeBaun M, Rowley D, Province M, et al. Selected antepartum medical complications and very-low-birthweight infants among black and white women. Am J Public Health 84(9): 1495–7. 1994.
31. Buescher PA, Taylor KP, Davis MH, Bowling JM. The quality of the new birth certificate data: A validation study in North Carolina. Am J Public Health 83(8):1163–65. 1993.
32. National Center for Health Statistics. Advance report of new data from the 1989 birth certificate. Monthly vital statistics report; vol 40 no 12, supp. Hyattsville, Maryland: Public Health Service. 1992.
33. Dietz PM, Adams MM, Kendrick JS, Mathis MP. The PRAMS Working Group. Completeness of ascertainment of prenatal smoking using birth certificates and confidential questionnaires: Variations by maternal attributes and infant birth weight. Am J Epidemiol 148(11):1048–54. 1998.
34. Kharrazi M, Epstein D, Hopkins B, et al. Evaluation of four smoking questions. Pub Health Rep 114(1):60–70. 1999.
35. Mathews TJ. Smoking during pregnancy, 1990–96. National vital statistics reports; vol 47 no 10. Hyattsville, Maryland: National Center for Health Statistics. 1998.
36. Ventura SJ. Commentary: Using the birth certificate to monitor smoking during pregnancy. Pub Health Rep 114(1):71–73. 1999.
37. Chandra A. Health aspects of pregnancy and childbirth: United States, 1982–88. National Center for Health Statistics. Vital Health Stat 23(18). 1995.
38. National Institute on Drug Abuse. National Pregnancy and Health Survey—Drug Use Among Women Delivering Live Births: 1992. National Institutes of Health. Rockville, Maryland: U.S. Department of Health and Human Services. 1996.
39. Vega WA, Kolody B, Hwang J, Noble A. Prevalence and magnitude of perinatal substance exposures in California. NEJM 329(12):850–4. 1993.
40. Kleinman JC, Madans JH. The effects of maternal smoking, physical stature, and educational attainment on the incidence of low birth weight. Am J Epidemiol 121(6):843–55. 1985.
41. Schoendorf KC, Kiely JL. Relationship of sudden infant death syndrome to maternal smoking during and after pregnancy. Pediatrics 90(6):905–8. 1992.
42. Cunningham J, Dockery DW, Speizer FE. Maternal smoking during pregnancy as a predictor of lung function in children. Am J Epidemiol 139(12):1139–52. 1994.
43. Ventura SJ, Taffel SM. Childbearing characteristics of U.S.- and foreign-born Hispanic mothers. Pub Health Rep 100(6):647–52. 1985.
44. Floyd RL, Zahniser SC, Gunter EP, Kendrick JS. Smoking during pregnancy: Prevalence, effects, and intervention strategies. Birth 18(1):48–53. 1991.
45. Fox SH, Koepsell TD, Daling JR. Birth weight and smoking during pregnancy—Effect modification by maternal age. Am J Epidemiol 139(10):1008–15. 1994.
46. Sampson PD, Bookstein FL, Barr HM, Steissguth AP. Prenatal alcohol exposure, birthweight, and measures of child size from birth to 14 years. Am J Public Health 84(9):1421–28. 1994.
47. Roeleveld N, Vingerhoets E, Zielhuis GA, Gabreels F. Mental retardation associated with parental smoking and alcohol consumption before, during, and after pregnancy. Prev Medicine 21:110–19. 1992.
48. Ebrahim SH, Luman ET, Floyd RL, et al. Alcohol consumption by pregnant women in the United States during 1988–1995. Obstet Gynecol 92(2):187–92. 1998.
49. Lewis CT, Mathews TJ, Heuser RL. Prenatal care in the United States, 1980–94. National Center for Health Statistics. Vital Health Stat 21(54). 1996.
50. Huntington J, Connell FA. For every dollar spent—the cost-savings argument for prenatal care. NEJM. 33(19):1303–7. 1994.
51. Fiscella K. Does prenatal care improve birth outcomes? A critical review. Obstet Gynecol 85(3):46–79. 1995.
52. U.S. Public Health Service. Caring for our future: The content of prenatal care. Washington: U.S. Department of Health and Human Services. 1989.
53. Kotelchuck M. An evaluation of the Kessner adequacy of prenatal care index and a proposed adequacy of prenatal care utilization index. Am J Public Health 84(9):1414–20. 1994.
54. Kogan MD, Martin JA, Alexander GR, et al. The changing pattern of prenatal care utilization in the United States, 1981–1995, using different prenatal care indices. JAMA 279(20):1623–28. 1998.
55. Piper JM, Mitchel EF, Snowden M, et al. Validation of 1989 Tennessee birth certificates using maternal and newborn hospital records. Am J Epidemiol 137(7):758–68. 1993.
56. Mathews TJ. Trends in stimulation and induction of labor, 1989–1995. Stat Bulletin 78(4):20–6. 1998.
57. Berkowitz GS, Papiernik E. Epidemiology of preterm birth. Epidemiologic Reviews; vol 15(2):414–43. 1993.
58. MacDorman MF, Atkinson JO. Infant mortality statistics from the linked birth/infant death data set—1996 period data. Monthly vital statistics report; vol 46 no 12, supp. Hyattsville, Maryland: National Center for Health Statistics. 1998.
59. Alexander GR, Allen MC. Conceptualization, measurement, and use of gestational age. I. Clinical and Public Health Practice. J Perinatal 16(1):53–9. 1996.
60. Centers for Disease Control and Prevention. Preterm singleton births: United States, 1989–1996. MMWR 48(9):185–9. 1999.
61. Apgar V. A proposal for a new method of evaluation of the newborn infant. Current Researches in Anesthesia and Analgesia 260–67. July–Aug. 1953.
62. Watkins ML, Edmonds L, McClearn A, et al. The surveillance of birth defects: The usefulness of the revised U.S. standard birth certificate. Am J Public Health 86(5):731–734. 1996.
63. Centers for Disease Control and Prevention. State-specific variation in rates of twin births —United States, 1992–1994. MMWR 46(6):121–25. 1997.
64. Martin JA, MacDorman MF, Mathews TJ. Triplet births: Trends and outcomes, 1971–94. National Center for Health Statistics. Vital Health Stat 21(55). 1997.
65. Kiely JL, Kleinman JC, Kiely M. Triplets and higher-order multiple births: Time trends and infant mortality. AJDC 146:862–8. 1992.
66. Wilcox LS, Kiely JL, Melvin CL, Martin MC. Assisted reproductive technologies: Estimates of their contribution to multiple births and newborn hospital days in the United States. Fertility and Sterility 65(2):361–66. 1996.
67. Martin JA, Taffel SM. Current and future impact of rising multiple birth ratios on low birthweight. Stat Bulletin 76(2):10–18. 1995.
68. Ventura SJ, Martin JA, Taffel SM, et al. Advance report of final natality statistics, 1992. Monthly vital statistics report; vol 43 no 5, supp. Hyattsville, Maryland: National Center for Health Statistics. 1994.
69. Berkov B. An evaluation of California's inferred birth statistics for unmarried women. National Center for Health Statistics. Vital Health Stat 2(97). 1985.
70. National Center for Health Statistics. Computer edits for natality data, effective 1993. Instruction manual, part 12. Hyattsville, Maryland: National Center for Health Statistics. 1995.
71. U.S. Bureau of the Census. Age, sex, race, and Hispanic origin information from the 1990 census: A comparison of census results with

results where age and race have been modified. 1990 CPH-L-74. Washington, DC: U.S. Department of Commerce. 1991.

72. U.S. Bureau of the Census. Estimates of the population of states by age, sex, race, and Hispanic origin: 1990 to 1997. STRES97.txt. Product Announcement CB98–122. Released July 21, 1998.
73. Lugaila TA. Marital status and living arrangements: March 1997 (Update). U. S. Bureau of the Census. Current population reports P20–506. Washington: U.S. Department of Commerce. 1998.
74. U.S. Bureau of the Census. Population estimates for 1997 based on unpublished tabulations prepared by the Housing and Household Economic Statistics Division. 1998.
75. Brockert JE, Stockbauer JW, Senner JW, et al. Recommended standard medical definitions for the U.S. Standard Certificate of Live Birth, 1989 revision. Paper presented at the annual meeting of the Association for Vital Records and Health Statistics. Traverse City, Michigan. June 25–27, 1990.
76. Mathews TJ, Ventura SJ. Birth and fertility rates by educational attainment: United States, 1994. Monthly vital statistics report, vol 45 no 10, supp. Hyattsville, Maryland: National Center for Health Statistics. 1997.
77. Taffel SM. Cesarean delivery in the United States, 1990. National Center for Health Statistics. Vital Health Stat 21(51). 1994.
78. Curtin SC. Rates of cesarean birth and vaginal birth after previous cesarean, 1991–95. Monthly vital statistics report; vol 45 no 11, supp 3. Hyattsville, Maryland: National Center for Health Statistics. 1997.

List of tables

1. Live births, birth rates, and fertility rates, by race: United States, specified years 1940–55 and each year, 1960–97 22
2. Live births by age of mother, live-birth order, and race of mother: United States, 1997 23
3. Fertility rates and birth rates by age of mother, live-birth order, and race of mother: United States, 1997 24
4. Total fertility rates and birth rates by age of mother: United States, 1970–97, and by age and race of mother: United States, 1980–97 25
5. Fertility rates and birth rates by live-birth order and race of mother: United States, 1980–97 27
6. Live births, birth rates, and fertility rates by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1989–97 28
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, 1997 29
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, 1997 31
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, 1989–97 33
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, Guam, and American Samoa, 1997 35
11. Live births by race of mother: United States and each State, Puerto Rico, Virgin Islands, Guam, and American Samoa, 1997 36
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, Guam, and American Samoa, 1997 37
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, 1997 38
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, 1997 39
15. Live births by race of mother and observed and seasonally adjusted birth and fertility rates, by month: United States, 1997 40
16. Live births by day of week and index of occurrence by method of delivery, day of week, and race of mother: United States, 1997 41
17. Number, rate, and percent of births to unmarried women by age, race, and Hispanic origin of mother: United States, 1997 42
18. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980–97, and by age, race, and Hispanic origin of mother: United States, 1980–97 43
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, Guam, and American Samoa, 1997 45
20. Birth rates by age and race of father: United States, 1980–97 46
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 and Hispanic origin of mother: United States, 1997 47
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, 1997 49
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, 1997 50
24. Percent of births with selected medical or health characteristics, by specified race of mother, by place of birth of mother: United States, 1997 51
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, 1997 52
26. Live births to mothers with selected medical risk factors and rates by age of mother, by race of mother: United States, 1997 53
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, 1997 54
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, 1997 55
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, 1997 56
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, 1997. 57

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 and Hispanic origin of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1997 58
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, 1997 59
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, 1997 60
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, 1997 62
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, 1997 63
36. Live births to mothers with selected obstetric procedures and rates by age of mother, by race of mother: United States, 1997 65
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, 1997 66
38. Live births by attendant, place of delivery, and race and Hispanic origin of mother: United States, 1997 67
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, 1989–97 68
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, 1997 69
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, 1997 70
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, 1997 . . . 71
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, 1997 72
44. Percent of live births very preterm and preterm and percent of live births of very low birthweight and low birthweight, by race and Hispanic origin of mother: United States, 1981–97 74
45. Number and percent low birthweight and number of live births by birthweight, by age and race and Hispanic origin of mother: United States, 1997 75
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, Guam, and American Samoa, 1997 77
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, Guam, and American Samoa, 1997 78
48. Live births with selected abnormal conditions of the newborn and rates by age of mother, by race of mother: United States, 1997 79
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, 1997 80
50. Live births by plurality of birth and ratios, by age and race and Hispanic origin of mother: United States, 1997 82

Guide to tables in Births: Final Data for 1997

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[1]										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						[4]6	[4]7	[4]8	[4]9			[4]12		[4]14			[6]17	[6]18	[6]19		[6]21	[6]22	[4]23		[4]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																				[3]20					
Race of mother	[2]1	[2]2	[2]3	[2]4	[3]5	[4]6	[4]7	[4]8	[4]9		[2]11	[4]12	[5]13	[4]14	[3]15	[3]16	[6]17	[6]18	[6]19		[3]21	[6]22	[4]23	[5]24	[4]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[1]									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	43		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			[4]28		[4]30	[6]31	[6]32	[6]33	[6]34	[6]35			[6]38	[6]39	[6]40	[6]41		[6]43	[6]44	[6]45	[6]46	[6]47			[6]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	[3]26	[5]27	[4]28	[3]29	[4]30	[3]31	[6]32	[6]33	[6]34	[6]35	[3]36	[3]37	[6]38	[6]39	[6]40	[6]41		[6]43	[3]44	[6]45	[6]46	[6]47	[3]48	[3]49	[6]50
Tobacco use				29	30	31	32																		

[1]Includes data for Puerto Rico, Virgin Islands, Guam, and American Samoa; data for American Samoa not available for tables 34 and 41.
[2]Includes white, black, American Indian, Asian or Pacific Islander.
[3]Includes white and black.
[4]Includes Mexican, Puerto Rican, Cuban, Central and South American, other and unknown Hispanic, non-Hispanic white, and non-Hispanic black.
[5]Includes white, black, American Indian, Chinese, Japanese, Hawaiian, Filipino, and other Asian or Pacific Islanders.
[6]Includes Hispanic, non-Hispanic white, and non-Hispanic black.

Table 1. Live births, birth rates, and fertility rates, by race: United States, specified years 1940-55 and each year, 1960-97

[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 [1]	White	Black	American Indian [2]	Asian or Pacific Islander	All races [1]	White	Black	American Indian [2]	Asian or Pacific Islander	All races [1]	White	Black	American Indian [2]	Asian or Pacific Islander
Registered births															
Race of mother:															
1997	3,880,894	3,072,640	599,913	38,572	169,769	14.5	13.9	17.7	16.6	16.9	65.0	63.9	70.7	69.1	66.3
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 [3]	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 [3]	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 [3]	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 [3]	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 [3]	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
Race of child:															
1980 [3]	3,612,258	2,898,732	589,616	36,797	---	15.9	14.9	22.1	---	---	68.4	64.7	88.1	---	---
1979 [3]	3,494,398	2,808,420	577,855	34,269	---	15.6	14.5	22.0	---	---	67.2	63.4	88.3	---	---
1978 [3]	3,333,279	2,681,116	551,540	33,160	---	15.0	14.0	21.3	---	---	65.5	61.7	86.7	---	---
1977 [3]	3,326,632	2,691,070	544,221	30,500	---	15.1	14.1	21.4	---	---	66.8	63.2	88.1	---	---
1976 [3]	3,167,788	2,567,614	514,479	29,009	---	14.6	13.6	20.5	---	---	65.0	61.5	85.8	---	---
1975 [3]	3,144,198	2,551,996	511,581	27,546	---	14.6	13.6	20.7	---	---	66.0	62.5	87.9	---	---
1974 [3]	3,159,958	2,575,792	507,162	26,631	---	14.8	13.9	20.8	---	---	67.8	64.2	89.7	---	---
1973 [3]	3,136,965	2,551,030	512,597	26,464	---	14.8	13.8	21.4	---	---	68.8	64.9	93.6	---	---
1972 [3]	3,258,411	2,655,558	531,329	27,368	---	15.6	14.5	22.5	---	---	73.1	68.9	99.9	---	---
1971 [4]	3,555,970	2,919,746	564,960	27,148	---	17.2	16.1	24.4	---	---	81.6	77.3	109.7	---	---
1970 [4]	3,731,386	3,091,264	572,362	25,864	---	18.4	17.4	25.3	---	---	87.9	84.1	115.4	---	---
1969 [4]	3,600,206	2,993,614	543,132	24,008	---	17.9	16.9	24.4	---	---	86.1	82.2	112.1	---	---
1968 [4]	3,501,564	2,912,224	531,152	24,156	---	17.6	16.6	24.2	---	---	85.2	81.3	112.7	---	---
1967 [5]	3,520,959	2,922,502	543,976	22,665	---	17.8	16.8	25.1	---	---	87.2	82.8	118.5	---	---
1966 [4]	3,606,274	2,993,230	558,244	23,014	---	18.4	17.4	26.2	---	---	90.8	86.2	124.7	---	---
1965 [4]	3,760,358	3,123,860	581,126	24,066	---	19.4	18.3	27.7	---	---	96.3	91.3	133.2	---	---
1964 [4]	4,027,490	3,369,160	607,556	24,382	---	21.1	20.0	29.5	---	---	104.7	99.8	142.6	---	---
1963 [4, 6]	4,098,020	3,326,344	580,658	22,358	---	21.7	20.7	---	---	---	108.3	103.6	---	---	---
1962 [4, 6]	4,167,362	3,394,068	584,610	21,968	---	22.4	21.4	---	---	---	112.0	107.5	---	---	---
1961 [4]	4,268,326	3,600,864	611,072	21,464	---	23.3	22.2	---	---	---	117.1	112.3	---	---	---
1960 [4]	4,257,850	3,600,744	602,264	21,114	---	23.7	22.7	31.9	---	---	118.0	113.2	153.5	---	---
Births adjusted for underregis-tration															
Race of child:															
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.
1 For 1960-91 includes births to races not shown separately.
2 Includes births to Aleuts and Eskimos.
3 Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.
4 Based on a 50-percent sample of births.
5 Based on a 20- to 50-percent sample of births.
6 Figures by race exclude New Jersey.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 2. Live births by age of mother, live-birth order, and race of mother: United States, 1997

[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	50-54 years
			Total	15 years	16 years	17 years	18 years	19 years							
All races	3,880,894	10,121	483,220	26,340	57,038	96,776	134,595	168,471	942,048	1,069,436	886,798	409,710	76,084	3,333	144
1st child	1,573,768	9,843	374,795	24,997	51,542	81,177	102,430	114,649	434,421	399,623	248,113	90,274	15,941	723	35
2d child	1,254,354	211	88,046	1,107	4,806	13,449	26,653	42,031	322,692	369,886	320,452	131,608	20,699	722	38
3d child	628,579	1	15,151	60	315	1,393	4,146	9,237	128,467	186,730	186,492	95,411	15,753	556	18
4th child	241,418	-	1,966	3	15	118	462	1,368	38,284	69,287	75,254	46,879	9,313	423	12
5th child	89,479	-	277	-	1	16	60	200	10,023	24,276	28,773	20,623	5,247	252	8
6th child	37,583	-	38	-	2	1	12	23	2,567	8,980	12,375	10,338	3,109	172	4
7th child	17,251	-	10	-	-	1	3	6	585	3,487	5,834	5,312	1,896	120	7
8th child and over	17,854	-	4	-	-	1	2	1	203	1,915	4,956	6,833	3,601	324	18
Not stated	20,608	66	2,933	173	357	620	827	956	4,806	5,252	4,549	2,432	525	41	4
White	3,072,640	5,021	338,272	15,959	37,324	66,882	95,436	122,671	720,546	871,636	735,571	337,423	61,417	2,633	121
1st child	1,252,047	4,913	269,307	15,273	34,276	57,621	75,175	86,962	346,364	334,554	207,519	75,441	13,310	605	34
2d child	1,012,916	76	57,500	540	2,645	8,069	17,223	29,023	250,685	307,959	269,851	109,275	16,936	601	33
3d child	498,451	-	8,320	25	137	699	2,191	5,268	90,725	150,110	156,615	79,552	12,674	438	17
4th child	182,633	-	902	-	11	41	212	638	22,974	51,488	61,132	38,399	7,399	327	12
5th child	63,291	-	117	-	-	6	33	78	4,940	15,976	21,785	16,230	4,041	196	6
6th child	25,252	-	11	-	1	-	2	8	1,038	5,098	8,649	7,921	2,406	125	4
7th child	10,990	-	2	-	-	-	-	2	195	1,655	3,713	3,879	1,458	85	3
8th child and over	11,340	-	3	-	-	1	1	1	93	768	2,670	4,786	2,785	227	8
Not stated	15,720	32	2,110	121	254	445	599	691	3,532	4,028	3,637	1,940	408	29	4
Black	599,913	4,712	128,539	9,381	17,658	26,595	34,712	40,193	182,600	135,529	94,123	45,069	8,981	357	3
1st child	230,724	4,556	92,746	8,796	15,411	20,776	23,882	23,881	67,884	35,504	20,584	8,002	1,398	50	-
2d child	174,612	122	27,597	503	1,993	4,927	8,562	11,612	60,442	43,022	28,965	12,361	2,043	59	1
3d child	101,843	1	6,332	31	160	658	1,802	3,681	33,169	28,966	21,143	10,263	1,896	73	-
4th child	47,865	-	963	2	4	66	224	667	13,714	14,617	10,937	6,235	1,337	62	-
5th child	21,465	-	148	-	1	10	25	112	4,558	6,911	5,542	3,396	875	33	2
6th child	9,986	-	23	-	1	-	9	13	1,368	3,223	2,956	1,880	506	30	-
7th child	4,941	-	7	-	-	1	3	3	337	1,513	1,639	1,111	314	20	-
8th child and over	4,852	-	1	-	-	-	1	-	103	928	1,770	1,489	535	26	-
Not stated	3,625	33	722	49	88	157	204	224	1,025	845	587	332	77	4	-
American Indian [1]	38,572	202	7,810	470	1,000	1,648	2,118	2,574	12,316	9,168	5,812	2,694	542	28	-
1st child	13,696	198	5,957	445	915	1,397	1,580	1,620	4,497	1,832	862	294	50	6	-
2d child	10,596	4	1,552	22	69	222	467	772	4,486	2,646	1,321	494	88	5	-
3d child	6,579	-	218	2	5	16	55	140	2,207	2,192	1,316	553	91	2	-
4th child	3,616	-	26	-	-	2	5	19	777	1,290	951	476	92	4	-
5th child	1,893	-	1	-	-	-	-	1	202	655	616	339	75	-	-
6th child	997	-	-	-	-	-	-	-	44	321	365	223	43	1	-
7th child	520	-	-	-	-	-	-	-	22	124	203	135	34	2	-
8th child and over	436	-	-	-	-	-	-	-	1	63	144	161	64	3	-
Not stated	239	-	56	1	11	11	11	22	80	45	34	19	5	-	-
Asian or Pacific Islander	169,769	186	8,599	530	1,056	1,651	2,329	3,033	26,586	53,103	51,292	24,524	5,144	315	20
1st child	77,301	176	6,785	483	940	1,383	1,793	2,186	15,676	27,733	19,148	6,537	1,183	62	1
2d child	56,230	9	1,397	42	99	231	401	624	7,079	16,259	20,315	9,478	1,632	57	4
3d child	21,706	-	281	2	13	20	98	148	2,366	5,462	7,418	5,043	1,092	43	1
4th child	7,304	-	75	1	-	9	21	44	819	1,892	2,234	1,769	485	30	-
5th child	2,830	-	11	-	-	-	2	9	323	734	830	658	256	18	-
6th child	1,348	-	4	-	-	1	1	2	117	338	405	314	154	16	-
7th child	800	-	1	-	-	-	-	1	31	195	279	187	90	13	4
8th child and over	1,226	-	-	-	-	-	-	-	6	156	372	397	217	68	10
Not stated	1,024	1	45	2	4	7	13	19	169	334	291	141	35	8	-

- Quantity zero.
[1] Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 3. Fertility rates and birth rates by age of mother, live-birth order, and race of mother: United States, 1997

[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 [1]	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 [2]
			Total	15-17 years	18-19 years						
All races	65.0	1.1	52.3	32.1	83.6	110.4	113.8	85.3	36.1	7.1	0.4
1st child	26.5	1.1	40.8	28.3	60.2	51.2	42.7	24.0	8.0	1.5	0.1
2d child	21.1	0.0	9.6	3.5	19.1	38.0	39.5	31.0	11.7	1.9	0.1
3d child	10.6	*	1.6	0.3	3.7	15.1	20.0	18.0	8.5	1.5	0.1
4th child	4.1	*	0.2	0.0	0.5	4.5	7.4	7.3	4.2	0.9	0.0
5th child	1.5	*	0.0	*	0.1	1.2	2.6	2.8	1.8	0.5	0.0
6th and 7th child	0.9	*	0.0	*	0.0	0.4	1.3	1.8	1.4	0.5	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.5	0.6	0.3	0.0
White	63.9	0.7	46.3	27.1	75.9	106.7	116.6	87.8	36.4	6.9	0.4
1st child	26.2	0.7	37.1	24.3	56.8	51.6	45.0	24.9	8.2	1.5	0.1
2d child	21.2	0.0	7.9	2.6	16.2	37.3	41.4	32.4	11.8	1.9	0.1
3d child	10.4	*	1.1	0.2	2.6	13.5	20.2	18.8	8.6	1.4	0.1
4th child	3.8	*	0.1	0.0	0.3	3.4	6.9	7.3	4.2	0.8	0.0
5th child	1.3	*	0.0	*	0.0	0.7	2.1	2.6	1.8	0.5	0.0
6th and 7th child	0.8	*	*	*	*	0.2	0.9	1.5	1.3	0.4	0.0
8th child and over	0.2	*	*	*	*	0.0	0.1	0.3	0.5	0.3	0.0
Black	70.7	3.3	88.2	60.8	130.1	139.0	99.5	64.3	29.7	6.5	0.3
1st child	27.3	3.2	64.0	51.3	83.5	52.0	26.2	14.1	5.3	1.0	0.0
2d child	20.7	0.1	19.0	8.5	35.3	46.3	31.8	19.9	8.2	1.5	0.1
3d child	12.1	*	4.4	1.0	9.6	25.4	21.4	14.5	6.8	1.4	0.1
4th child	5.7	*	0.7	0.1	1.6	10.5	10.8	7.5	4.1	1.0	0.1
5th child	2.5	*	0.1	*	0.2	3.5	5.1	3.8	2.3	0.6	0.0
6th and 7th child	1.8	*	0.0	*	0.0	1.3	3.5	3.2	2.0	0.6	0.0
8th child and over	0.6	*	*	*	*	0.1	0.7	1.2	1.0	0.4	0.0
American Indian [3]	69.1	1.7	71.8	45.3	117.6	134.9	100.8	64.2	29.3	6.4	0.4
1st child	24.7	1.7	55.2	40.4	80.8	49.6	20.2	9.6	3.2	0.6	*
2d child	19.1	*	14.4	4.6	31.3	49.5	29.2	14.7	5.4	1.0	*
3d child	11.9	*	2.0	0.3	4.9	24.3	24.2	14.6	6.1	1.1	*
4th child	6.5	*	0.2	*	0.6	8.6	14.2	10.6	5.2	1.1	*
5th child	3.4	*	*	*	*	2.2	7.2	6.9	3.7	0.9	*
6th and 7th child	2.7	*	*	*	*	0.7	4.9	6.3	3.9	0.9	*
8th child and over	0.8	*	*	*	*	*	0.7	1.6	1.8	0.8	*
Asian or Pacific Islander	66.3	0.5	23.7	14.3	39.3	70.5	113.2	110.3	54.1	11.9	0.9
1st child	30.4	0.5	18.8	12.5	29.3	41.8	59.5	41.4	14.5	2.8	0.2
2d child	22.1	*	3.9	1.7	7.6	18.9	34.9	43.9	21.0	3.8	0.2
3d child	8.5	*	0.8	0.2	1.8	6.3	11.7	16.0	11.2	2.5	0.1
4th child	2.9	*	0.2	*	0.5	2.2	4.1	4.8	3.9	1.1	0.1
5th child	1.1	*	*	*	*	0.9	1.6	1.8	1.5	0.6	*
6th and 7th child	0.8	*	*	*	*	0.4	1.1	1.5	1.1	0.6	0.1
8th child and over	0.5	*	*	*	*	*	0.3	0.8	0.9	0.5	0.2

* 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] Rates computed by relating births to women aged 45-54 years to women aged 45-49 years.
[3] Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 4. Total fertility rates and birth rates by age of mother: United States, 1970-97, and by age and race of mother: United States, 1980-97

[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 [1]
			Total	15-17 years	18-19 years						
All races [2]											
1997	2,032.5	1.1	52.3	32.1	83.6	110.4	113.8	85.3	36.1	7.1	0.4
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 [3]	1,806.5	1.2	50.6	31.0	77.4	106.8	108.7	67.0	22.9	3.9	0.2
1983 [3]	1,799.0	1.1	51.4	31.8	77.4	107.8	108.5	64.9	22.0	3.9	0.2
1982 [3]	1,827.5	1.1	52.4	32.3	79.4	111.6	111.0	64.1	21.2	3.9	0.2
1981 [3]	1,812.0	1.1	52.2	32.0	80.0	112.2	111.5	61.4	20.0	3.8	0.2
1980 [3]	1,839.5	1.1	53.0	32.5	82.1	115.1	112.9	61.9	19.8	3.9	0.2
1979 [3]	1,808.0	1.2	52.3	32.3	81.3	112.8	111.4	60.3	19.5	3.9	0.2
1978 [3]	1,760.0	1.2	51.5	32.2	79.8	109.9	108.5	57.8	19.0	3.9	0.2
1977 [3]	1,789.5	1.2	52.8	33.9	80.9	112.9	111.0	56.4	19.2	4.2	0.2
1976 [3]	1,738.0	1.2	52.8	34.1	80.5	110.3	106.2	53.6	19.0	4.3	0.2
1975 [3]	1,774.0	1.3	55.6	36.1	85.0	113.0	108.2	52.3	19.5	4.6	0.3
1974 [3]	1,835.0	1.2	57.5	37.3	88.7	117.7	111.5	53.8	20.2	4.8	0.3
1973 [3]	1,879.0	1.2	59.3	38.5	91.2	119.7	112.2	55.6	22.1	5.4	0.3
1972 [3]	2,010.0	1.2	61.7	39.0	96.9	130.2	117.7	59.8	24.8	6.2	0.4
1971 [4]	2,266.5	1.1	64.5	38.2	105.3	150.1	134.1	67.3	28.7	7.1	0.4
1970 [4]	2,480.0	1.2	68.3	38.8	114.7	167.8	145.1	73.3	31.7	8.1	0.5
White											
1997	2,009.0	0.7	46.3	27.1	75.9	106.7	116.6	87.8	36.4	6.9	0.4
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 [3]	1,748.5	0.6	42.9	24.3	68.4	102.7	109.8	67.7	22.2	3.6	0.2
1983 [3]	1,740.5	0.6	43.9	25.0	68.8	103.8	109.4	65.3	21.3	3.6	0.2
1982 [3]	1,767.0	0.6	45.0	25.5	70.8	107.7	111.9	64.0	20.4	3.6	0.2
1981 [3]	1,748.0	0.5	44.9	25.4	71.5	108.3	112.3	61.0	19.0	3.4	0.2
1980 [3]	1,773.0	0.6	45.4	25.5	73.2	111.1	113.8	61.2	18.8	3.5	0.2
Black											
1997	2,154.0	3.3	88.2	60.8	130.1	139.0	99.5	64.3	29.7	6.5	0.3
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 [3]	2,070.5	4.4	94.1	69.2	128.1	132.2	98.4	56.7	23.3	4.8	0.2
1983 [3]	2,066.0	4.1	93.9	69.6	127.1	131.9	98.4	56.2	23.3	5.1	0.3
1982 [3]	2,106.5	4.0	94.3	69.7	128.9	135.4	101.3	57.5	23.3	5.1	0.4
1981 [3]	2,117.5	4.0	94.5	69.3	131.0	136.5	102.3	57.4	23.1	5.4	0.3
1980 [3]	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, 1970-97, and by age and race of mother: United States, 1980-97 --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 [1]
			Total	15-17 years	18-19 years						
American Indian [5]											
1997	2,047.5	1.7	71.8	45.3	117.6	134.9	100.8	64.2	29.3	6.4	0.4
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 [3]	2,136.0	1.7	81.5	50.7	124.7	142.4	109.2	60.5	26.3	5.6	*
1983 [3]	2,180.5	1.9	84.2	55.2	121.4	145.5	113.7	58.9	25.5	6.4	*
1982 [3]	2,213.0	1.4	83.5	52.6	127.6	148.1	115.8	60.9	26.9	6.0	*
1981 [3]	2,090.0	2.1	78.4	49.7	121.5	141.2	105.6	58.9	25.2	6.6	*
1980 [3]	2,162.5	1.9	82.2	51.5	129.5	143.7	106.6	61.8	28.1	8.2	*
Asian or Pacific Islander											
1997	1,925.5	0.5	23.7	14.3	39.3	70.5	113.2	110.3	54.1	11.9	0.9
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 [3]	1,892.0	0.5	24.2	12.6	40.7	86.7	124.3	92.4	40.6	8.7	1.0
1983 [3]	1,943.5	0.5	26.1	12.9	44.5	94.0	126.2	93.3	39.4	8.2	1.0
1982 [3]	2,015.5	0.4	29.4	14.0	50.8	98.9	130.9	94.4	39.2	8.8	1.1
1981 [3]	1,976.0	0.3	28.5	13.4	49.5	96.4	129.1	93.4	38.0	8.6	0.9
1980 [3]	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.
[1] Beginning 1997, rates computed by relating births to women aged 45-54 years to women aged 45-49 years.
[2] For 1970-91 includes births to races not shown separately.
[3] Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.
[4] Based on a 50-percent sample of births.
[5] Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 5. Fertility rates and birth rates by live-birth order and race of mother: United States, 1980-97

[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
All races [1]								
1997	65.0	26.5	21.1	10.6	4.1	1.5	0.9	0.3
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 [2]	65.5	27.4	21.7	10.1	3.7	1.4	0.9	0.3
1983 [2]	65.7	27.8	21.5	10.1	3.7	1.4	0.9	0.3
1982 [2]	67.3	28.6	22.0	10.2	3.8	1.4	0.9	0.3
1981 [2]	67.3	29.0	21.6	10.1	3.8	1.5	0.9	0.4
1980 [2]	68.4	29.5	21.8	10.3	3.9	1.5	1.0	0.4
White								
1997	63.9	26.2	21.2	10.4	3.8	1.3	0.8	0.2
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 [2]	63.2	26.8	21.4	9.6	3.3	1.2	0.7	0.2
1983 [2]	63.4	27.2	21.2	9.5	3.3	1.2	0.7	0.2
1982 [2]	64.8	28.0	21.6	9.6	3.4	1.2	0.7	0.3
1981 [2]	64.8	28.4	21.1	9.5	3.4	1.2	0.8	0.3
1980 [2]	65.6	28.8	21.3	9.6	3.4	1.3	0.8	0.3
Black								
1997	70.7	27.3	20.7	12.1	5.7	2.5	1.8	0.6
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 [2]	78.1	30.9	23.0	13.2	6.0	2.6	1.7	0.6
1983 [2]	78.7	31.1	23.1	13.2	6.1	2.7	1.8	0.6
1982 [2]	80.9	31.7	23.9	13.8	6.3	2.7	1.8	0.7
1981 [2]	82.0	32.3	24.2	13.7	6.3	2.8	1.9	0.8
1980 [2]	84.9	33.7	24.7	14.0	6.5	2.9	2.1	0.9

[1] Includes races other than white and black.
[2] 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 birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1989-97

Measure and year	All origins [1]	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total [2]	White	Black
Number										
1997	3,880,894	709,767	499,024	55,450	12,887	97,405	45,001	3,115,174	2,333,363	581,431
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 [3]	4,049,024	643,271	432,047	59,569	11,472	89,031	51,152	3,365,862	2,527,207	657,450
1991 [3]	4,094,566	623,085	411,233	59,833	11,058	86,908	54,053	3,434,464	2,589,878	666,758
1990 [4]	4,092,994	595,073	385,640	58,807	11,311	83,008	56,307	3,457,417	2,626,500	661,701
1989 [5]	3,903,012	532,249	327,233	56,229	10,842	72,443	65,502	3,297,493	2,526,367	611,269
Birth rate [6]										
1997	14.5	24.2	26.8	18.1	10.1	[7]22.4		13.3	12.2	18.1
1996	14.7	24.8	27.4	17.9	10.7	[7]23.4		13.5	12.4	18.3
1995	14.8	25.2	26.9	19.7	11.0	[7]25.3		13.7	12.6	18.8
1994	15.2	25.5	27.0	21.4	10.8	[7]25.7		14.0	12.8	20.0
1993	15.5	26.0	27.4	21.9	10.5	[7]26.9		14.4	13.1	21.1
1992 [3]	15.9	26.5	27.8	23.2	10.1	[7]27.9		14.8	13.5	21.9
1991 [8]	16.3	26.7	29.2	21.0	10.1	[7]26.5		15.2	13.9	22.5
1990 [4]	16.7	26.7	28.7	21.6	10.9	[7]27.5		15.7	14.4	23.0
1989 [5]	16.3	26.2	25.7	23.7	10.0	[7]28.3		15.4	14.2	22.8
Fertility rate [9]										
1997	65.0	102.8	116.6	71.7	57.4	[7]87.6		60.1	57.0	72.4
1996	65.3	104.9	119.3	71.3	58.9	[7]90.2		60.3	57.3	72.5
1995	65.6	105.0	117.0	75.7	55.1	[7]94.5		60.8	57.6	74.5
1994	66.7	105.6	115.4	81.9	55.9	[7]97.7		62.0	58.3	79.0
1993	67.6	106.9	114.8	82.5	55.5	[7]105.0		63.1	59.0	82.7
1992 [3]	68.9	108.6	116.0	89.9	50.3	[7]107.0		64.4	60.2	85.5
1991 [8]	69.6	108.1	121.6	80.9	49.1	[7]99.3		65.4	61.0	87.6
1990 [4]	71.0	107.7	118.9	82.9	52.6	[7]102.7		67.1	62.8	89.0
1989 [5]	69.2	104.9	106.6	86.6	49.8	[7]95.8		65.7	60.5	84.8

[1] Includes origin not stated.
[2] Includes races other than white and black.
[3] Excludes data for New Hampshire, which did not report Hispanic origin.
[4] Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.
[5] Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.
[6] Live births per 1,000 population in specifed group.
[7] Includes Central and South American and other and unknown Hispanic.
[8] 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.
[9] Live births per 1,000 women aged 15-44 years in specified group.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, 1997

[Live-birth order refers to number of children born alive to mother. Includes births with stated origin of mother only]

Live-birth order and 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	50-54 years
			Total	15 years	16 years	17 years	18 years	19 years							
Hispanic															
Total	709,767	2,833	118,122	7,778	15,870	24,768	31,542	38,164	216,152	188,669	121,539	51,601	10,405	439	7
1st child	266,392	2,766	88,821	7,303	14,083	20,010	22,781	24,644	93,006	50,172	22,808	7,468	1,308	43	-
2d child	214,352	48	23,635	377	1,533	4,065	7,184	10,476	76,759	64,382	35,468	12,157	1,829	73	1
3d child	127,872	-	4,042	23	90	431	1,150	2,348	32,426	44,385	31,959	12,780	2,201	78	1
4th child	56,782	-	527	-	7	25	127	368	9,529	18,559	17,455	8,904	1,739	68	1
5th child	22,760	-	76	-	-	4	23	49	2,350	6,687	7,586	4,767	1,248	45	1
6th child	9,525	-	6	-	1	-	1	4	561	2,245	3,248	2,620	804	41	-
7th child	4,141	-	3	-	-	-	1	2	126	846	1,438	1,242	458	27	1
8th child and over	3,697	-	3	-	-	1	1	1	44	380	1,017	1,424	767	60	2
Not stated	4,246	19	1,009	75	156	232	274	272	1,351	1,013	560	239	51	4	-
Mexican	499,024	2,103	86,426	5,701	11,759	18,219	22,988	27,759	159,304	133,465	78,891	32,026	6,547	259	3
1st child	182,542	2,053	64,661	5,343	10,417	14,612	16,484	17,805	67,104	32,028	12,324	3,728	629	15	-
2d child	147,737	37	17,579	280	1,150	3,082	5,335	7,732	57,377	45,150	20,484	6,172	902	36	-
3d child	92,294	-	3,001	17	69	330	850	1,735	24,491	33,526	22,139	7,854	1,246	37	-
4th child	42,598	-	380	-	5	17	96	262	7,127	14,312	13,196	6,339	1,208	36	-
5th child	17,386	-	56	-	-	2	16	38	1,737	5,157	5,890	3,607	910	29	-
6th child	7,413	-	5	-	1	-	1	3	395	1,694	2,599	2,081	608	31	-
7th child	3,234	-	3	-	-	-	1	2	95	637	1,131	978	368	21	1
8th child and over	2,940	-	1	-	-	-	-	1	30	289	791	1,130	645	52	2
Not stated	2,880	13	740	61	117	176	205	181	948	672	337	137	31	2	-
Puerto Rican	55,450	291	12,052	856	1,597	2,538	3,323	3,738	17,192	13,337	8,357	3,515	670	33	3
1st child	21,778	286	8,773	794	1,393	2,005	2,318	2,263	6,468	3,693	1,859	588	107	4	-
2d child	17,024	3	2,553	49	168	446	813	1,077	6,112	4,372	2,816	1,012	150	6	-
3d child	9,180	-	491	5	9	48	140	289	2,940	2,839	1,855	878	169	7	1
4th child	3,929	-	71	-	1	2	12	56	1,039	1,320	908	480	102	8	1
5th child	1,649	-	6	-	-	1	1	4	316	566	433	256	69	2	1
6th child	718	-	-	-	-	-	-	-	99	254	198	132	34	1	-
7th child	326	-	-	-	-	-	-	-	16	102	116	75	15	2	-
8th child and over	258	-	-	-	-	-	-	-	8	50	103	74	21	2	-
Not stated	588	2	158	8	26	36	39	49	194	141	69	20	3	1	-
Cuban	12,887	24	927	51	101	175	255	345	2,520	3,609	3,835	1,697	264	11	-
1st child	5,633	24	759	49	92	153	204	261	1,515	1,683	1,194	408	48	2	-
2d child	4,621	-	142	2	9	21	42	68	743	1,346	1,648	642	96	4	-
3d child	1,898	-	18	-	-	1	5	12	195	447	738	427	70	3	-
4th child	486	-	6	-	-	-	2	4	49	89	180	133	27	2	-
5th child	139	-	-	-	-	-	-	-	12	26	37	50	14	-	-
6th child	42	-	-	-	-	-	-	-	-	6	13	19	4	-	-
7th child	17	-	-	-	-	-	-	-	-	3	5	7	2	-	-
8th child and over	21	-	-	-	-	-	-	-	-	3	11	6	1	-	-
Not stated	30	-	2	-	-	-	2	-	6	6	9	5	2	-	-
Central and South American	97,405	178	10,046	549	1,182	1,936	2,701	3,678	23,992	27,144	22,710	10,930	2,289	116	-
1st child	37,931	172	8,016	521	1,079	1,672	2,110	2,634	12,413	9,379	5,504	2,043	385	19	-
2d child	31,083	4	1,675	25	86	233	491	840	7,900	9,708	7,935	3,306	534	21	-
3d child	17,100	-	266	1	6	19	84	156	2,686	5,243	5,481	2,820	575	29	-
4th child	6,729	-	28	-	-	3	4	21	708	1,845	2,309	1,486	335	18	-
5th child	2,457	-	4	-	-	-	2	2	129	594	877	643	197	13	-
6th child	930	-	1	-	-	-	-	1	32	171	309	293	117	7	-
7th child	385	-	-	-	-	-	-	-	5	51	135	134	56	4	-
8th child and over	313	-	2	-	-	1	1	-	2	17	62	147	79	4	-
Not stated	477	2	54	2	11	8	9	24	117	136	98	58	11	1	-
Other and unknown Hispanic	45,001	237	8,671	621	1,231	1,900	2,275	2,644	13,144	11,114	7,746	3,433	635	20	1
1st child	18,508	231	6,612	596	1,102	1,568	1,665	1,681	5,506	3,389	1,927	701	139	3	-
2d child	13,887	4	1,686	21	120	283	503	759	4,627	3,806	2,585	1,025	147	6	1
3d child	7,400	-	266	-	6	33	71	156	2,114	2,330	1,746	801	141	2	-
4th child	3,040	-	42	-	1	3	13	25	606	993	862	466	67	4	-
5th child	1,129	-	10	-	-	1	4	5	156	344	349	211	58	1	-
6th child	422	-	-	-	-	-	-	-	35	120	129	95	41	2	-
7th child	179	-	-	-	-	-	-	-	10	53	51	48	17	-	-
8th child and over	165	-	-	-	-	-	-	-	4	21	50	67	21	2	-
Not stated	271	2	55	4	2	12	19	18	86	58	47	19	4	-	-

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, 1997 --Con.

[Live-birth order refers to number of children born alive to mother. Includes births with stated origin of mother only]

Live-birth order and 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	50-54 years
			Total	15 years	16 years	17 years	18 years	19 years							
Non-Hispanic															
Total [1]	3,115,174	7,197	360,159	18,308	40,627	71,038	101,715	128,471	715,227	865,694	749,555	350,343	64,064	2,807	128
1st child	1,286,028	6,990	282,227	17,457	36,975	60,357	78,658	88,780	336,574	343,614	220,663	81,033	14,246	648	33
2d child	1,022,467	162	63,569	717	3,237	9,276	19,222	31,117	242,485	300,685	279,372	117,058	18,466	634	36
3d child	492,203	1	10,984	37	223	952	2,962	6,810	94,668	140,175	151,722	80,916	13,255	467	15
4th child	181,452	-	1,417	3	8	92	328	986	28,357	49,863	56,763	37,272	7,420	349	11
5th child	65,499	-	197	-	1	12	37	147	7,583	17,206	20,792	15,580	3,931	203	7
6th child	27,489	-	32	-	1	1	11	19	1,988	6,579	8,934	7,563	2,262	127	4
7th child	12,818	-	7	-	-	1	2	4	452	2,583	4,294	3,982	1,402	92	6
8th child and over	13,708	-	1	-	-	-	1	-	158	1,504	3,807	5,231	2,735	256	16
Not stated	13,510	44	1,725	94	182	347	494	608	2,962	3,485	3,208	1,708	347	31	-
White	2,333,363	2,240	219,857	8,244	21,536	42,088	63,787	84,202	500,928	674,498	603,304	280,393	49,908	2,130	105
1st child	974,855	2,200	180,306	8,027	20,268	37,591	52,292	62,128	251,763	280,489	181,209	66,624	11,698	534	32
2d child	788,759	28	33,849	169	1,129	4,015	10,056	18,480	172,863	240,936	230,324	95,384	14,827	517	31
3d child	366,267	-	4,310	4	47	274	1,062	2,923	57,925	104,830	122,959	65,595	10,282	352	14
4th child	124,488	-	373	-	4	16	83	270	13,353	32,645	43,182	29,095	5,573	256	11
5th child	40,139	-	41	-	-	2	11	28	2,597	9,169	14,059	11,354	2,765	149	5
6th child	15,512	-	6	-	-	-	2	4	486	2,804	5,320	5,224	1,585	83	4
7th child	6,731	-	-	-	-	-	-	-	72	802	2,227	2,596	975	57	2
8th child and over	7,344	-	-	-	-	-	-	-	49	382	1,578	3,223	1,946	160	6
Not stated	9,268	12	972	44	88	190	281	369	1,820	2,441	2,446	1,298	257	22	-
Black	581,431	4,613	125,343	9,163	17,235	25,940	33,870	39,135	177,494	130,942	90,637	43,434	8,624	341	3
1st child	223,429	4,460	90,304	8,593	15,028	20,232	23,283	23,168	65,556	34,171	19,832	7,713	1,346	47	-
2d child	169,163	121	27,035	492	1,962	4,842	8,377	11,362	58,760	41,490	27,860	11,891	1,949	56	1
3d child	98,781	1	6,214	29	158	648	1,760	3,619	32,470	28,037	20,300	9,874	1,815	70	-
4th child	46,602	-	948	2	4	65	222	655	13,507	14,223	10,549	6,022	1,293	60	-
5th child	20,908	-	146	-	1	10	25	110	4,482	6,745	5,377	3,276	849	31	2
6th child	9,742	-	22	-	1	-	8	13	1,348	3,153	2,876	1,830	486	27	-
7th child	4,821	-	6	-	-	1	2	3	333	1,475	1,604	1,077	306	20	-
8th child and over	4,757	-	1	-	-	-	1	-	102	910	1,732	1,467	519	26	-
Not stated	3,228	31	667	47	81	142	192	205	936	738	507	284	61	4	-

- Quantity zero.
1 Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, 1997

[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 [1]	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 [2]
			Total	15-17 years	18-19 years						
Hispanic											
Total	102.8	2.3	97.4	66.3	144.3	184.2	161.7	97.9	45.0	10.8	0.6
1st child	38.8	2.3	73.8	57.2	98.9	79.8	43.2	18.5	6.5	1.4	0.1
2d child	31.2	0.0	19.6	8.3	36.8	65.8	55.5	28.7	10.6	1.9	0.1
3d child	18.6	*	3.4	0.8	7.3	27.8	38.2	25.9	11.2	2.3	0.1
4th child	8.3	*	0.4	0.0	1.0	8.2	16.0	14.1	7.8	1.8	0.1
5th child	3.3	*	0.1	*	0.2	2.0	5.8	6.1	4.2	1.3	0.1
6th and 7th child	2.0	*	*	*	*	0.6	2.7	3.8	3.4	1.3	0.1
8th child and over	0.5	*	*	*	*	0.0	0.3	0.8	1.2	0.8	0.1
Mexican	116.6	2.5	112.4	77.3	165.1	204.9	176.3	104.2	49.0	11.6	0.6
1st child	42.9	2.5	84.8	66.5	112.4	86.8	42.5	16.3	5.7	1.1	*
2d child	34.7	0.0	23.1	9.9	42.8	74.2	60.0	27.2	9.5	1.6	0.1
3d child	21.7	*	3.9	0.9	8.5	31.7	44.5	29.4	12.1	2.2	0.1
4th child	10.0	*	0.5	0.0	1.2	9.2	19.0	17.5	9.7	2.1	0.1
5th child	4.1	*	0.1	*	0.2	2.2	6.8	7.8	5.5	1.6	0.1
6th and 7th child	2.5	*	*	*	*	0.6	3.1	4.9	4.7	1.7	0.1
8th child and over	0.7	*	*	*	*	0.0	0.4	1.0	1.7	1.1	0.1
Puerto Rican	71.7	1.8	74.9	48.9	120.0	154.0	109.3	59.1	27.0	6.2	0.5
1st child	28.4	1.8	55.2	41.6	78.8	58.6	30.6	13.3	4.5	1.0	*
2d child	22.2	*	16.1	6.6	32.5	55.4	36.2	20.1	7.8	1.4	*
3d child	12.0	*	3.1	0.6	7.4	26.6	23.5	13.2	6.8	1.6	*
4th child	5.1	*	0.4	*	1.2	9.4	10.9	6.5	3.7	0.9	*
5th child	2.2	*	*	*	*	2.9	4.7	3.1	2.0	0.6	*
6th and 7th child	1.4	*	*	*	*	1.0	2.9	2.2	1.6	0.5	*
8th child and over	0.3	*	*	*	*	*	0.4	0.7	0.6	0.2	*
Cuban	57.4	1.0	38.3	25.3	53.4	82.7	123.5	75.7	35.1	6.3	*
1st child	25.1	1.0	31.5	22.7	41.5	49.8	57.7	23.6	8.4	1.1	*
2d child	20.6	*	5.9	2.5	9.8	24.4	46.1	32.6	13.3	2.3	*
3d child	8.5	*	*	*	*	6.4	15.3	14.6	8.8	1.7	*
4th child	2.2	*	*	*	*	1.6	3.0	3.6	2.7	0.6	*
5th child	0.6	*	*	*	*	*	0.9	0.7	1.0	*	*
6th and 7th child	0.3	*	*	*	*	*	*	*	0.5	*	*
8th child and over	0.1	*	*	*	*	*	*	*	*	*	*
Other Hispanic [3]	87.6	2.0	72.1	48.3	106.8	146.4	147.9	104.4	45.4	11.8	0.7
1st child	34.9	1.9	56.7	42.8	76.9	71.0	49.6	25.6	8.7	2.1	0.1
2d child	27.8	*	13.0	5.0	24.7	49.7	52.5	36.2	13.8	2.8	0.1
3d child	15.1	*	2.1	0.4	4.4	19.0	29.4	24.9	11.5	2.9	0.2
4th child	*	*	*	*	*	*	*	*	*	*	*
5th child	2.2	*	*	*	*	1.1	3.6	4.2	2.7	1.0	*
6th and 7th child	1.2	*	*	*	*	0.3	1.5	2.1	1.8	0.9	*
8th child and over	0.3	*	*	*	*	*	0.1	0.4	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, 1997 --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 [1]	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 [2]
			Total	15-17 years	18-19 years						
Non-Hispanic [4]											
Total [5]	60.1	0.9	45.5	27.0	74.3	98.6	107.0	83.5	35.1	6.7	0.4
1st child	24.9	0.9	35.8	23.9	54.3	46.6	42.7	24.7	8.2	1.5	0.1
2d child	19.8	0.0	8.1	2.8	16.3	33.6	37.3	31.3	11.8	1.9	0.1
3d child	9.5	*	1.4	0.3	3.2	13.1	17.4	17.0	8.2	1.4	0.1
4th child	3.5	*	0.2	0.0	0.4	3.9	6.2	6.3	3.7	0.8	0.0
5th child	1.3	*	0.0	*	0.1	1.0	2.1	2.3	1.6	0.4	0.0
6th and 7th child	0.8	*	0.0	*	0.0	0.3	1.1	1.5	1.2	0.4	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.4	0.5	0.3	0.0
White	57.0	0.4	36.0	19.4	61.9	89.8	107.2	85.2	34.9	6.4	0.3
1st child	23.9	0.4	29.7	17.8	48.0	45.3	44.8	25.7	8.3	1.5	0.1
2d child	19.3	0.0	5.6	1.4	12.0	31.1	38.4	32.6	11.9	1.9	0.1
3d child	9.0	*	0.7	0.1	1.7	10.4	16.7	17.4	8.2	1.3	0.1
4th child	3.1	*	0.1	0.0	0.2	2.4	5.2	6.1	3.6	0.7	0.0
5th child	1.0	*	0.0	*	0.0	0.5	1.5	2.0	1.4	0.4	0.0
6th and 7th child	0.6	*	*	*	*	0.1	0.6	1.1	1.0	0.3	0.0
8th child and over	0.2	*	*	*	*	0.0	0.1	0.2	0.4	0.3	0.0
Black	72.4	3.4	90.8	62.6	134.0	143.0	101.9	65.8	30.3	6.6	0.3
1st child	28.0	3.3	65.8	52.8	85.7	53.1	26.7	14.5	5.4	1.0	0.0
2d child	21.2	0.1	19.7	8.8	36.4	47.6	32.5	20.3	8.4	1.5	0.1
3d child	12.4	*	4.5	1.0	9.9	26.3	21.9	14.8	6.9	1.4	0.1
4th child	5.8	*	0.7	0.1	1.6	10.9	11.1	7.7	4.2	1.0	0.1
5th child	2.6	*	0.1	*	0.3	3.6	5.3	3.9	2.3	0.7	0.0
6th and 7th child	1.8	*	0.0	*	0.0	1.4	3.6	3.3	2.1	0.6	0.0
8th child and over	0.6	*	*	*	*	0.1	0.7	1.3	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 Rates computed by relating births to women aged 45-54 years to women aged 45-49 years.
3 Includes Central and South American and other and unknown Hispanic.
4 Includes origin not stated.
5 Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, 1989-97

[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 [1]	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 [2]
				Total	15-17 years	18-19 years						
All origins												
1997	2,032.5	65.0	1.1	52.3	32.1	83.6	110.4	113.8	85.3	36.1	7.1	0.4
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
Hispanic												
Total												
1997	2,999.5	102.8	2.3	97.4	66.3	144.3	184.2	161.7	97.9	45.0	10.8	0.6
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 [3]	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 [3]	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 [4]	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 [5]	2,903.5	104.9	2.3	100.8	---	---	184.4	146.6	92.1	43.5	10.4	0.6
Mexican												
1997	3,307.5	116.6	2.5	112.4	77.3	165.1	204.9	176.3	104.2	49.0	11.6	0.6
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 [3]	3,196.5	116.0	2.5	108.8	---	---	202.3	166.3	99.1	47.7	11.8	0.8
1991 [3]	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 [4]	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 [5]	2,916.5	106.6	2.0	94.5	---	---	184.3	153.7	96.1	41.0	11.1	0.6
Puerto Rican												
1997	2,164.0	71.7	1.8	74.9	48.9	120.0	154.0	109.3	59.1	27.0	6.2	0.5
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 [3]	2,644.5	89.9	3.5	110.4	---	---	204.9	106.6	66.7	30.0	6.5	0.3
1991 [3]	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 [4]	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 [5]	2,421.0	86.6	3.8	112.7	---	---	171.0	98.0	65.2	26.9	6.3	0.3
Cuban												
1997	1,814.5	57.4	1.0	38.3	25.3	53.4	82.7	123.5	75.7	35.1	6.3	*
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 [3]	1,485.5	50.3	1.0	26.3	---	---	51.6	98.4	86.2	28.9	4.7	0.0
1991 [3]	1,385.5	49.1	*	27.7	17.5	41.3	61.2	88.8	68.2	26.7	4.0	*
1990 [4]	1,459.5	52.6	*	30.3	18.2	46.1	64.6	95.4	67.6	28.2	4.9	*
1989 [5]	1,479.0	49.8	0.5	25.1	---	---	64.2	101.8	73.7	27.2	3.0	0.3

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, 1989-97 --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 1990, and estimated as of July 1 for all other years]

Year and origin/race of mother	Total fertilty rate	Fertility rate [1]	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 [2]
				Total	15-17 years	18-19 years						
Other Hispanic [6]												
1997	2,653.5	87.6	2.0	72.1	48.3	106.8	146.4	147.9	104.4	45.4	11.8	0.7
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 [3]	3,076.0	107.0	2.5	112.1	---	---	172.9	157.8	106.6	50.3	12.5	0.5
1991 [3]	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 [4]	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 [5]	2,683.0	95.8	1.7	66.4	---	---	159.2	150.4	85.1	60.3	12.7	0.8
Non-Hispanic [7]												
Total [8]												
1997	1,888.5	60.1	0.9	45.5	27.0	74.3	98.6	107.0	83.5	35.1	6.7	0.4
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 [3]	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 [3]	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 [4]	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 [5]	1,921.0	65.7	1.3	53.4	---	---	107.8	113.4	74.7	28.6	4.8	0.2
White												
1997	1,801.0	57.0	0.4	36.0	19.4	61.9	89.8	107.2	85.2	34.9	6.4	0.3
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 [3]	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 [3]	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 [4]	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 [5]	1,770.0	60.5	0.4	39.9	---	---	94.7	111.7	75.0	27.8	4.3	0.2
Black												
1997	2,210.5	72.4	3.4	90.8	62.6	134.0	143.0	101.9	65.8	30.3	6.6	0.3
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 [3]	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 [3]	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 [4]	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 [5]	2,424.0	84.8	5.2	111.9	---	---	156.3	113.8	65.7	26.3	5.3	0.3

* Figure does not meet standards of reliability or precision.
--- Data not available.
0.0 Quantity more than zero but less that 0.05.
1 Rates computed by relating total births, regardless of age of mother, to women 15-44 years.
2 Beginning 1997, rates computed by relating births to women aged 45-54 years to women aged 45-49 years.
3 Excludes data for New Hampshire, which did not report Hispanic origin.
4 Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.
5 Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.
6 Includes Central and South American and other and unknown Hispanic.
7 Includes origin not stated.
8 Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, Guam, and American Samoa, 1997

[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 [1]	3,880,894	14.5	65.0	2,032.5	52.3	32.1	83.6
Alabama	60,914	14.1	62.1	1,917.0	66.6	43.4	100.2
Alaska	9,947	16.3	72.4	2,390.5	44.6	25.1	73.6
Arizona	75,699	16.6	78.1	2,433.0	69.7	44.0	111.2
Arkansas	36,478	14.5	67.3	2,076.0	72.9	42.9	119.2
California	524,840	16.3	72.3	2,230.5	57.3	36.2	90.5
Colorado	56,533	14.5	64.2	2,064.5	48.2	29.9	77.2
Connecticut	43,109	13.2	60.3	1,852.5	36.1	22.5	58.1
Delaware	10,253	14.0	60.3	1,865.0	55.8	36.8	83.3
District of Columbia	7,927	15.0	61.7	1,972.0	91.0	65.9	122.4
Florida	192,383	13.1	64.9	2,064.0	57.7	35.1	94.2
Georgia	118,221	15.8	66.1	2,062.5	67.2	44.0	102.8
Hawaii	17,393	14.7	69.0	2,208.0	43.8	25.3	69.6
Idaho	18,582	15.4	70.3	2,231.0	43.3	23.3	72.5
Illinois	180,803	15.2	68.4	2,129.5	54.7	34.4	87.6
Indiana	83,436	14.2	62.9	1,969.0	54.2	32.1	87.6
Iowa	36,659	12.9	60.4	1,914.5	35.7	20.1	60.4
Kansas	37,289	14.4	65.7	2,084.5	48.5	27.5	81.7
Kentucky	53,203	13.6	59.9	1,868.5	59.6	35.4	95.0
Louisiana	66,025	15.2	65.7	2,022.0	66.3	42.1	101.4
Maine	13,669	11.0	49.5	1,596.5	32.0	15.4	58.3
Maryland	70,215	13.8	58.9	1,836.5	43.9	28.2	68.8
Massachusetts	80,364	13.1	57.8	1,705.5	31.7	19.1	50.8
Michigan	133,714	13.7	60.0	1,883.5	43.9	25.4	72.2
Minnesota	64,499	13.8	61.4	1,945.0	32.0	17.8	55.1
Mississippi	41,533	15.2	66.3	1,991.0	73.7	50.2	108.8
Missouri	74,037	13.7	62.2	1,972.5	51.5	29.6	86.3
Montana	10,849	12.3	59.1	1,957.0	37.6	20.1	65.2
Nebraska	23,319	14.1	64.6	2,053.0	37.2	21.3	61.6
Nevada	26,911	16.0	75.4	2,422.0	67.7	42.2	109.1
New Hampshire	14,313	12.2	52.4	1,647.5	28.6	14.0	53.0
New Jersey	113,279	14.1	64.1	1,980.0	35.0	21.3	56.7
New Mexico	26,871	15.5	70.4	2,246.5	68.4	44.4	106.3
New York	257,238	14.2	63.9	1,949.0	38.8	23.4	62.3
North Carolina	107,015	14.4	64.3	2,008.0	61.3	37.7	97.3
North Dakota	8,353	13.0	61.0	1,921.5	30.1	14.3	55.0
Ohio	152,033	13.6	60.7	1,909.5	49.8	28.6	82.6
Oklahoma	48,269	14.6	67.8	2,121.0	64.3	37.3	107.4
Oregon	43,809	13.5	62.7	2,026.0	46.9	27.0	78.2
Pennsylvania	144,224	12.0	55.9	1,758.0	37.3	21.9	61.3
Rhode Island	12,455	12.6	56.6	1,732.5	42.7	27.6	65.6
South Carolina	52,214	13.9	60.4	1,862.0	61.4	40.0	93.0
South Dakota	10,173	13.8	63.6	2,028.0	39.7	21.8	66.3
Tennessee	74,478	13.9	61.2	1,927.5	64.5	38.5	103.8
Texas	333,974	17.2	75.3	2,343.0	71.7	47.1	110.1
Utah	43,059	20.9	88.5	2,632.0	42.6	23.7	68.3
Vermont	6,607	11.2	49.6	1,573.5	26.9	12.1	51.2
Virginia	91,862	13.6	58.0	1,784.0	44.2	26.1	70.8
Washington	78,190	13.9	61.8	1,978.5	42.5	24.5	70.7
West Virginia	20,730	11.4	53.1	1,649.0	49.1	27.5	80.3
Wisconsin	66,557	12.9	58.1	1,835.0	35.9	21.4	58.8
Wyoming	6,387	13.3	61.8	2,014.5	43.3	23.3	75.8
Puerto Rico	64,109	16.8	71.1	2,029.0	77.8	57.6	106.6
Virgin Islands	2,017	17.6	80.3	2,426.5	66.0	45.6	96.7
Guam	4,309	29.6	138.9	4,137.5	106.3	61.4	178.2
American Samoa	1,634	27.1	123.5	3,657.0	43.9	20.7	81.5

[1] Excludes data for Puerto Rico, Virgin Islands, Guam, and American Samoa.

Table 11. Live births by race of mother: United States and each State, Puerto Rico, Virgin Islands, Guam, and American Samoa, 1997

[By place of residence]

State	Number				
	All races	*White*	*Black*	*American Indian* [1]	*Asian or Pacific Islander*
United States [2]	3,880,894	3,072,640	599,913	38,572	169,769
Alabama	60,914	40,437	19,830	139	508
Alaska	9,947	6,592	457	2,400	498
Arizona	75,699	66,266	2,500	5,319	1,614
Arkansas	36,478	28,073	7,822	211	372
California	524,840	426,231	37,320	3,355	57,934
Colorado	56,533	51,714	2,584	590	1,645
Connecticut	43,109	36,197	5,370	111	1,431
Delaware	10,253	7,528	2,490	12	223
District of Columbia	7,927	1,977	5,813	2	135
Florida	192,383	144,047	43,536	717	4,083
Georgia	118,221	75,602	39,715	205	2,699
Hawaii	17,393	4,481	578	187	12,147
Idaho	18,582	18,000	67	277	238
Illinois	180,803	138,517	35,466	248	6,572
Indiana	83,436	73,556	8,780	116	984
Iowa	36,659	34,572	1,100	230	757
Kansas	37,289	33,265	2,803	330	891
Kentucky	53,203	47,929	4,648	91	535
Louisiana	66,025	37,648	27,134	288	955
Maine	13,669	13,323	81	103	162
Maryland	70,215	44,471	22,933	204	2,607
Massachusetts	80,364	68,623	7,716	164	3,861
Michigan	133,714	105,805	24,286	768	2,855
Minnesota	64,499	57,127	3,330	1,138	2,904
Mississippi	41,533	22,024	18,967	194	348
Missouri	74,037	61,561	11,033	267	1,176
Montana	10,849	9,429	31	1,294	95
Nebraska	23,319	21,308	1,253	362	396
Nevada	26,911	22,857	2,129	446	1,479
New Hampshire	14,313	14,000	104	30	179
New Jersey	113,279	84,539	21,034	178	7,528
New Mexico	26,871	22,730	506	3,246	389
New York	257,238	184,613	55,214	595	16,816
North Carolina	107,015	75,880	27,477	1,586	2,072
North Dakota	8,353	7,396	84	775	98
Ohio	152,033	127,036	22,623	284	2,090
Oklahoma	48,269	38,013	4,746	4,640	870
Oregon	43,809	40,235	936	746	1,892
Pennsylvania	144,224	120,215	20,407	276	3,326
Rhode Island	12,455	10,908	946	145	456
South Carolina	52,214	33,074	18,408	123	609
South Dakota	10,173	8,426	91	1,543	113
Tennessee	74,478	57,006	16,322	127	1,023
Texas	333,974	284,321	39,484	794	9,375
Utah	43,059	40,893	260	663	1,243
Vermont	6,607	6,523	22	5	57
Virginia	91,862	66,726	21,073	202	3,861
Washington	78,190	67,635	3,181	1,729	5,645
West Virginia	20,730	19,851	747	17	115
Wisconsin	66,557	57,400	6,414	880	1,863
Wyoming	6,387	6,060	62	220	45
Puerto Rico	64,109	59,342	4,745	---	---
Virgin Islands	2,017	363	1,595	56	3
Guam	4,309	421	70	2	3,816
American Samoa	1,634	8	---	---	1,626

--- Data not available.
1 Includes births to Aleuts and Eskimos.
2 Excludes data for Puerto Rico, Virgin Islands, Guam, and American Samoa.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, Guam, and American Samoa, 1997

[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 [1]	White	Black	
United States [2]	3,880,894	709,767	499,024	55,450	12,887	97,405	45,001	3,115,174	2,333,363	581,431	55,953
Alabama	60,914	1,056	724	88	13	179	52	59,830	39,402	19,798	28
Alaska	9,947	609	263	38	5	54	249	9,321	6,110	444	17
Arizona	75,699	28,472	27,286	174	59	493	460	46,256	37,860	2,375	971
Arkansas	36,478	1,542	1,254	31	4	211	42	34,866	26,506	7,799	70
California	524,840	248,948	215,493	1,927	793	25,243	5,492	273,347	177,863	36,109	2,545
Colorado	56,533	13,217	8,909	184	32	365	3,727	43,236	38,685	2,487	80
Connecticut	43,109	5,709	373	3,868	78	1,107	283	34,769	28,433	4,896	2,631
Delaware	10,253	637	295	215	7	107	13	9,560	6,864	2,462	56
District of Columbia	7,927	694	46	16	4	574	54	7,084	1,274	5,677	149
Florida	192,383	37,369	7,818	6,907	8,778	12,366	1,500	154,888	107,757	42,546	126
Georgia	118,221	7,164	5,402	424	98	992	248	110,052	67,874	39,404	1,005
Hawaii	17,393	2,147	424	666	9	83	965	15,202	3,766	550	44
Idaho	18,582	2,365	2,046	20	5	77	217	15,932	15,387	63	285
Illinois	180,803	33,171	27,366	2,850	201	988	1,766	147,556	105,487	35,256	76
Indiana	83,436	3,409	2,651	306	22	210	220	79,672	69,840	8,749	355
Iowa	36,659	1,603	1,296	29	8	179	91	34,673	32,685	1,049	383
Kansas	37,289	3,553	2,981	81	20	190	281	33,385	29,430	2,766	351
Kentucky	53,203	727	488	79	30	78	52	52,455	47,230	4,630	21
Louisiana	66,025	1,263	469	83	61	146	504	64,738	36,445	27,097	24
Maine	13,669	121	21	11	1	21	67	12,977	12,656	68	571
Maryland	70,215	3,274	533	240	55	1,640	806	66,093	40,890	22,490	848
Massachusetts	80,364	8,235	282	4,386	90	3,152	325	71,645	61,446	6,208	484
Michigan	133,714	5,454	3,971	399	67	333	684	121,226	93,875	23,957	7,034
Minnesota	64,499	2,625	2,064	87	11	266	197	58,498	51,234	3,284	3,376
Mississippi	41,533	328	154	17	12	20	125	41,165	21,663	18,961	40
Missouri	74,037	1,758	1,298	78	27	191	164	72,209	59,788	10,999	70
Montana	10,849	302	168	11	4	9	110	10,198	8,818	18	349
Nebraska	23,319	1,978	1,563	22	6	219	168	20,800	18,817	1,236	541
Nevada	26,911	7,713	6,201	163	136	718	495	18,998	15,121	2,064	200
New Hampshire	14,313	228	64	64	2	27	71	13,653	13,350	96	432
New Jersey	113,279	19,635	2,399	6,935	927	9,107	267	93,097	66,168	19,302	547
New Mexico	26,871	13,322	4,475	48	50	91	8,658	13,545	9,545	477	4
New York	257,238	50,720	6,091	15,434	496	23,653	5,046	181,946	117,641	47,172	24,572
North Carolina	107,015	6,906	5,069	499	91	847	400	100,090	69,102	27,376	19
North Dakota	8,353	170	110	12	2	12	34	7,940	7,100	80	243
Ohio	152,033	3,432	1,631	1,195	42	299	265	147,909	123,489	22,120	692
Oklahoma	48,269	3,226	2,474	98	14	116	524	44,828	34,750	4,676	215
Oregon	43,809	5,854	5,441	55	23	247	88	37,856	34,369	914	99
Pennsylvania	144,224	6,623	834	4,536	99	560	594	136,794	113,297	19,947	807
Rhode Island	12,455	1,780	112	608	12	944	104	9,061	7,742	777	1,614
South Carolina	52,214	1,129	739	120	11	178	81	51,035	31,971	18,382	50
South Dakota	10,173	141	94	7	3	21	16	10,013	8,284	89	19
Tennessee	74,478	1,721	1,121	155	34	175	236	72,717	55,288	16,297	40
Texas	333,974	146,580	131,456	916	276	7,013	6,919	186,485	137,580	38,928	909
Utah	43,059	4,298	3,346	66	12	488	386	38,627	36,534	242	134
Vermont	6,607	22	6	8	---	3	5	6,388	6,305	22	197
Virginia	91,862	5,374	1,185	496	96	3,009	588	86,391	61,428	20,956	97
Washington	78,190	9,336	7,700	180	31	225	1,200	66,363	56,617	2,968	2,491
West Virginia	20,730	82	33	10	1	10	28	20,639	19,778	744	9
Wisconsin	66,557	3,207	2,349	602	26	156	74	63,337	54,292	6,366	13
Wyoming	6,387	538	456	6	3	13	60	5,829	5,527	58	20
Puerto Rico	64,109	5	---	5	---	---	---	2	---	2	64,102
Virgin Islands	2,017	375	6	285	2	55	27	1,534	85	1,402	108
Guam	4,309	43	20	9	---	5	9	4,185	373	68	81
American Samoa	1,634	---	---	---	---	---	---	---	---	---	1,634

--- Data not available.
1 Includes races other than white and black.
2 Excludes data for Puerto Rico, Virgin Islands, Guam, and American Samoa.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, 1997

Characteristic	All races	White	Black	American Indian [1]	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
	Number									
Births	3,880,894	3,072,640	599,913	38,572	169,769	28,434	8,890	5,687	31,501	95,257
	Rate									
Birth rate [2]	14.5	13.9	17.7	16.6	16.9	---	---	---	---	---
Fertility rate [3]	65.0	63.9	70.7	69.1	66.3	---	---	---	---	---
Total fertility rate [4]	2,032.5	2,008.5	2,154.0	2,047.5	1,925.0	---	---	---	---	---
Sex ratio [5]	1,048	1,050	1,031	1,036	1,072	1,100	1,068	1,066	1,069	1,065
	Percent									
All births										
Births to mothers under 20 years	12.7	11.2	22.2	20.8	5.2	0.9	2.2	18.6	5.9	5.7
4th- and higher-order births	10.5	9.6	14.9	19.5	8.0	2.2	4.1	15.3	7.0	10.0
Births to unmarried mothers	32.4	25.8	69.2	58.7	15.6	6.5	10.1	49.1	19.5	15.6
Mothers completing 12 years or more of school	77.9	78.7	72.4	67.2	86.0	87.7	97.7	83.2	92.7	82.2
Mothers born in the 50 States and DC	80.7	82.4	89.3	96.6	15.6	9.6	44.0	97.9	17.7	9.1
Mothers born in the 50 States and DC										
Births to mothers under 20 years	13.7	11.5	24.0	21.2	15.2	4.5	4.5	18.7	17.4	19.6
4th- and higher-order births	9.8	8.6	15.1	19.7	8.2	3.5	4.4	15.3	7.8	7.0
Births to unmarried mothers	33.3	24.8	72.2	59.7	33.6	13.4	16.1	49.4	40.7	33.1
Mothers completing 12 years or more of school	82.1	84.5	71.5	67.0	87.1	95.9	96.6	83.1	87.2	82.3
Mothers born outside the 50 States and DC										
Births to mothers under 20 years	8.4	9.8	7.4	8.8	3.3	0.6	0.5	13.1	3.4	4.3
4th- and higher-order births	13.0	14.2	13.6	12.5	8.0	2.1	3.8	15.0	6.9	10.3
Births to unmarried mothers	28.1	30.5	43.5	30.2	12.3	5.7	5.3	36.1	14.9	13.8
Mothers completing 12 years or more of school	60.0	50.8	80.1	73.5	85.8	86.9	98.6	88.3	93.9	82.2

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

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

Characteristic	All origins [1]	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total [2]	White	Black
	Number									
Births	3,880,894	709,767	499,024	55,450	12,887	97,405	45,001	3,115,174	2,333,363	581,431
	Rate									
Birth rate [3]	14.5	24.2	26.8	18.1	10.1	[7]22.4		13.1	12.0	18.0
Fertility rate [4]	65.0	102.8	116.6	71.7	57.4	[7]87.6		59.0	55.8	71.9
Total fertility rate [5]	2,032.5	2,999.5	3,307.5	2,163.5	1,814.5	[7]2,653.5		1,888.0	1,801.0	2,210.5
Sex ratio [6]	1,048	1,040	1,038	1,049	1,043	1,042	1,044	1,049	1,052	1,031
	Percent									
All births										
Births to mothers under 20 years	12.7	17.0	17.7	22.3	7.4	10.5	19.8	11.8	9.5	22.4
4th- and higher-order births	10.5	13.7	14.8	12.5	5.5	11.2	11.0	9.7	8.4	15.0
Births to unmarried mothers	32.4	40.9	38.9	59.4	24.4	41.8	43.6	30.5	21.5	69.4
Mothers completing 12 years or more of school	77.9	49.7	43.7	62.9	86.3	60.4	67.2	84.1	87.1	72.5
Mothers born in the 50 States and DC	80.7	39.1	39.2	63.3	38.8	9.0	74.3	90.0	95.1	90.7
Mothers born in the 50 States and DC										
Births to mothers under 20 years	13.7	25.6	26.7	24.3	11.2	22.4	23.4	12.6	9.8	23.9
4th- and higher-order births	9.8	11.2	11.7	11.1	4.8	4.6	10.6	9.7	8.3	15.1
Births to unmarried mothers	33.3	47.7	46.2	61.6	24.2	44.5	46.8	32.0	22.1	72.2
Mothers completing 12 years or more of school	82.1	64.0	62.1	63.4	86.8	77.8	69.0	83.8	87.0	71.5
Mothers born outside the 50 States and DC										
Births to mothers under 20 years	8.4	11.5	11.9	18.7	4.9	9.3	9.3	4.0	3.7	6.7
4th- and higher-order births	13.0	15.4	16.8	15.1	5.9	11.8	12.1	9.6	9.5	14.0
Births to unmarried mothers	28.1	36.5	34.2	55.5	24.5	41.5	33.1	16.7	10.7	41.2
Mothers completing 12 years or more of school	60.0	40.4	31.6	62.2	86.0	58.7	62.4	86.9	90.2	82.7

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

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, 1997

[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[1]	
	All races[2]	White	Black	Birth rate	Fertility rate	Birth rate	Fertility rate
Total	3,880,894	3,072,640	599,913	14.5	65.0	...	...
January	317,211	248,675	51,645	14.0	62.6	14.7	65.7
February	291,541	230,077	46,037	14.3	63.7	14.5	64.9
March	321,212	255,265	48,813	14.2	63.4	14.4	64.6
April	314,230	250,965	46,429	14.3	64.1	14.6	65.3
May	330,331	263,918	48,926	14.6	65.2	14.6	65.4
June	321,867	256,533	48,347	14.6	65.6	14.5	64.9
July	346,506	274,977	53,140	15.2	68.4	14.6	65.5
August	339,122	268,819	52,314	14.9	66.9	14.2	63.8
September	333,600	264,583	51,104	15.1	68.0	14.4	64.6
October	328,657	260,214	50,667	14.4	64.8	14.4	65.0
November	307,282	240,582	49,478	13.9	62.6	14.4	64.6
December	329,335	258,032	53,013	14.4	64.9	14.7	66.3

... Category not applicable.

1 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).

2 Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

Day of week and race of mother	Average number of births	Index of occurrence [1]				
		Total [2]	Method of delivery			
			Vaginal	Cesarean		
				Total	Primary	Repeat
All races [3]	10,633	100.0	100.0	100.0	100.0	100.0
Sunday	7,778	73.2	78.2	54.1	63.9	37.7
Monday	10,861	102.2	100.8	107.3	99.1	121.1
Tuesday	12,104	113.8	111.6	122.2	119.7	126.4
Wednesday	11,723	110.3	108.8	115.8	114.4	118.3
Thursday	11,631	109.4	107.9	114.6	112.0	119.1
Friday	11,640	109.5	106.4	121.0	114.8	131.6
Saturday	8,670	81.5	86.1	64.6	75.9	45.4
White	8,418	100.0	100.0	100.0	100.0	100.0
Sunday	6,003	71.3	76.5	51.7	61.8	35.1
Monday	8,659	102.9	101.4	108.3	99.8	122.5
Tuesday	9,670	114.9	112.6	123.2	120.8	127.1
Wednesday	9,335	110.9	109.4	116.7	115.3	119.0
Thursday	9,268	110.1	108.7	115.2	112.4	119.8
Friday	9,252	109.9	106.7	122.1	115.4	133.2
Saturday	6,723	79.9	84.5	62.5	74.3	42.9
Black	1,644	100.0	100.0	100.0	100.0	100.0
Sunday	1,315	80.0	84.7	63.4	72.2	47.9
Monday	1,633	99.3	98.3	103.1	95.8	116.0
Tuesday	1,814	110.3	108.0	118.4	115.2	124.0
Wednesday	1,775	108.0	106.4	113.5	111.5	116.9
Thursday	1,756	106.8	105.3	112.5	110.9	115.3
Friday	1,771	107.8	105.1	117.0	113.1	124.0
Saturday	1,440	87.6	92.1	71.9	81.2	55.6

[1] 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.
[2] Includes method of delivery not stated.
[3] Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

Measure and age of mother	All races [1]	White		Black		Hispanic [2]
		Total	Non-Hispanic	Total	Non-Hispanic	
Number						
All ages	1,257,444	793,202	502,620	415,054	403,536	290,437
Under 15 years	9,685	4,631	2,096	4,682	4,585	2,586
15-19 years	376,117	240,353	155,795	122,986	120,098	84,594
15 years	24,497	14,267	7,509	9,306	9,094	6,820
16 years	50,454	31,232	18,300	17,410	17,000	13,036
17 years	81,302	52,522	33,514	26,006	25,392	19,003
18 years	104,267	67,623	45,580	33,227	32,477	22,030
19 years	115,597	74,709	50,892	37,037	36,135	23,705
20-24 years	438,632	276,764	176,696	145,647	142,037	99,740
25-29 years	234,762	147,318	89,976	76,977	74,542	57,331
30-34 years	124,831	77,543	47,756	41,520	39,948	29,920
35-39 years	59,870	37,878	24,637	19,223	18,467	13,242
40 years and over	13,547	8,715	5,664	4,019	3,859	3,024
Rate per 1,000 unmarried women in specified group						
15-44 years [3]	44.0	37.0	27.6	73.4	---	91.4
15-19 years	42.2	34.2	26.4	86.4	---	75.2
15-17 years	28.2	22.4	16.2	60.6	---	55.0
18-19 years	65.2	53.6	43.1	127.2	---	109.5
20-24 years	71.0	59.2	44.8	127.8	---	139.1
25-29 years	56.2	49.3	35.2	85.2	---	135.0
30-34 years	39.0	34.4	25.1	52.3	---	86.1
35-39 years	19.0	16.7	12.7	24.7	---	42.0
40-44 years [4]	4.6	3.9	2.9	6.5	---	12.2
Percent of births to unmarried women						
All ages	32.4	25.8	21.7	69.2	69.4	40.9
Under 15 years	95.7	92.2	93.7	99.4	99.4	91.3
15-19 years	77.8	71.1	71.1	95.7	95.8	71.6
15 years	93.0	89.4	91.2	99.2	99.2	87.7
16 years	88.5	83.7	85.1	98.6	98.6	82.1
17 years	84.0	78.5	79.9	97.8	97.9	76.7
18 years	77.5	70.9	71.7	95.7	95.9	69.8
19 years	68.6	60.9	60.7	92.1	92.3	62.1
20-24 years	46.6	38.4	35.5	79.8	80.0	46.1
25-29 years	22.0	16.9	13.5	56.8	56.9	30.4
30-34 years	14.1	10.5	8.0	44.1	44.1	24.6
35-39 years	14.6	11.2	8.9	42.7	42.5	25.7
40 years and over	17.0	13.6	10.9	43.0	43.0	27.9

--- Data not available.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin of any race.
3 Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.
4 Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

NOTES: For 48 States and the District of Columbia, marital status is reported on the birth certificate; for Michigan and New York, 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 1980-97, and by age, race, and Hispanic origin of mother: United States, 1980-97

[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 [1]	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years [2]
		Total	15-17 years	18-19 years					
All races [3]									
1997 [4]	44.0	42.2	28.2	65.2	71.0	56.2	39.0	19.0	4.6
1996 [4]	44.8	42.9	29.0	65.9	70.7	56.8	41.1	20.1	4.8
1995 [4]	45.1	44.4	30.5	67.6	70.3	56.1	39.6	19.5	4.7
1994 [4]	46.9	46.4	32.0	70.1	72.2	59.0	40.1	19.8	4.7
1993 [4]	45.3	44.5	30.6	66.9	69.2	57.1	38.5	19.0	4.4
1992 [4]	45.2	44.6	30.4	67.3	68.5	56.5	37.9	18.8	4.1
1991 [4]	45.2	44.8	30.9	65.7	68.0	56.5	38.1	18.0	3.8
1990 [4]	43.8	42.5	29.6	60.7	65.1	56.0	37.6	17.3	3.6
1989 [4]	41.6	40.1	28.7	56.0	61.2	52.8	34.9	16.0	3.4
1988 [4]	38.5	36.4	26.4	51.5	56.0	48.5	32.0	15.0	3.2
1987 [4]	36.0	33.8	24.5	48.9	52.6	44.5	29.6	13.5	2.9
1986 [4]	34.2	32.3	22.8	48.0	49.3	42.2	27.2	12.2	2.7
1985 [4]	32.8	31.4	22.4	45.9	46.5	39.9	25.2	11.6	2.5
1984 [4, 5]	31.0	30.0	21.9	42.5	43.0	37.1	23.3	10.9	2.5
1983 [4, 5]	30.3	29.5	22.0	40.7	41.8	35.5	22.4	10.2	2.6
1982 [4, 5]	30.0	28.7	21.5	39.6	41.5	35.1	21.9	10.0	2.7
1981 [4, 5]	29.5	27.9	20.9	39.0	41.1	34.5	20.8	9.8	2.6
1980 [4, 5]	29.4	27.6	20.6	39.0	40.9	34.0	21.1	9.7	2.6
1980 [5, 6]	28.4	27.5	20.7	38.7	39.7	31.4	18.5	8.4	2.3
1975 [5, 6]	24.5	23.9	19.3	32.5	31.2	27.5	17.9	9.1	2.6
1970 [6, 7]	26.4	22.4	17.1	32.9	38.4	37.0	27.1	13.6	3.5
White, total									
1997 [4]	37.0	34.2	22.4	53.6	59.2	49.3	34.4	16.7	3.9
1996 [4]	37.6	34.5	22.7	54.1	59.0	49.9	36.1	17.8	4.3
1995 [4]	37.5	35.5	23.6	55.4	58.0	48.7	34.2	16.9	4.2
1994 [4]	38.3	36.2	24.1	56.4	58.1	49.7	34.2	17.3	4.3
1993 [4]	35.9	33.6	22.1	52.4	54.2	46.7	32.2	16.4	3.9
1992 [4]	35.2	33.0	21.6	51.5	52.7	45.4	31.5	16.2	3.6
1991 [4]	34.6	32.8	21.8	49.6	51.5	44.6	31.1	15.2	3.2
1990 [4]	32.9	30.6	20.4	44.9	48.2	43.0	29.9	14.5	3.2
1989 [4]	30.2	28.0	19.3	40.2	43.8	39.1	26.8	13.1	2.9
1988 [4]	27.4	25.3	17.6	36.8	39.2	35.4	24.2	12.1	2.7
1987 [4]	25.3	23.2	16.2	34.5	36.6	32.0	22.3	10.7	2.4
1986 [4]	23.9	21.8	14.9	33.5	34.2	30.5	20.1	9.7	2.2
1985 [4]	22.5	20.8	14.5	31.2	31.7	28.5	18.4	9.0	2.0
1984 [4, 5]	20.6	19.3	13.7	27.9	28.5	25.5	16.8	8.4	2.0
1983 [4, 5]	19.8	18.7	13.6	26.4	27.1	23.8	15.9	7.8	2.0
1982 [4, 5]	19.3	18.0	13.1	25.3	26.5	23.1	15.3	7.4	2.1
1981 [4, 5]	18.6	17.2	12.6	24.6	25.8	22.3	14.2	7.2	1.9
1980 [4, 5]	18.1	16.5	12.0	24.1	25.1	21.5	14.1	7.1	1.8
White, non-Hispanic									
1997 [4]	27.6	26.4	16.2	43.1	44.8	35.2	25.1	12.7	2.9
1996 [4]	28.3	27.0	16.9	43.8	44.5	35.7	26.6	13.9	3.3
1995 [4]	28.2	27.7	17.6	44.5	43.8	34.9	25.3	13.0	3.2
1994 [4]	28.5	28.1	18.0	45.0	43.8	35.0	24.8	12.9	3.1
1993 [4]	---	---	---	---	---	---	---	---	---
1992 [4]	---	---	---	---	---	---	---	---	---
1991 [4]	---	---	---	---	---	---	---	---	---
1990 [4, 8]	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 1980-97, and by age, race, and Hispanic origin of mother: United States, 1980-97 --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 [1]	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years [2]
		Total	15-17 years	18-19 years					
Black, total									
1997 [4]	73.4	86.4	60.6	127.2	127.8	85.2	52.3	24.7	6.5
1996 [4]	74.4	89.2	64.0	129.2	125.8	84.5	54.5	25.5	6.1
1995 [4]	75.9	92.8	68.6	131.2	127.7	84.8	54.3	25.6	6.0
1994 [4]	82.1	100.9	75.1	141.6	138.1	93.6	57.2	26.3	5.9
1993 [4]	84.0	102.4	76.8	141.6	142.2	94.5	57.3	25.9	5.8
1992 [4]	86.5	105.9	78.0	147.8	144.3	98.2	57.7	25.8	5.4
1991 [4]	89.5	108.5	80.4	148.7	147.5	100.9	60.1	25.6	5.4
1990 [4]	90.5	106.0	78.8	143.7	144.8	105.3	61.5	25.5	5.1
1989 [4]	90.7	104.5	78.9	140.9	142.4	102.9	60.5	24.9	5.0
1988 [4]	86.5	96.1	73.5	130.5	133.6	97.2	57.4	24.1	5.0
1987 [4]	82.6	90.9	69.9	123.0	126.1	91.6	53.1	22.4	4.7
1986 [4]	79.0	88.5	67.0	121.1	118.0	84.6	50.0	20.6	4.4
1985 [4]	77.0	87.6	66.8	117.9	113.1	79.3	47.5	20.4	4.3
1984 [4, 5]	75.2	86.1	66.5	113.6	107.9	77.8	43.8	19.4	4.3
1983 [4, 5]	76.2	85.5	66.8	111.9	107.2	79.7	43.8	19.4	4.8
1982 [4, 5]	77.9	85.1	66.3	112.7	109.3	82.7	44.1	19.5	5.2
1981 [4, 5]	79.4	85.0	65.9	114.2	110.7	83.1	45.5	19.6	5.6
1980 [4, 5]	81.1	87.9	68.8	118.2	112.3	81.4	46.7	19.0	5.5
Hispanic [9]									
1997 [4]	91.4	75.2	55.0	109.5	139.1	135.0	86.1	42.0	12.2
1996 [4]	93.2	74.5	53.4	110.4	146.5	139.1	90.8	42.3	12.3
1995 [4]	95.0	78.7	56.3	117.9	148.9	133.8	89.2	43.4	12.2
1994 [4]	101.2	82.6	59.0	123.6	154.8	141.6	95.5	48.4	14.0
1993 [4]	95.2	74.6	51.9	114.6	140.5	137.7	90.9	47.8	14.1
1992 [4]	95.3	72.9	51.0	110.5	142.2	138.3	91.8	48.1	14.5
1991 [4]	93.7	72.4	50.5	109.6	135.4	137.5	89.1	47.7	14.2
1990 [4]	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 Includes all persons of Hispanic origin 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, Guam, and American Samoa, 1997

[By place of residence]

State	Births to unmarried women						Percent unmarried					
		White		Black				White		Black		
	All races [1]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [2]	All races [1]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [2]
United States [3]	1,257,444	793,202	502,620	415,054	403,536	290,437	32.4	25.8	21.5	69.2	69.4	40.9
Alabama	20,635	6,841	6,602	13,676	13,665	244	33.9	16.9	16.8	69.0	69.0	23.1
Alaska	3,048	1,422	1,293	190	183	171	30.6	21.6	21.2	41.6	41.2	28.1
Arizona	28,495	22,940	9,315	1,616	1,539	13,783	37.6	34.6	24.6	64.6	64.8	48.4
Arkansas	12,478	6,495	5,987	5,837	5,822	510	34.2	23.1	22.6	74.6	74.7	33.1
California	172,017	138,242	38,396	23,242	22,561	100,674	32.8	32.4	21.6	62.3	62.5	40.4
Colorado	14,273	12,340	7,078	1,424	1,360	5,372	25.2	23.9	18.3	55.1	54.7	40.6
Connecticut	14,116	9,762	5,606	3,768	3,432	3,786	32.7	27.0	19.7	70.2	70.1	66.3
Delaware	3,693	1,890	1,556	1,781	1,761	325	36.0	25.1	22.7	71.5	71.5	51.0
District of Columbia	5,041	474	112	4,530	4,430	384	63.6	24.0	8.8	77.9	78.0	55.3
Florida	69,285	39,076	26,872	29,284	28,723	12,838	36.0	27.1	24.9	67.3	67.5	34.4
Georgia	41,879	14,819	12,602	26,703	26,528	2,138	35.4	19.6	18.6	67.2	67.3	29.8
Hawaii	5,202	767	598	122	110	961	29.9	17.1	15.9	21.1	20.0	44.8
Idaho	3,848	3,638	2,899	31	29	686	20.7	20.2	18.8	46.3	46.0	29.0
Illinois	60,443	32,515	19,832	27,326	27,186	12,803	33.4	23.5	18.8	77.0	77.1	38.6
Indiana	27,184	20,363	18,896	6,668	6,645	1,378	32.6	27.7	27.1	75.9	76.0	40.4
Iowa	9,601	8,493	7,867	828	793	570	26.2	24.6	24.1	75.3	75.6	35.6
Kansas	10,274	8,014	6,642	1,948	1,927	1,355	27.6	24.1	22.6	69.5	69.7	38.1
Kentucky	15,669	12,213	11,993	3,341	3,333	230	29.5	25.5	25.4	71.9	72.0	31.6
Louisiana	29,011	8,847	8,521	19,860	19,843	343	43.9	23.5	23.4	73.2	73.2	27.2
Maine	4,060	3,934	3,697	34	26	36	29.7	29.5	29.2	42.0	38.2	29.8
Maryland	23,493	9,133	7,860	14,065	13,825	1,202	33.5	20.5	19.2	61.3	61.5	36.7
Massachusetts	20,836	15,497	11,287	4,571	3,677	4,991	25.9	22.6	18.4	59.2	59.2	60.6
Michigan	44,454	25,522	21,197	18,277	18,058	2,205	33.2	24.1	22.6	75.3	75.4	40.4
Minnesota	16,141	12,259	10,684	2,213	2,185	1,231	25.0	21.5	20.9	66.5	66.5	46.9
Mississippi	18,859	4,320	4,228	14,366	14,361	91	45.4	19.6	19.5	75.7	75.7	27.7
Missouri	24,516	15,603	14,950	8,568	8,549	667	33.1	25.3	25.0	77.7	77.7	37.9
Montana	3,119	2,190	1,992	12	8	126	28.7	23.2	22.6	*	*	41.7
Nebraska	6,021	4,792	3,867	907	897	790	25.8	22.5	20.6	72.4	72.6	39.9
Nevada	9,555	7,475	4,269	1,461	1,413	3,192	35.5	32.7	28.2	68.6	68.5	41.4
New Hampshire	3,404	3,326	3,090	53	51	88	23.8	23.8	23.1	51.0	53.1	38.6
New Jersey	31,738	17,290	8,493	13,951	13,072	9,581	28.0	20.5	12.8	66.3	67.7	48.8
New Mexico	11,696	8,993	2,494	287	266	6,591	43.5	39.6	26.1	56.7	55.8	49.5
New York	90,673	51,091	21,573	36,866	31,580	29,141	35.2	27.7	18.3	66.8	66.9	57.5
North Carolina	34,468	15,074	12,418	18,297	18,246	2,717	32.2	19.9	18.0	66.6	66.6	39.3
North Dakota	2,174	1,575	1,484	24	24	45	26.0	21.3	20.9	28.6	30.0	26.5
Ohio	51,544	33,740	32,174	17,470	17,069	1,594	33.9	26.6	26.1	77.2	77.2	46.4
Oklahoma	15,660	9,955	8,914	3,392	3,343	1,063	32.4	26.2	25.7	71.5	71.5	33.0
Oregon	12,631	11,230	9,072	625	612	2,188	28.8	27.9	26.4	66.8	67.0	37.4
Pennsylvania	47,234	30,736	26,472	15,886	15,544	4,207	32.8	25.6	23.4	77.8	77.9	63.5
Rhode Island	4,128	3,259	1,949	613	506	1,008	33.1	29.9	25.2	64.8	65.1	56.6
South Carolina	19,857	6,869	6,508	12,866	12,854	366	38.0	20.8	20.4	69.9	69.9	32.4
South Dakota	3,166	1,920	1,875	36	35	45	31.1	22.8	22.6	39.6	39.3	31.9
Tennessee	25,383	13,160	12,617	11,992	11,972	566	34.1	23.1	22.8	73.5	73.5	32.9
Texas	102,496	76,413	26,946	24,891	24,539	49,506	30.7	26.9	19.6	63.0	63.0	33.8
Utah	7,145	6,449	4,902	145	135	1,562	16.6	15.8	13.4	55.8	55.8	36.3
Vermont	1,726	1,712	1,637	10	10	5	26.1	26.2	26.0	*	*	*
Virginia	26,908	13,097	11,241	13,388	13,328	1,916	29.3	19.6	18.3	63.5	63.6	35.7
Washington	21,218	17,335	13,558	1,732	1,638	3,479	27.1	25.6	23.9	54.4	55.2	37.3
West Virginia	6,495	5,912	5,889	568	566	25	31.3	29.8	29.8	76.0	76.1	30.5
Wisconsin	18,707	12,602	11,254	5,287	5,253	1,425	28.1	22.0	20.7	82.4	82.5	44.4
Wyoming	1,747	1,588	1,362	26	24	237	27.4	26.2	24.6	41.9	41.4	44.1
Puerto Rico	29,345	26,381	---	2,959	---	---	45.8	44.5	---	62.4	---	---
Virgin Islands	1,368	206	25	1,145	1,014	242	67.8	56.7	29.4	71.8	72.3	64.5
Guam	2,125	73	64	16	15	6	49.3	17.3	17.2	*	*	*
American Samoa	567	---	---	---	---	---	34.7	---	---	---	---	---

* Figure does not meet standards of reliability or precision.
--- Data not available.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin of any race.
3 Excludes data for Puerto Rico, Virgin Islands, Guam and American Samoa.

Table 20. Birth rates by age and race of father: United States, 1980-97

[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 [1]	Age of father								
		15-19 years [2]	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 [3]										
1997	50.4	22.2	83.4	108.5	95.7	52.1	20.6	7.1	2.5	0.3
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 [4]	55.0	17.8	80.7	111.4	89.9	46.0	17.8	6.3	2.4	0.4
1983 [4]	55.1	18.2	82.6	113.0	89.1	45.2	17.4	6.4	2.3	0.4
1982 [4]	56.4	18.6	86.5	117.3	90.3	44.5	17.5	6.4	2.3	0.4
1981 [4]	56.3	18.4	88.4	119.1	88.7	43.3	17.0	6.2	2.3	0.4
1980 [4]	57.0	18.8	92.0	123.1	91.0	42.8	17.1	6.1	2.2	0.3
White										
1997	47.7	18.2	76.1	106.8	95.3	50.6	19.1	6.3	2.1	0.3
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 [4]	51.8	14.0	74.3	108.8	87.9	43.5	16.0	5.3	1.9	0.3
1983 [4]	52.0	14.4	76.3	110.2	86.8	42.6	15.5	5.3	1.8	0.3
1982 [4]	53.1	14.9	80.1	114.2	87.5	41.7	15.6	5.3	1.9	0.3
1981 [4]	52.9	15.0	81.7	115.8	85.8	40.3	15.0	5.2	1.8	0.3
1980 [4]	53.4	15.4	84.9	119.4	87.8	39.7	15.0	5.1	1.8	0.3
Black										
1997	68.0	45.6	136.6	130.2	91.8	53.3	26.1	11.7	5.5	1.1
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 [4]	76.7	40.9	128.0	132.2	98.3	58.4	29.3	13.3	6.1	1.2
1983 [4]	77.2	40.7	129.1	134.4	99.0	59.6	29.6	13.5	6.0	1.2
1982 [4]	79.5	40.3	133.4	141.2	103.6	61.1	29.6	13.9	6.0	1.2
1981 [4]	80.4	38.9	138.4	145.6	104.3	61.3	29.7	13.3	5.7	1.2
1980 [4]	83.0	40.1	145.3	152.8	109.6	62.0	31.2	13.6	5.9	1.1

[1] Rates computed by relating total births, regardless of age of father, to men aged 15-54 years.
[2] Rates computed by relating births of fathers under 20 years of age to men aged 15-19 years.
[3] Includes races other than white and black.
[4] 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 birth certificates. In this table all men (including Hispanic men) are classified only according to their 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 and Hispanic origin of mother: United States, 1997

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		
All races [1]									
All ages	3,880,894	224,911	620,586	1,257,946	848,379	872,733	56,339	77.9	22.8
Under 15 years	10,121	7,662	2,114	-	-	-	345	-	-
15-19 years	483,220	42,406	257,957	152,407	22,352	-	8,098	36.8	-
15 years	26,340	8,561	17,034	-	-	-	745	-	-
16 years	57,038	7,492	47,188	1,251	-	-	1,107	2.2	-
17 years	96,776	7,790	73,070	13,962	318	-	1,636	15.0	-
18 years	134,595	8,748	64,883	54,967	3,989	-	2,008	44.5	-
19 years	168,471	9,815	55,782	82,227	18,045	-	2,602	60.5	-
20-24 years	942,048	60,597	188,561	412,416	218,654	48,205	13,615	73.2	5.2
25-29 years	1,069,436	53,137	99,328	344,535	281,965	276,014	14,457	85.5	26.2
30-34 years	886,798	36,317	48,766	229,782	213,767	346,265	11,901	90.3	39.6
35-39 years	409,710	19,150	19,972	100,508	94,325	169,440	6,315	90.3	42.0
40 years and over	79,561	5,642	3,888	18,298	17,316	32,809	1,608	87.8	42.1
White, total									
All ages	3,072,640	196,441	451,023	969,727	670,870	745,496	39,083	78.7	24.6
Under 15 years	5,021	3,784	1,063	-	-	-	174	-	-
15-19 years	338,272	34,967	175,948	107,113	15,000	-	5,244	36.7	-
15 years	15,959	5,553	10,000	-	-	-	406	-	-
16 years	37,324	5,764	30,022	857	-	-	681	2.3	-
17 years	66,882	6,734	49,216	9,595	226	-	1,111	14.9	-
18 years	95,436	7,868	45,744	37,842	2,654	-	1,328	43.0	-
19 years	122,671	9,048	40,966	58,819	12,120	-	1,718	58.7	-
20-24 years	720,546	56,059	142,900	310,764	163,600	37,766	9,457	72.0	5.3
25-29 years	871,636	48,128	77,710	273,790	227,115	234,824	10,069	85.4	27.3
30-34 years	735,571	32,140	36,643	184,448	174,775	299,091	8,474	90.5	41.1
35-39 years	337,423	16,735	14,094	79,669	76,587	145,826	4,512	90.7	43.8
40 years and over	64,171	4,628	2,665	13,943	13,793	27,989	1,153	88.4	44.4
White, non-Hispanic									
All ages	2,333,363	41,659	256,605	757,734	570,573	686,483	20,309	87.1	29.7
Under 15 years	2,240	1,731	448	-	-	-	61	-	-
15-19 years	219,857	13,087	112,161	80,571	11,564	-	2,474	42.4	-
15 years	8,244	2,757	5,306	-	-	-	181	-	-
16 years	21,536	2,676	17,989	570	-	-	301	2.7	-
17 years	42,088	2,644	31,994	6,786	155	-	509	16.7	-
18 years	63,787	2,570	30,393	28,196	1,985	-	643	47.8	-
19 years	84,202	2,440	26,479	45,019	9,424	-	840	65.3	-
20-24 years	500,928	11,433	81,350	237,112	133,461	33,211	4,361	81.3	6.7
25-29 years	674,498	7,717	37,116	213,989	194,427	215,954	5,295	93.3	32.3
30-34 years	603,304	4,605	17,000	148,805	151,660	276,328	4,906	96.4	46.2
35-39 years	280,393	2,384	7,218	65,869	67,311	135,029	2,582	96.5	48.6
40 years and over	52,143	702	1,312	11,388	12,150	25,961	630	96.1	50.4
Black, total									
All ages	599,913	17,272	145,147	229,003	134,490	61,868	12,133	72.4	10.5
Under 15 years	4,712	3,588	969	-	-	-	155	-	-
15-19 years	128,539	6,345	73,386	39,978	6,395	-	2,435	36.8	-
15 years	9,381	2,726	6,362	-	-	-	293	-	-
16 years	17,658	1,522	15,415	345	-	-	376	2.0	-
17 years	26,595	874	21,336	3,856	78	-	451	15.0	-
18 years	34,712	667	17,117	15,198	1,156	-	574	47.9	-
19 years	40,193	556	13,156	20,579	5,161	-	741	65.2	-
20-24 years	182,600	2,569	39,422	84,898	45,254	7,293	3,164	76.6	4.1
25-29 years	135,529	1,864	16,859	53,271	40,483	20,250	2,802	85.9	15.3
30-34 years	94,123	1,581	9,107	32,960	27,562	20,748	2,165	88.4	22.6
35-39 years	45,069	959	4,508	14,848	12,394	11,206	1,154	87.6	25.5
40 years and over	9,341	366	896	3,048	2,402	2,371	258	86.1	26.1

See footnotes at end of table.

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, 1997 --Con.

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		
Black, non-Hispanic									
All ages	581,431	15,872	140,790	222,692	131,000	60,248	10,829	72.5	10.6
Under 15 years	4,613	3,526	941	-	-	-	146	-	-
15-19 years	125,343	6,128	71,633	39,106	6,220	-	2,256	36.8	-
15 years	9,163	2,674	6,212	-	-	-	277	-	-
16 years	17,235	1,483	15,065	336	-	-	351	2.0	-
17 years	25,940	835	20,882	3,734	76	-	413	14.9	-
18 years	33,870	638	16,681	14,895	1,124	-	532	48.1	-
19 years	39,135	498	12,793	20,141	5,020	-	683	65.4	-
20-24 years	177,494	2,245	38,264	82,877	44,089	7,132	2,887	76.8	4.1
25-29 years	130,942	1,538	16,101	51,662	39,417	19,745	2,479	86.3	15.4
30-34 years	90,637	1,284	8,689	31,772	26,839	20,161	1,892	88.8	22.7
35-39 years	43,434	839	4,295	14,342	12,093	10,906	959	87.9	25.7
40 years and over	8,968	312	867	2,933	2,342	2,304	210	86.5	26.3
Hispanic [2]									
All ages	709,767	155,599	194,592	205,465	93,925	46,973	13,213	49.7	6.7
Under 15 years	2,833	2,094	636	-	-	-	103	-	-
15-19 years	118,122	21,911	63,974	26,455	3,442	-	2,340	25.8	-
15 years	7,778	2,813	4,764	-	-	-	201	-	-
16 years	15,870	3,078	12,166	289	-	-	337	1.9	-
17 years	24,768	4,100	17,233	2,842	72	-	521	12.0	-
18 years	31,542	5,291	15,373	9,637	676	-	565	33.3	-
19 years	38,164	6,629	14,438	13,687	2,694	-	716	43.7	-
20-24 years	216,152	44,804	61,359	72,162	29,499	4,253	4,075	49.9	2.0
25-29 years	188,669	40,651	40,639	57,617	30,583	15,767	3,412	56.1	8.5
30-34 years	121,539	27,752	19,734	33,814	20,708	17,424	2,107	60.2	14.6
35-39 years	51,601	14,425	6,910	13,006	8,242	8,064	954	57.9	15.9
40 years and over	10,851	3,962	1,340	2,411	1,451	1,465	222	50.1	13.8

- Quantity zero.
[1] Includes races other than white and black.
[2] Includes all persons of Hispanic origin of any race.

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, 1997

Period of gestation [1] and race and Hispanic origin of mother	All births	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	Median weight gain in pounds
	Number										
All gestation periods [2]											
All races [3]	3,356,054	343,135	333,214	438,876	571,339	440,185	392,319	207,508	351,293	278,185	...
White, total	2,646,409	245,325	251,875	348,586	463,127	364,038	320,670	170,891	280,887	201,010	...
White, non-Hispanic	2,155,500	190,213	198,880	286,263	385,913	308,016	271,844	145,919	239,412	129,040	...
Black, total	562,593	83,291	65,280	69,318	82,489	57,399	55,959	29,185	59,464	60,208	...
Black, non-Hispanic	545,322	81,489	63,556	67,082	79,983	55,200	54,052	28,168	57,523	58,269	...
Hispanic [4]	460,819	52,903	50,899	59,061	71,947	52,093	45,487	22,995	38,837	66,597	...
Under 37 weeks											
All races [3]	386,344	61,274	47,970	51,343	57,446	38,929	34,267	17,830	33,617	43,668	...
White, total	271,501	37,950	32,521	36,925	42,205	29,666	25,512	13,749	25,160	27,813	...
White, non-Hispanic	215,540	28,949	25,435	29,858	34,480	24,661	21,271	11,590	21,260	18,036	...
Black, total	98,888	20,902	13,372	12,149	12,791	7,689	7,410	3,491	7,501	13,583	...
Black, non-Hispanic	96,412	20,522	13,050	11,821	12,490	7,429	7,198	3,393	7,296	13,213	...
Hispanic [4]	53,520	8,725	6,866	6,816	7,352	4,778	4,058	2,035	3,682	9,208	...
37-39 weeks											
All races [3]	1,558,672	154,288	157,619	211,878	275,268	209,445	181,645	93,583	153,903	121,043	...
White, total	1,229,126	111,516	119,335	168,368	222,693	172,321	147,854	76,627	122,237	88,175	...
White, non-Hispanic	1,002,059	86,419	94,227	138,471	185,782	145,701	124,985	65,363	103,944	57,167	...
Black, total	257,231	35,988	30,132	32,790	39,190	27,671	26,239	13,472	26,713	25,036	...
Black, non-Hispanic	249,594	35,207	29,388	31,775	38,047	26,647	25,363	13,017	25,834	24,316	...
Hispanic [4]	214,097	24,213	24,158	28,371	34,439	24,870	21,441	10,436	17,319	28,850	...
40 weeks and over											
All races [3]	1,398,825	126,520	127,018	174,878	237,704	191,197	175,824	95,830	163,216	106,638	...
White, total	1,137,731	95,308	99,639	142,806	197,578	161,614	146,898	80,320	133,114	80,454	...
White, non-Hispanic	932,465	74,461	78,968	117,576	165,147	137,303	125,267	68,818	113,905	51,020	...
Black, total	203,754	26,076	21,629	24,256	30,356	21,953	22,222	12,181	25,139	19,942	...
Black, non-Hispanic	196,786	25,445	20,978	23,368	29,298	21,043	21,406	11,719	24,289	19,240	...
Hispanic [4]	191,160	19,808	19,751	23,751	30,018	22,365	19,903	10,479	17,771	27,314	...
	Percent distribution										
All gestation periods [2]											
All races [3]	100.0	11.1	10.8	14.3	18.6	14.3	12.7	6.7	11.4	...	30.5
White, total	100.0	10.0	10.3	14.3	18.9	14.9	13.1	7.0	11.5	...	30.6
White, non-Hispanic	100.0	9.4	9.8	14.1	19.0	15.2	13.4	7.2	11.8	...	30.8
Black, total	100.0	16.6	13.0	13.8	16.4	11.4	11.1	5.8	11.8	...	29.7
Black, non-Hispanic	100.0	16.7	13.0	13.8	16.4	11.3	11.1	5.8	11.8	...	29.6
Hispanic [4]	100.0	13.4	12.9	15.0	18.3	13.2	11.5	5.8	9.9	...	29.8
Under 37 weeks											
All races [3]	100.0	17.9	14.0	15.0	16.8	11.4	10.0	5.2	9.8	...	27.4
White, total	100.0	15.6	13.3	15.2	17.3	12.2	10.5	5.6	10.3	...	28.5
White, non-Hispanic	100.0	14.7	12.9	15.1	17.5	12.5	10.8	5.9	10.8	...	29.1
Black, total	100.0	24.5	15.7	14.2	15.0	9.0	8.7	4.1	8.8	...	25.3
Black, non-Hispanic	100.0	24.7	15.7	14.2	15.0	8.9	8.7	4.1	8.8	...	25.3
Hispanic [4]	100.0	19.7	15.5	15.4	16.6	10.8	9.2	4.6	8.3	...	25.9
37-39 weeks											
All races [3]	100.0	10.7	11.0	14.7	19.1	14.6	12.6	6.5	10.7	...	30.4
White, total	100.0	9.8	10.5	14.8	19.5	15.1	13.0	6.7	10.7	...	30.5
White, non-Hispanic	100.0	9.1	10.0	14.7	19.7	15.4	13.2	6.9	11.0	...	30.6
Black, total	100.0	15.5	13.0	14.1	16.9	11.9	11.3	5.8	11.5	...	30.0
Black, non-Hispanic	100.0	15.6	13.0	14.1	16.9	11.8	11.3	5.8	11.5	...	30.0
Hispanic [4]	100.0	13.1	13.0	15.3	18.6	13.4	11.6	5.6	9.3	...	29.6
40 weeks and over											
All races [3]	100.0	9.8	9.8	13.5	18.4	14.8	13.6	7.4	12.6	...	30.8
White, total	100.0	9.0	9.4	13.5	18.7	15.3	13.9	7.6	12.6	...	30.9
White, non-Hispanic	100.0	8.4	9.0	13.3	18.7	15.6	14.2	7.8	12.9	...	31.3
Black, total	100.0	14.2	11.8	13.2	16.5	11.9	12.1	6.6	13.7	...	30.4
Black, non-Hispanic	100.0	14.3	11.8	13.2	16.5	11.9	12.1	6.6	13.7	...	30.4
Hispanic [4]	100.0	12.1	12.1	14.5	18.3	13.7	12.1	6.4	10.8	...	30.3

... Category not applicable.
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 Includes all persons of Hispanic origin 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, 1997

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

Period of gestation [1] 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 [2]										
All races [3]	7.7	14.5	10.7	7.9	6.2	5.1	5.0	4.8	5.3	11.9
White, total	6.6	12.1	9.3	7.0	5.5	4.6	4.4	4.5	4.9	10.0
White, non-Hispanic	6.6	12.3	9.5	7.0	5.4	4.6	4.4	4.5	4.9	10.5
Black, total	13.1	21.6	16.4	12.9	10.5	8.5	8.2	7.1	7.3	19.0
Black, non-Hispanic	13.2	21.7	16.4	13.0	10.6	8.6	8.3	7.2	7.3	19.0
Hispanic, total [4]	6.9	11.6	8.5	6.8	5.5	4.6	4.6	4.2	4.5	9.0
Mexican [4]	6.3	10.4	7.4	6.0	4.9	4.2	4.0	3.9	4.1	8.3
Puerto Rican [4]	9.4	16.6	12.8	9.7	8.2	6.7	6.1	5.2	5.7	14.6
Cuban [4]	6.8	15.7	10.9	8.0	6.1	3.7	4.2	5.8	5.2	13.7
Central and South American [4]	6.4	11.2	8.5	6.8	5.5	4.2	4.7	3.7	4.2	8.4
Other and unknown Hispanic [4]	8.2	13.2	11.3	8.1	6.7	5.6	5.5	4.6	5.0	11.9
Under 37 weeks										
All races [3]	44.1	58.1	49.3	43.0	38.1	35.4	34.8	34.5	35.4	54.1
White, total	42.3	55.8	47.8	41.8	36.9	34.8	34.3	34.6	35.5	51.6
White, non-Hispanic	43.4	57.9	49.9	43.2	37.8	35.8	35.1	35.4	36.5	55.2
Black, total	49.9	62.9	53.9	47.2	42.8	38.3	37.1	35.0	35.4	60.2
Black, non-Hispanic	50.0	63.0	54.0	47.4	43.0	38.5	37.2	35.2	35.6	60.1
Hispanic [4]	37.3	48.1	40.1	35.5	31.7	29.1	29.8	27.8	28.4	44.0
37-39 weeks										
All races [3]	4.3	6.8	5.8	4.6	3.8	3.2	3.2	3.2	3.3	5.3
White, total	3.7	5.9	5.0	4.0	3.4	2.8	2.8	2.9	3.0	4.3
White, non-Hispanic	3.7	5.9	5.1	4.0	3.3	2.8	2.8	2.9	3.0	4.3
Black, total	7.0	9.9	8.6	7.5	6.2	5.3	5.2	4.9	4.7	8.5
Black, non-Hispanic	7.0	10.0	8.7	7.6	6.2	5.3	5.2	5.0	4.8	8.6
Hispanic [4]	4.0	5.9	5.0	4.3	3.6	3.1	3.1	2.9	3.0	4.5
40 weeks and over										
All races [3]	1.5	2.7	2.1	1.7	1.3	1.0	1.0	0.9	0.9	2.1
White, total	1.2	2.2	1.7	1.4	1.1	0.9	0.8	0.8	0.8	1.7
White, non-Hispanic	1.2	2.1	1.7	1.4	1.1	0.8	0.8	0.8	0.8	1.6
Black, total	2.9	4.6	3.9	3.0	2.5	2.2	2.2	1.6	1.5	3.7
Black, non-Hispanic	2.9	4.6	3.9	3.1	2.5	2.2	2.2	1.6	1.5	3.8
Hispanic [4]	1.5	2.5	1.8	1.6	1.4	1.1	1.0	0.8	1.1	1.8

[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] Includes all persons of Hispanic origin 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, 1997

Characteristic	All races	White	Black	American Indian [1]	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
All Births										
Mother										
Prenatal care beginning in the first trimester	82.5	84.7	72.3	68.1	82.1	87.4	89.3	78.0	83.3	79.7
Late or no prenatal care	3.9	3.2	7.3	8.6	3.8	2.4	2.7	5.4	3.3	4.4
Smoker [2]	13.2	14.3	9.7	20.8	3.2	1.0	4.7	15.8	3.4	2.5
Drinker [3]	1.2	1.1	1.7	3.6	0.4	0.2	1.0	1.7	0.3	0.3
Weight gain of less than 16 lbs [4]	11.1	10.0	16.6	15.3	9.9	6.4	12.6	13.1	8.4	10.6
Median weight gain [4]	30.5	30.6	29.7	30.2	30.0	30.3	26.0	30.6	30.3	29.5
Cesarean delivery rate	20.8	20.7	21.8	18.0	19.0	19.1	15.1	16.2	22.5	18.3
Infant										
Preterm births [5]	11.4	10.2	17.5	12.2	10.2	7.4	8.1	11.0	11.9	10.6
Birthweight										
Very low birthweight [6]	1.4	1.1	3.0	1.2	1.1	0.7	0.8	1.4	1.3	1.1
Low birthweight [7]	7.5	6.5	13.0	6.8	7.2	5.1	6.8	7.2	8.3	7.5
4,000 grams or more [8]	10.1	11.2	5.3	12.4	5.8	6.5	4.8	8.3	5.8	5.6
5-minute Apgar score of less than 7 [9]	1.4	1.2	2.4	1.4	1.0	0.7	0.9	1.6	1.2	1.0
Births to mothers born in the 50 States and D.C.										
Mother										
Prenatal care beginning in the first trimester	84.0	86.8	71.9	67.9	82.0	91.9	90.2	78.0	81.5	77.9
Late or no prenatal care	3.5	2.6	7.3	8.7	4.4	1.8	2.8	5.4	4.2	5.3
Smoker [2]	15.1	16.1	10.7	21.3	10.6	5.7	6.6	15.8	8.3	9.8
Drinker [3]	1.3	1.2	1.8	3.7	1.1	*	*	1.7	0.8	0.9
Weight gain of less than 16 lbs [4]	11.0	9.7	16.9	15.4	10.8	7.8	14.5	13.1	10.5	8.3
Median weight gain [4]	30.6	30.7	29.6	30.1	30.4	30.2	26.9	30.6	30.6	30.8
Cesarean delivery rate	21.0	20.9	21.6	17.9	16.7	17.0	17.2	16.2	17.2	16.2
Infant										
Preterm births [5]	11.5	10.2	17.9	12.3	10.8	9.2	9.3	11.0	11.8	11.0
Birthweight										
Very low birthweight [6]	1.5	1.1	3.0	1.2	1.2	0.7	0.9	1.4	1.2	1.3
Low birthweight [7]	7.7	6.6	13.3	6.7	7.7	7.2	7.2	7.2	9.0	7.5
4,000 grams or more [8]	10.4	11.5	5.0	12.5	7.2	5.3	6.0	8.3	5.5	8.8
5-minute Apgar score of less than 7 [9]	1.5	1.2	2.5	1.3	1.3	*	1.2	1.6	1.4	1.2
Births to mothers born outside the 50 Sates and D.C.										
Mother										
Prenatal care beginning in the first trimester	76.4	74.9	75.7	73.8	82.1	86.9	88.6	80.0	83.8	79.8
Late or no prenatal care	5.7	6.2	6.4	6.6	3.7	2.4	2.6	*	3.1	4.3
Smoker [2]	2.8	3.3	1.8	7.0	1.7	0.6	3.2	*	2.4	1.8
Drinker [3]	0.5	0.6	0.4	*	0.2	*	1.2	*	0.2	0.2
Weight gain of less than 16 lbs [4]	12.1	12.5	13.5	12.7	9.7	6.3	11.3	*	8.0	10.8
Median weight gain [4]	29.9	29.9	30.1	30.2	29.7	30.3	25.8	32.5	30.3	29.1
Cesarean delivery rate	20.1	19.8	23.9	18.1	19.4	19.3	13.6	19.0	23.6	18.5
Infant										
Preterm births [5]	10.6	10.3	14.2	10.9	10.1	7.2	7.2	*	11.9	10.6
Birthweight										
Very low birthweight [6]	1.1	1.0	2.5	1.1	1.0	0.7	0.7	*	1.3	1.0
Low birthweight [7]	6.4	5.8	9.7	8.2	7.1	4.8	6.5	*	8.2	7.5
4,000 grams or more [8]	8.9	9.9	8.4	8.1	5.6	6.6	3.8	*	5.9	5.3
5-minute Apgar score of less than 7 [9]	1.2	1.1	1.8	1.7	1.0	0.8	0.7	*	1.2	1.0

* Figure does not meet standards of reliability or precision.
1 Includes births to Aleuts and Eskimos.
2 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.
3 Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.
4 Excludes data for California, which did not report weight gain on the birth certificate. Median weight shown in pounds.
5 Born prior to 37 completed weeks of gestation.
6 Birthweight of less than 1,500 grams (3 lb 4 oz).
7 Birthweight of less than 2,500 grams (5 lb 8 oz).
8 Equivalent to 8 lb 14 oz.
9 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 birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

Characteristic	All origins [1]	Origin of mother								
		Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total [2]	White	Black
All Births										
Mother										
Prenatal care beginning in the first trimester	82.5	73.7	72.1	76.5	90.4	76.9	76.0	84.5	87.9	72.3
Late or no prenatal care	3.9	6.2	6.7	5.4	1.5	5.0	5.3	3.4	2.4	7.3
Smoker [3]	13.2	4.1	2.9	11.0	4.2	1.8	8.5	14.7	16.5	9.8
Drinker [4]	1.2	0.7	0.6	1.0	0.4	0.4	1.3	1.3	1.2	1.7
Weight gain of less than 16 lbs [5]	11.1	13.4	14.8	12.6	7.3	10.6	12.6	10.8	9.4	16.7
Median weight gain [5]	30.5	29.8	28.5	30.4	32.3	30.3	30.3	30.6	30.8	29.6
Cesarean delivery rate	20.8	20.2	19.7	20.8	30.5	21.9	19.4	20.9	20.9	21.8
Infant										
Preterm births [6]	11.4	11.2	10.9	13.7	11.0	11.2	12.0	11.4	9.9	17.6
Birthweight										
Very low birthweight [7]	1.4	1.1	1.0	1.8	1.4	1.2	1.3	1.5	1.1	3.1
Low birthweight [8]	7.5	6.4	6.0	9.4	6.8	6.3	7.9	7.8	6.5	13.1
4,000 grams or more [9]	10.1	8.9	9.3	6.7	10.5	8.9	7.6	10.3	11.9	5.3
5-minute Apgar score of less than 7 [10]	1.4	1.2	1.2	1.5	0.9	1.0	1.1	1.5	1.2	2.5
Births to mothers born in the 50 States and D.C.										
Mother										
Prenatal care beginning in the first trimester	84.0	76.2	75.7	76.5	90.3	80.4	75.8	84.8	88.0	71.9
Late or no prenatal care	3.5	5.1	5.2	5.4	2.0	4.0	5.3	3.3	2.3	7.3
Smoker [3]	15.1	7.3	5.4	12.6	5.6	5.6	10.2	15.7	16.9	10.7
Drinker [4]	1.3	1.1	1.0	1.1	0.6	0.8	1.7	1.3	1.2	1.8
Weight gain of less than 16 lbs [5]	11.0	12.4	13.1	11.8	7.3	7.6	12.4	10.9	9.4	17.0
Median weight gain [5]	30.6	29.8	28.5	30.4	32.3	30.3	30.3	30.6	30.8	29.6
Cesarean delivery rate	21.0	20.6	20.7	20.6	27.4	20.1	19.4	21.0	20.9	21.6
Infant										
Preterm births [6]	11.5	12.0	11.7	13.8	10.6	10.6	12.1	11.5	10.0	17.9
Birthweight										
Very low birthweight [7]	1.5	1.3	1.2	1.9	1.5	1.4	1.3	1.5	1.1	3.0
Low birthweight [8]	7.7	7.3	6.8	9.6	6.8	7.0	8.3	7.8	6.5	13.4
4,000 grams or more [9]	10.4	8.0	8.4	6.7	9.5	9.0	7.1	10.6	11.9	5.0
5-minute Apgar score of less than 7 [10]	1.5	1.2	1.2	1.4	0.6	1.3	1.2	1.5	1.2	2.5
Births to mothers born outside the 50 States and D.C.										
Mother										
Prenatal care beginning in the first trimester	76.4	72.1	69.9	76.6	90.5	76.5	77.3	82.3	85.3	76.1
Late or no prenatal care	5.7	6.9	7.7	5.3	1.2	5.1	5.1	4.1	3.5	6.4
Smoker [3]	2.8	1.8	1.0	8.4	3.4	1.4	2.7	4.0	7.5	1.6
Drinker [4]	0.5	0.4	0.3	0.9	*	0.4	0.4	0.6	1.1	0.3
Weight gain of less than 16 lbs [5]	12.1	14.2	16.1	14.0	7.3	10.9	12.7	9.9	8.1	13.9
Median weight gain [5]	29.9	28.5	26.8	30.1	32.2	30.2	30.1	30.3	30.6	30.1
Cesarean delivery rate	20.1	20.0	19.0	21.2	32.5	22.0	19.7	20.2	19.4	23.9
Infant										
Preterm births [6]	10.6	10.7	10.3	13.4	11.3	11.3	11.2	10.5	9.2	14.5
Birthweight										
Very low birthweight [7]	1.1	1.0	0.9	1.7	1.2	1.1	1.3	1.3	1.0	2.7
Low birthweight [8]	6.4	5.8	5.4	9.0	6.7	6.2	6.4	7.2	6.0	10.0
4,000 grams or more [9]	8.9	9.5	9.8	6.8	11.1	8.9	9.0	8.1	11.3	8.3
5-minute Apgar score of less than 7 [10]	1.2	1.2	1.2	1.6	1.0	1.0	1.0	1.2	1.0	1.9

1 Includes origin not stated.
2 Includes races other than white and black.
3 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.
4 Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.
5 Excludes data for California, which did not report weight gain on the birth certificate. Median weight gain shown in pounds.
6 Born prior to 37 completed weeks of gestation.
7 Birthweight of less than 1,500 grams (3 lb 4 oz).
8 Birthweight of less than 2,500 grams (5 lb 8 oz).
9 Equivalent to 8 lb 14 oz.
10 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 birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, 1997

[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 [1]	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	40-54 years	
All races [2]										
Anemia	3,880,894	77,334	20.2	28.6	24.2	18.2	15.8	15.8	17.3	47,176
Cardiac disease	3,880,894	19,929	5.2	2.9	3.6	5.0	6.7	8.0	8.8	47,176
Acute or chronic lung disease	3,880,894	37,153	9.7	12.7	10.7	8.7	8.6	8.6	9.6	47,176
Diabetes	3,880,894	101,176	26.4	8.2	16.3	25.5	35.0	47.8	64.9	47,176
Genital herpes [3]	3,546,920	31,550	9.0	6.1	8.1	8.9	10.1	11.9	12.0	46,065
Hydramnios/Oligohydramnios	3,880,894	50,025	13.0	14.5	13.2	12.4	12.2	13.6	17.8	47,176
Hemoglobinopathy	3,880,894	3,123	0.8	1.2	0.9	0.7	0.7	0.8	1.0	47,176
Hypertension, chronic	3,880,894	26,378	6.9	2.5	4.1	6.1	8.6	13.9	23.0	47,176
Hypertension, pregnancy-associated	3,880,894	141,235	36.8	42.8	37.0	35.7	33.6	37.2	46.2	47,176
Eclampsia	3,880,894	12,782	3.3	4.9	3.5	3.0	2.7	3.1	4.2	47,176
Incompetent cervix	3,880,894	10,208	2.7	1.3	1.9	2.6	3.4	4.2	4.4	47,176
Previous infant 4000+ grams	3,880,894	41,934	10.9	1.3	6.5	11.5	15.7	19.1	21.1	47,176
Previous preterm or small-for-gestational-age infant	3,880,894	46,152	12.0	5.4	12.2	12.5	13.2	15.1	16.9	47,176
Renal disease [4]	3,819,980	10,886	2.9	3.3	3.2	2.9	2.5	2.5	2.7	48,127
Rh sensitization [5]	3,843,605	24,505	6.5	5.3	6.0	6.6	7.1	7.2	6.4	48,527
Uterine bleeding [3]	3,546,920	24,463	7.0	5.0	6.0	7.1	7.9	8.7	9.4	46,065
White										
Anemia	3,072,640	53,347	17.6	25.2	20.9	16.1	14.2	14.2	16.0	35,423
Cardiac disease	3,072,640	16,730	5.5	2.9	3.6	5.2	7.2	8.5	9.4	35,423
Acute or chronic lung disease	3,072,640	28,357	9.3	12.0	10.2	8.6	8.6	8.5	9.3	35,423
Diabetes	3,072,640	78,155	25.7	8.6	16.4	24.6	32.7	44.3	59.9	35,423
Genital herpes [3]	2,788,319	25,156	9.1	5.3	7.3	8.9	10.6	13.0	13.8	34,503
Hydramnios/Oligohydramnios	3,072,640	37,670	12.4	13.5	12.7	11.8	11.7	12.9	16.5	35,423
Hemoglobinopathy	3,072,640	1,056	0.3	0.3	0.3	0.3	0.4	0.4	0.7	35,423
Hypertension, chronic	3,072,640	18,199	6.0	2.1	3.5	5.4	7.3	11.4	18.7	35,423
Hypertension, pregnancy-associated	3,072,640	112,553	37.1	42.7	38.0	36.6	33.6	36.7	44.8	35,423
Eclampsia	3,072,640	9,525	3.1	4.4	3.3	2.9	2.7	3.0	4.1	35,423
Incompetent cervix	3,072,640	7,207	2.4	1.2	1.6	2.1	3.1	4.0	4.3	35,423
Previous infant 4000+ grams	3,072,640	37,648	12.4	1.5	7.2	12.7	17.3	21.1	23.7	35,423
Previous preterm or small-for-gestational-age infant	3,072,640	35,155	11.6	5.0	11.3	11.8	12.8	14.6	16.5	35,423
Renal disease [4]	3,032,203	9,019	3.0	3.6	3.4	3.0	2.7	2.5	2.6	36,242
Rh sensitization [5]	3,039,375	22,144	7.4	6.3	6.8	7.5	8.0	8.1	7.2	36,660
Uterine bleeding [3]	2,788,319	20,256	7.4	5.3	6.4	7.4	8.2	8.9	9.7	34,503
Black										
Anemia	599,913	19,447	32.7	36.1	36.1	30.6	27.7	27.6	27.1	6,044
Cardiac disease	599,913	2,624	4.4	3.1	4.1	4.7	5.3	6.6	8.0	6,044
Acute or chronic lung disease	599,913	7,628	12.8	15.2	13.6	11.5	10.9	10.9	12.9	6,044
Diabetes	599,913	14,562	24.5	6.8	15.1	26.7	42.7	59.1	79.5	6,044
Genital herpes [3]	560,429	5,547	10.0	8.1	11.4	11.2	9.8	7.6	5.8	5,898
Hydramnios/Oligohydramnios	599,913	9,837	16.6	17.3	15.4	15.9	16.6	18.8	26.0	6,044
Hemoglobinopathy	599,913	1,916	3.2	3.5	3.2	3.2	2.9	3.3	3.4	6,044
Hypertension, chronic	599,913	7,229	12.2	3.4	6.5	11.8	20.8	35.2	55.8	6,044
Hypertension, pregnancy-associated	599,913	23,560	39.7	44.1	35.2	36.8	41.0	46.5	58.4	6,044
Eclampsia	599,913	2,716	4.6	6.0	4.5	4.0	3.7	4.2	5.4	6,044
Incompetent cervix	599,913	2,664	4.5	1.7	3.3	6.1	7.1	7.1	5.5	6,044
Previous infant 4000+ grams	599,913	2,805	4.7	0.9	3.7	6.1	7.7	8.9	9.6	6,044
Previous preterm or small-for-gestational-age infant	599,913	9,143	15.4	6.4	16.0	19.1	18.9	20.0	19.9	6,044
Renal disease [4]	580,083	1,459	2.5	2.6	2.9	2.3	2.2	2.3	3.0	6,169
Rh sensitization [5]	597,110	1,985	3.4	3.1	3.3	3.5	3.7	3.6	3.7	6,142
Uterine bleeding [3]	560,429	3,050	5.5	4.1	4.9	6.1	6.6	7.1	7.3	5,898

1 Total number of births to residents of areas reporting specified medical risk factor.
2 Includes races other than white and black.
3 Texas does not report this risk factor.
4 Alabama does not report this risk factor.
5 Kansas does not report this risk factor.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

[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* [1]	*Asian or Pacific Islander*					
					Total	*Chinese*	*Japanese*	*Hawaiian*	*Filipino*	*Other*
	Number									
Medical risk factors										
Anemia	77,334	53,347	19,447	1,803	2,737	248	111	164	430	1,784
Diabetes	101,176	78,155	14,562	1,841	6,618	1,218	222	132	1,197	3,849
Hypertension, pregnancy-associated	141,235	112,553	23,560	1,802	3,320	403	151	138	881	1,747
Uterine bleeding [2]	24,463	20,256	3,050	265	892	157	47	22	168	498
Complications of labor and/or delivery										
Meconium,moderate/heavy	215,127	156,876	46,465	2,301	9,485	1,495	294	353	1,895	5,448
Premature rupture of membrane	108,831	83,123	19,703	1,594	4,411	669	276	178	756	2,532
Dysfunctional labor	106,157	85,168	15,143	1,344	4,502	778	226	166	819	2,513
Breech/Malpresentation	147,248	122,347	17,870	1,389	5,642	993	312	183	1,018	3,136
Cephalopelvic disproportion	81,208	66,674	9,931	724	3,879	662	195	96	818	2,108
Fetal distress [3]	141,502	105,621	29,248	1,310	5,323	818	217	121	902	3,265
Obstetric procedures										
Amniocentesis	118,298	101,043	10,209	692	6,354	1,907	652	120	1,077	2,598
Electronic fetal monitoring	3,207,918	2,548,914	497,949	30,505	130,550	22,146	6,480	3,927	23,727	74,270
Induction of labor	708,151	598,273	82,039	7,115	20,724	3,456	1,153	733	3,416	11,966
Ultrasound	2,480,726	2,008,198	349,846	22,313	100,369	17,810	5,501	2,933	18,261	55,864
Stimulation of labor	670,409	541,361	95,011	5,854	28,183	5,209	1,307	613	4,487	16,567
	Rate									
Medical risk factors										
Anemia	20.2	17.6	32.7	48.1	16.6	8.9	13.5	34.3	14.1	19.1
Diabetes	26.4	25.7	24.5	49.1	40.1	43.6	27.0	27.6	39.2	41.1
Hypertension, pregnancy-associated	36.8	37.1	39.7	48.1	20.1	14.4	18.4	28.8	28.8	18.7
Uterine bleeding [2]	7.0	7.4	5.5	7.2	5.7	5.9	5.9	4.7	5.7	5.7
Complications of labor and/or delivery										
Meconium,moderate/heavy	56.0	51.6	78.1	61.3	56.8	53.4	34.1	66.4	61.1	58.0
Premature rupture of membrane	28.3	27.3	33.1	42.5	26.4	23.9	32.0	33.5	24.4	26.9
Dysfunctional labor	27.6	28.0	25.4	35.8	27.0	27.8	26.2	31.2	26.4	26.7
Breech/Malpresentation	38.3	40.2	30.0	37.0	33.8	35.5	36.1	34.4	32.8	33.4
Cephalopelvic disproportion	21.1	21.9	16.7	19.3	23.2	23.7	22.6	18.0	26.4	22.4
Fetal distress [3]	40.4	38.3	52.7	35.7	33.8	30.6	25.8	23.0	30.1	37.4
Obstetric procedures										
Amniocentesis	30.7	33.1	17.1	18.4	38.1	67.7	76.9	23.6	34.9	27.6
Electronic fetal monitoring	833.0	835.7	834.8	809.8	782.5	786.0	764.0	772.1	768.1	788.4
Induction of labor	183.9	196.2	137.5	188.9	124.2	122.7	135.9	144.1	110.6	127.0
Ultrasound	644.2	658.4	586.5	592.4	601.6	632.1	648.5	576.7	591.2	593.0
Stimulation of labor	174.1	177.5	159.3	155.4	168.9	184.9	154.1	120.5	145.3	175.9

[1] Includes births to Aleuts and Eskimos.
[2] Texas does not report this risk factor.
[3] Texas does not report this complication.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

[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*[1]	*Origin of mother*								
		Hispanic						*Non-Hispanic*		
		Total	*Mexican*	*Puerto Rican*	*Cuban*	*Central and South American*	*Other and unknown Hispanic*	*Total*[2]	*White*	*Black*
	Number									
Medical risk factors										
Anemia	77,334	14,243	9,142	1,742	236	1,599	1,524	61,781	38,490	18,939
Diabetes	101,176	17,687	11,632	1,925	296	2,621	1,213	81,650	59,496	13,970
Hypertension, pregnancy-associated	141,235	18,888	12,736	1,520	385	2,615	1,632	120,363	92,537	22,911
Uterine bleeding[3]	24,463	2,542	1,430	377	62	409	264	21,417	17,369	2,937
Complications of labor and/or delivery										
Meconium,moderate/heavy	215,127	40,192	26,855	3,606	556	6,605	2,570	171,835	115,566	44,950
Premature rupture of membrane	108,831	13,922	8,377	1,734	322	2,172	1,317	92,595	67,762	19,102
Dysfunctional labor	106,157	15,883	9,017	1,871	564	2,846	1,585	87,686	67,576	14,466
Breech/Malpresentation	147,248	21,226	14,141	1,914	499	2,984	1,688	123,636	99,651	17,241
Cephalopelvic disproportion	81,208	11,226	7,915	860	245	1,470	736	68,916	54,802	9,682
Fetal distress[4]	141,502	18,238	10,915	2,158	350	3,164	1,651	120,949	86,099	28,461
Obstetric procedures										
Amniocentesis	118,298	10,035	4,806	1,332	448	2,392	1,057	105,087	88,459	9,811
Electronic fetal monitoring	3,207,918	551,794	379,252	47,715	11,290	76,720	36,817	2,611,983	1,974,292	482,426
Induction of labor	708,151	85,152	55,777	7,815	2,464	11,511	7,585	610,753	504,463	79,586
Ultrasound	2,480,726	380,311	256,441	35,129	7,583	52,625	28,533	2,061,480	1,605,066	338,448
Stimulation of labor	670,409	111,715	74,489	11,316	2,372	16,146	7,392	547,412	422,838	91,581
	Rate									
Medical risk factors										
Anemia	20.2	20.2	18.4	32.2	18.4	16.6	34.4	20.1	16.7	32.9
Diabetes	26.4	25.1	23.4	35.6	23.1	27.1	27.4	26.5	25.8	24.3
Hypertension, pregnancy-associated	36.8	26.8	25.7	28.1	30.0	27.1	36.9	39.1	40.1	39.8
Uterine bleeding[3]	7.0	4.6	3.9	7.1	4.9	4.6	7.1	7.4	8.0	5.5
Complications of labor and/or delivery										
Meconium,moderate/heavy	56.0	56.9	53.9	66.6	43.3	68.3	57.7	55.8	50.1	77.9
Premature rupture of membrane	28.3	19.7	16.8	32.0	25.1	22.4	29.6	30.1	29.4	33.1
Dysfunctional labor	27.6	22.5	18.1	34.6	44.0	29.4	35.6	28.5	29.3	25.1
Breech/Malpresentation	38.3	30.1	28.4	35.4	38.9	30.8	37.9	40.1	43.2	29.9
Cephalopelvic disproportion	21.1	15.9	15.9	15.9	19.1	15.2	16.5	22.4	23.8	16.8
Fetal distress[4]	40.4	32.6	29.8	40.6	27.9	35.3	43.9	41.8	39.7	52.9
Obstetric procedures										
Amniocentesis	30.7	14.2	9.6	24.5	34.9	24.7	23.7	34.0	38.2	17.0
Electronic fetal monitoring	833.0	780.6	761.5	877.6	878.3	790.7	826.5	845.4	853.0	834.3
Induction of labor	183.9	120.5	112.0	143.7	191.7	118.6	170.3	197.7	218.0	137.6
Ultrasound	644.2	538.0	514.9	646.1	589.9	542.3	640.5	667.2	693.5	585.3
Stimulation of labor	174.1	158.0	149.6	208.1	184.5	166.4	165.9	177.2	182.7	158.4

1 Includes origin not stated.
2 Includes races other than white and black.
3 Texas does not report this risk factor.
4 Texas does not report this complication.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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, 1997

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	40-54 years
			Total	15-17 years	18-19 years					
	Number									
All races[1]										
Total	3,124,110	8,476	399,821	148,792	251,029	769,429	863,520	703,396	319,137	60,331
Smoker	406,484	674	69,346	22,800	46,546	126,135	100,299	69,115	34,919	5,996
Nonsmoker	2,671,200	7,682	325,031	124,020	201,011	632,465	750,431	623,402	278,980	53,209
Not stated	46,426	120	5,444	1,972	3,472	10,829	12,790	10,879	5,238	1,126
White										
Total	2,444,987	3,827	270,381	94,906	175,475	575,451	699,792	583,803	263,075	48,658
Smoker	344,666	512	59,704	19,363	40,341	108,821	85,651	57,276	28,031	4,671
Nonsmoker	2,063,713	3,255	206,790	74,208	132,582	458,252	603,806	517,666	230,845	43,099
Not stated	36,608	60	3,887	1,335	2,552	8,378	10,335	8,861	4,199	888
Black										
Total	539,157	4,366	117,207	49,157	68,050	165,611	121,301	82,988	39,535	8,149
Smoker	51,891	123	7,652	2,689	4,963	14,174	12,293	10,347	6,141	1,161
Nonsmoker	480,773	4,191	108,397	45,989	62,408	149,735	107,474	71,410	32,721	6,845
Not stated	6,493	52	1,158	479	679	1,702	1,534	1,231	673	143
	Percent									
Smoker[1]	13.2	8.1	17.6	15.5	18.8	16.6	11.8	10.0	11.1	10.1
White	14.3	13.6	22.4	20.7	23.3	19.2	12.4	10.0	10.8	9.8
Black	9.7	2.9	6.6	5.5	7.4	8.6	10.3	12.7	15.8	14.5
	Percent distribution									
All races[1]										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	27.2	49.1	35.0	39.2	33.0	27.5	24.5	24.8	23.3	23.0
6-10 cigarettes	40.7	37.3	41.8	40.5	42.4	42.0	40.8	39.0	38.1	36.1
11-15 cigarettes	6.4	*	4.6	4.0	4.9	5.9	7.1	7.4	7.5	6.6
16-20 cigarettes	21.8	10.1	16.5	14.5	17.5	21.2	23.4	23.8	24.9	26.4
21-30 cigarettes	2.8	*	1.5	1.3	1.6	2.4	3.0	3.5	4.2	5.2
31-40 cigarettes	1.0	*	0.5	0.4	0.5	0.9	1.0	1.3	1.8	2.4
41 cigarettes or more	0.2	*	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4
White										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	24.3	43.9	31.8	35.6	29.9	24.5	21.8	22.1	20.4	20.7
6-10 cigarettes	41.1	40.3	43.2	42.3	43.6	42.7	40.8	38.8	37.2	34.7
11-15 cigarettes	6.9	*	5.0	4.4	5.2	6.4	7.7	8.1	8.3	7.2
16-20 cigarettes	23.4	11.6	17.8	15.7	18.8	22.7	25.1	25.6	27.2	28.6
21-30 cigarettes	3.0	*	1.7	1.4	1.8	2.6	3.3	3.8	4.7	6.0
31-40 cigarettes	1.1	*	0.5	0.4	0.6	0.9	1.1	1.4	2.0	2.4
41 cigarettes or more	0.2	*	0.1	0.1	0.1	0.2	0.2	0.2	0.3	*
Black										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	43.7	66.1	57.4	62.1	54.9	47.7	40.6	37.9	35.3	32.4
6-10 cigarettes	38.5	27.0	31.9	28.5	33.7	36.8	40.9	40.6	41.9	41.1
11-15 cigarettes	3.0	*	1.8	1.4	2.1	2.6	3.3	3.5	4.1	4.6
16-20 cigarettes	12.6	*	8.0	7.3	8.4	11.2	13.3	14.9	15.4	17.7
21-30 cigarettes	1.2	*	0.4	*	0.5	1.0	1.1	1.9	1.7	2.0
31-40 cigarettes	0.7	*	0.3	*	*	0.5	0.7	0.9	1.2	1.9
41 cigarettes or more	0.2	*	*	*	*	0.2	*	*	*	*

* Figure does not meet standards of reliability or precision.
1 Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

Origin of mother	Smoking status				Age of mother									
	Total births	Smoker	Non-smoker	Not stated	All ages	Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-54 years
							Total	15-17 years	18-19 years					
All origins [1]	3,124,110	406,484	2,671,200	46,426	13.2	8.1	17.6	15.5	18.8	16.6	11.8	10.0	11.1	10.1
Hispanic	445,405	18,092	422,425	4,888	4.1	4.2	4.9	4.7	5.0	4.2	3.6	3.7	4.6	4.3
Mexican	279,642	7,989	269,246	2,407	2.9	2.7	3.4	3.4	3.5	2.8	2.5	2.7	3.5	3.4
Puerto Rican	50,554	5,459	44,081	1,014	11.0	8.2	10.6	9.9	11.0	11.4	10.7	10.8	12.5	10.0
Cuban	11,906	500	11,352	54	4.2	*	4.9	*	5.2	4.6	3.9	3.7	5.1	*
Central and South American	67,569	1,172	65,718	679	1.8	*	1.9	1.8	1.9	1.8	1.5	1.5	2.3	2.6
Other and unknown Hispanic	35,734	2,972	32,028	734	8.5	*	9.2	8.4	9.8	9.0	8.1	7.5	7.9	8.0
Non-Hispanic [2]	2,648,039	383,905	2,225,854	38,280	14.7	9.2	20.6	18.5	21.9	19.3	13.0	10.7	11.8	10.8
White	1,990,992	323,821	1,638,023	29,148	16.5	22.4	29.2	28.5	29.6	23.7	14.1	10.8	11.6	10.6
Black	522,998	50,840	466,061	6,097	9.8	2.9	6.6	5.5	7.4	8.7	10.4	12.9	16.1	14.8

* Figure does not meet standards of reliability or precision.
[1] Includes origin not stated.
[2] 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 birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified 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 and Hispanic origin of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1997

Smoking measure, and race and Hispanic origin 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 [1]	3,124,110	148,048	493,433	1,030,964	690,118	714,838	46,709
White, total	2,444,987	124,740	342,637	782,868	544,288	618,550	31,904
White, non-Hispanic	1,990,992	36,666	223,691	650,759	482,036	579,860	17,980
Black, total	539,157	16,338	132,643	205,543	118,926	55,076	10,631
Black, non-Hispanic	522,998	14,996	128,758	199,964	115,942	53,684	9,654
Hispanic [2]	445,405	89,093	120,431	131,334	60,896	33,430	10,221
	Percent						
Smoker	13.2	12.1	25.7	17.1	9.9	2.4	12.7
White ,total	14.3	12.5	29.8	19.5	10.9	2.5	13.6
White , non-Hispanic	16.5	36.0	42.0	22.5	11.8	2.6	18.9
Black, total	9.7	10.3	16.1	9.5	6.1	2.2	12.9
Black, non-Hispanic	9.8	10.7	16.3	9.6	6.2	2.2	13.2
Hispanic [2]	4.1	2.7	6.4	4.1	3.2	1.3	4.2
	Percent distribution						
All races [1]							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	67.9	62.6	67.5	67.3	69.8	74.8	68.5
11-20 cigarettes	28.1	30.9	28.1	28.9	26.9	22.7	27.1
21 cigarettes or more	4.0	6.5	4.4	3.8	3.3	2.5	4.4
White, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	65.4	60.3	64.1	65.1	67.9	73.9	65.3
11-20 cigarettes	30.3	32.7	31.1	30.9	28.6	23.5	29.7
21 cigarettes or more	4.3	7.0	4.9	4.0	3.5	2.6	5.0
White, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	64.6	56.6	62.7	64.5	67.5	73.6	64.1
11-20 cigarettes	31.0	35.7	32.3	31.4	29.0	23.7	30.6
21 cigarettes or more	4.4	7.7	5.1	4.1	3.6	2.7	5.3
Black, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	82.2	78.8	82.0	82.6	83.3	83.9	77.8
11-20 cigarettes	15.6	17.6	15.7	15.3	15.4	14.5	19.7
21 cigarettes or more	2.1	3.5	2.3	2.1	1.3	*	2.5
Black, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	82.2	78.7	81.9	82.6	83.3	83.9	78.5
11-20 cigarettes	15.6	17.8	15.8	15.3	15.4	14.4	19.1
21 cigarettes or more	2.1	3.6	2.3	2.1	1.3	*	2.4
Hispanic [2]							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	82.8	82.5	83.6	82.6	81.9	83.2	76.4
11-20 cigarettes	15.4	14.9	14.8	15.8	15.8	16.2	20.1
21 cigarettes or more	1.8	2.6	1.7	1.6	2.3	*	*

* Figure does not meet standards of reliability or precision.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin 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.

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, 1997

[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	40-54 years
			Total	15-17 years	18-19 years					
All races [1]										
Total	7.8	14.2	9.9	10.7	9.4	7.7	6.8	7.1	8.6	10.3
Smoker	12.1	15.7	11.4	12.1	11.1	10.4	11.4	13.6	16.8	19.5
Nonsmoker	7.1	13.9	9.5	10.5	9.0	7.1	6.2	6.4	7.5	9.2
Not stated	9.8	28.6	12.6	13.3	12.2	9.2	8.6	9.3	11.9	10.8
White, total										
Total	6.6	12.1	8.4	9.1	8.1	6.5	5.9	6.2	7.4	9.2
Smoker	10.7	17.2	10.9	11.5	10.6	9.7	10.0	11.4	14.2	17.0
Nonsmoker	5.9	10.9	7.7	8.4	7.3	5.7	5.2	5.5	6.6	8.3
Not stated	8.7	33.9	11.8	12.8	11.2	8.2	7.5	8.3	10.3	9.8
White, non-Hispanic										
Total	6.6	12.3	8.4	9.0	8.1	6.6	5.8	6.1	7.3	9.0
Smoker	10.6	16.6	10.8	11.4	10.6	9.6	9.9	11.3	14.1	16.8
Nonsmoker	5.7	10.6	7.4	8.0	7.1	5.6	5.2	5.4	6.4	8.1
Not stated	8.4	*	11.3	12.2	10.8	8.1	7.2	8.0	10.0	10.1
Black, total										
Total	13.1	16.3	13.4	14.0	12.9	12.0	12.4	13.8	16.2	17.5
Smoker	21.3	*	16.4	16.9	16.1	16.2	21.7	26.1	28.8	30.7
Nonsmoker	12.2	16.3	13.1	13.8	12.6	11.5	11.3	11.9	13.7	15.2
Not stated	16.9	*	16.3	15.9	16.6	15.2	16.5	17.1	21.4	20.9
Black, non-Hispanic										
Total	13.2	16.3	13.5	14.1	13.0	12.1	12.6	14.0	16.4	17.6
Smoker	21.4	*	16.3	16.9	16.0	16.3	21.8	26.2	28.9	30.8
Nonsmoker	12.3	16.3	13.2	13.9	12.7	11.6	11.4	12.1	13.8	15.3
Not stated	16.8	*	16.4	16.0	16.7	14.4	16.7	16.9	22.1	20.0
Hispanic [2]										
Total	6.9	11.9	8.5	9.2	8.0	6.3	5.9	6.6	8.3	10.2
Smoker	12.1	*	11.8	12.5	11.2	10.4	12.0	13.1	15.5	21.2
Nonsmoker	6.6	11.2	8.3	9.0	7.7	6.1	5.7	6.3	7.9	9.7
Not stated	10.4	*	12.7	13.7	12.0	8.7	8.7	10.9	14.2	*

* Figure does not meet standards of reliability or precision.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin 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, 1997

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began									
		1st trimester			2d trimester	Late or no care			Not stated	Percent	
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care		1st trimester	Late or no care
All races [1]	3,880,894	3,119,693	2,391,738	727,955	512,228	148,281	102,041	46,240	100,692	82.5	3.9
Under 15 years	10,121	4,570	2,764	1,806	3,537	1,588	1,125	463	426	47.1	16.4
15-19 years	483,220	319,387	213,043	106,344	115,755	33,517	23,975	9,542	14,561	68.1	7.2
15 years	26,340	14,379	8,842	5,537	8,177	2,776	1,980	796	1,008	56.8	11.0
16 years	57,038	34,232	21,721	12,511	16,161	4,797	3,432	1,365	1,848	62.0	8.7
17 years	96,776	62,621	40,959	21,662	24,257	7,013	5,006	2,007	2,885	66.7	7.5
18 years	134,595	90,734	60,958	29,776	30,985	8,872	6,314	2,558	4,004	69.5	6.8
19 years	168,471	117,421	80,563	36,858	36,175	10,059	7,243	2,816	4,816	71.7	6.1
20-24 years	942,048	708,037	515,927	192,110	162,393	45,914	32,654	13,260	25,704	77.3	5.0
25-29 years	1,069,436	899,189	707,821	191,368	112,815	32,074	21,906	10,168	25,358	86.1	3.1
30-34 years	886,798	771,037	620,229	150,808	73,109	21,399	13,870	7,529	21,253	89.1	2.5
35-39 years	409,710	352,437	281,291	71,146	35,676	10,958	6,746	4,212	10,639	88.3	2.7
40 years and over	79,561	65,036	50,663	14,373	8,943	2,831	1,765	1,066	2,751	84.7	3.7
White, total	3,072,640	2,545,590	1,971,327	574,263	363,139	97,210	69,505	27,705	66,701	84.7	3.2
Under 15 years	5,021	2,539	1,542	997	1,597	714	487	227	171	52.4	14.7
15-19 years	338,272	233,104	156,254	76,850	75,803	20,797	15,308	5,489	8,568	70.7	6.3
15 years	15,959	9,347	5,790	3,557	4,580	1,543	1,123	420	489	60.4	10.0
16 years	37,324	23,742	15,157	8,585	9,757	2,849	2,085	764	976	65.3	7.8
17 years	66,882	45,089	29,655	15,434	15,864	4,272	3,112	1,160	1,657	69.1	6.5
18 years	95,436	66,787	44,976	21,811	20,646	5,592	4,108	1,484	2,411	71.8	6.0
19 years	122,671	88,139	60,676	27,463	24,956	6,541	4,880	1,661	3,035	73.7	5.5
20-24 years	720,546	556,995	408,446	148,549	115,885	30,862	22,701	8,161	16,804	79.1	4.4
25-29 years	871,636	749,633	594,678	154,955	83,227	21,704	15,468	6,236	17,072	87.7	2.5
30-34 years	735,571	652,854	529,345	123,509	53,919	14,060	9,609	4,451	14,738	90.6	2.0
35-39 years	337,423	296,738	238,716	58,022	26,173	7,142	4,664	2,478	7,370	89.9	2.2
40 years and over	64,171	53,727	42,346	11,381	6,535	1,931	1,268	663	1,978	86.4	3.1
White, non-Hispanic	2,333,363	2,014,137	1,591,887	422,250	223,753	54,238	38,205	16,033	41,235	87.9	2.4
Under 15 years	2,240	1,196	744	452	666	320	213	107	58	54.8	14.7
15-19 years	219,857	159,104	107,905	51,199	45,188	11,118	8,292	2,826	4,447	73.9	5.2
15 years	8,244	5,067	3,157	1,910	2,228	740	549	191	209	63.1	9.2
16 years	21,536	14,364	9,294	5,070	5,238	1,459	1,082	377	475	68.2	6.9
17 years	42,088	29,811	19,688	10,123	9,199	2,238	1,663	575	840	72.3	5.4
18 years	63,787	46,713	31,697	15,016	12,774	3,042	2,252	790	1,258	74.7	4.9
19 years	84,202	63,149	44,069	19,080	15,749	3,639	2,746	893	1,665	76.5	4.4
20-24 years	500,928	405,254	302,971	102,283	69,942	16,300	12,002	4,298	9,432	82.5	3.3
25-29 years	674,498	601,366	486,276	115,090	50,446	11,929	8,279	3,650	10,757	90.6	1.8
30-34 years	603,304	549,773	452,155	97,618	34,951	8,536	5,605	2,931	10,044	92.7	1.4
35-39 years	280,393	252,447	205,808	46,639	18,073	4,769	3,019	1,750	5,104	91.7	1.7
40 years and over	52,143	44,997	36,028	8,969	4,487	1,266	795	471	1,393	88.7	2.5
Black, total	599,913	414,251	301,287	112,964	117,343	41,592	25,356	16,236	26,727	72.3	7.3
Under 15 years	4,712	1,896	1,144	752	1,786	798	584	214	232	42.3	17.8
15-19 years	128,539	76,702	50,763	25,939	35,189	11,211	7,515	3,696	5,437	62.3	9.1
15 years	9,381	4,538	2,753	1,785	3,266	1,098	762	336	479	51.0	12.3
16 years	17,658	9,472	5,975	3,497	5,682	1,718	1,172	546	786	56.1	10.2
17 years	26,595	15,651	10,144	5,507	7,391	2,425	1,642	783	1,128	61.5	9.5
18 years	34,712	21,307	14,281	7,026	9,085	2,870	1,897	973	1,450	64.1	8.6
19 years	40,193	25,734	17,610	8,124	9,765	3,100	2,042	1,058	1,594	66.7	8.0
20-24 years	182,600	124,312	88,929	35,383	38,230	12,584	8,070	4,514	7,474	71.0	7.2
25-29 years	135,529	100,469	76,034	24,435	21,110	7,931	4,534	3,397	6,019	77.6	6.1
30-34 years	94,123	71,008	54,488	16,520	12,965	5,487	2,898	2,589	4,663	79.4	6.1
35-39 years	45,069	33,290	25,169	8,121	6,481	2,924	1,434	1,490	2,374	78.0	6.8
40 years and over	9,341	6,574	4,760	1,814	1,582	657	321	336	528	74.6	7.5

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, 1997 --Con.

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began									
		1st trimester			2d trimester	Late or no care			Not stated	Percent	
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care		1st trimester	Late or no care
Black, non-Hispanic	581,431	401,994	292,736	109,258	113,971	40,425	24,502	15,923	25,041	72.3	7.3
Under 15 years	4,613	1,863	1,126	737	1,751	779	569	210	220	42.4	17.7
15-19 years	125,343	74,842	49,576	25,266	34,381	10,957	7,332	3,625	5,163	62.3	9.1
15 years	9,163	4,433	2,687	1,746	3,196	1,070	741	329	464	51.0	12.3
16 years	17,235	9,242	5,834	3,408	5,563	1,683	1,147	536	747	56.1	10.2
17 years	25,940	15,283	9,913	5,370	7,226	2,367	1,596	771	1,064	61.4	9.5
18 years	33,870	20,791	13,950	6,841	8,891	2,812	1,856	956	1,376	64.0	8.7
19 years	39,135	25,093	17,192	7,901	9,505	3,025	1,992	1,033	1,512	66.7	8.0
20-24 years	177,494	121,011	86,668	34,343	37,188	12,237	7,805	4,432	7,058	71.0	7.2
25-29 years	130,942	97,266	73,731	23,535	20,399	7,675	4,344	3,331	5,602	77.6	6.1
30-34 years	90,637	68,546	52,711	15,835	12,472	5,297	2,765	2,532	4,322	79.4	6.1
35-39 years	43,434	32,146	24,338	7,808	6,252	2,840	1,380	1,460	2,196	78.0	6.9
40 years and over	8,968	6,320	4,586	1,734	1,528	640	307	333	480	74.5	7.5
Hispanic [2]	709,767	506,442	358,733	147,709	138,218	42,666	31,283	11,383	22,441	73.7	6.2
Under 15 years	2,833	1,363	811	552	948	405	285	120	117	50.2	14.9
15-19 years	118,122	73,760	48,167	25,593	30,674	9,670	7,034	2,636	4,018	64.6	8.5
15 years	7,778	4,308	2,646	1,662	2,389	806	575	231	275	57.4	10.7
16 years	15,870	9,417	5,888	3,529	4,561	1,395	1,007	388	497	61.3	9.1
17 years	24,768	15,276	9,959	5,317	6,638	2,035	1,463	572	819	63.8	8.5
18 years	31,542	19,990	13,218	6,772	7,905	2,537	1,859	678	1,110	65.7	8.3
19 years	38,164	24,769	16,456	8,313	9,181	2,897	2,130	767	1,317	67.2	7.9
20-24 years	216,152	148,997	103,352	45,645	45,689	14,574	10,752	3,822	6,892	71.2	7.0
25-29 years	188,669	141,007	102,397	38,610	32,473	9,687	7,169	2,518	5,502	77.0	5.3
30-34 years	121,539	93,736	69,291	24,445	18,604	5,410	3,974	1,436	3,789	79.6	4.6
35-39 years	51,601	39,718	29,128	10,590	7,873	2,290	1,614	676	1,720	79.6	4.6
40 years and over	10,851	7,861	5,587	2,274	1,957	630	455	175	403	75.2	6.0

[1] Includes races other than white and black and origin not stated.
[2] Includes all persons of Hispanic origin 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, 1997

[By place of residence]

State	Percent beginning care in first trimester						Percent late [1] or no care					
		White		Black				White		Black		
	All races [2]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [3]	All races [2]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [3]
United States [4]	82.5	84.7	87.9	72.3	72.3	73.7	3.9	3.2	2.4	7.3	7.3	6.2
Alabama	82.2	88.0	88.7	70.3	70.3	62.4	3.7	2.3	2.1	6.6	6.6	13.4
Alaska	80.4	82.4	82.8	81.3	81.8	77.6	4.4	3.5	3.3	5.8	5.7	5.1
Arizona	75.4	76.5	85.0	70.9	70.9	65.1	6.6	6.2	3.1	9.2	9.2	10.3
Arkansas	75.7	79.4	80.5	62.6	62.6	60.1	5.8	4.4	4.1	10.7	10.7	11.3
California	81.8	81.8	87.9	78.6	78.6	77.3	3.7	3.7	2.4	4.6	4.6	4.7
Colorado	82.9	83.3	87.9	77.3	77.4	69.7	3.9	3.8	2.5	6.0	6.0	7.5
Connecticut	89.2	90.6	92.7	80.1	81.0	79.1	1.9	1.5	1.2	4.0	3.9	3.2
Delaware	82.5	86.2	87.7	71.4	71.6	69.0	3.3	2.2	2.0	6.4	6.4	5.1
District of Columbia	66.6	81.0	89.3	61.4	61.5	63.2	12.3	7.2	4.7	14.2	14.1	12.4
Florida	83.9	87.1	88.9	72.8	72.7	81.7	3.2	2.3	1.9	5.9	5.9	3.8
Georgia	85.8	89.5	90.9	78.5	78.5	75.8	3.1	2.1	1.7	5.0	5.0	6.4
Hawaii	83.4	88.9	89.9	89.2	89.6	82.0	4.6	3.1	2.9	*	*	3.9
Idaho	78.6	78.9	81.4	71.0	70.7	62.1	4.2	4.0	3.3	*	*	8.9
Illinois	82.4	85.6	89.5	69.7	69.7	72.8	4.0	2.8	1.8	8.8	8.8	6.1
Indiana	80.1	81.8	82.6	66.1	66.1	66.6	3.9	3.4	3.2	7.9	7.9	8.4
Iowa	87.4	88.1	88.9	73.5	73.5	70.7	2.5	2.4	2.1	5.5	5.6	6.9
Kansas	85.6	86.6	89.2	75.9	75.9	64.5	2.7	2.4	1.8	5.6	5.6	7.9
Kentucky	85.8	86.8	87.1	75.3	75.4	72.9	2.6	2.3	2.3	5.6	5.6	5.6
Louisiana	81.3	88.6	88.8	71.1	71.1	84.0	4.1	2.0	2.0	7.0	7.0	3.7
Maine	88.9	89.3	89.4	79.0	80.9	83.9	1.7	1.6	1.5	*	*	*
Maryland	88.8	92.6	93.3	80.3	80.3	80.7	2.6	1.5	1.4	5.2	5.2	4.0
Massachusetts	88.9	90.4	91.9	78.0	78.0	77.8	2.7	2.2	1.8	6.4	6.4	5.6
Michigan	84.2	87.2	88.4	70.6	70.5	73.8	3.0	2.2	2.0	6.9	6.9	5.2
Minnesota	84.1	86.7	87.5	63.8	63.7	61.1	3.1	2.3	2.0	10.3	10.3	9.4
Mississippi	80.1	89.2	89.4	69.6	69.6	78.6	4.1	1.8	1.8	6.8	6.8	*
Missouri	86.0	88.2	88.6	73.6	73.6	74.8	2.8	2.1	2.0	7.0	7.0	6.1
Montana	82.6	84.8	84.9	74.2	*	77.3	3.6	2.8	2.7	*	*	*
Nebraska	83.9	85.0	87.0	72.0	72.0	67.1	2.9	2.6	2.1	6.8	6.8	7.2
Nevada	76.1	76.9	83.3	66.6	66.8	64.3	6.3	6.1	3.8	9.1	9.0	10.5
New Hampshire	89.6	89.8	90.1	78.0	78.5	77.9	1.8	1.7	1.7	*	*	*
New Jersey	81.3	85.5	89.4	63.9	63.2	71.2	4.7	3.0	2.2	12.1	12.5	6.3
New Mexico	70.2	72.5	79.1	64.2	65.4	67.6	7.6	6.9	4.4	10.8	10.8	8.7
New York	80.6	84.1	87.9	69.8	69.7	71.1	5.0	3.8	2.7	8.7	9.0	7.2
North Carolina	83.9	88.1	90.0	73.2	73.2	69.3	3.2	2.2	1.7	6.1	6.1	7.4
North Dakota	84.8	86.7	87.0	75.0	73.8	75.7	2.2	1.5	1.5	*	*	*
Ohio	85.1	87.4	87.7	72.2	72.2	76.6	4.3	3.3	3.2	9.9	9.8	5.7
Oklahoma	78.5	81.1	82.1	67.7	67.5	67.5	4.8	3.9	3.6	8.3	8.3	7.8
Oregon	81.1	81.4	83.9	79.4	79.2	66.7	3.6	3.6	3.0	4.1	4.2	6.8
Pennsylvania	83.8	86.6	87.5	68.0	68.1	71.5	4.4	3.4	3.1	10.5	10.5	7.4
Rhode Island	89.5	90.6	92.2	79.9	79.5	81.3	1.7	1.3	1.1	5.5	5.4	2.4
South Carolina	80.5	87.0	87.6	68.8	68.9	67.6	4.7	2.7	2.5	8.3	8.3	9.0
South Dakota	82.1	85.2	85.5	69.2	69.7	70.8	3.4	2.1	2.0	*	*	*
Tennessee	83.7	87.1	87.9	71.8	71.8	63.2	3.9	2.6	2.3	8.3	8.3	12.7
Texas	78.5	78.8	86.8	74.6	74.6	71.2	5.1	5.1	2.6	6.1	6.1	7.4
Utah	83.7	84.6	87.0	70.2	69.6	63.7	3.5	3.1	2.3	10.6	11.0	9.5
Vermont	88.0	88.2	88.3	*	*	*	2.0	1.9	1.9	*	*	*
Virginia	85.1	88.8	90.2	73.5	73.5	72.6	3.2	2.1	1.8	6.5	6.5	5.9
Washington	83.3	84.1	86.2	77.1	77.1	70.7	3.4	3.1	2.6	5.1	5.0	5.9
West Virginia	82.0	82.6	82.7	65.3	65.3	72.6	3.1	2.9	2.9	8.9	8.9	*
Wisconsin	84.6	87.3	88.2	68.9	68.9	72.6	3.2	2.5	2.2	8.0	8.0	7.2
Wyoming	82.5	83.2	84.0	75.8	75.9	73.9	3.7	3.5	3.4	*	*	5.2
Puerto Rico	78.3	79.0	---	69.7	---	---	2.9	2.7	---	4.7	---	---
Virgin Islands	56.9	61.3	80.0	55.7	56.3	53.2	10.9	10.6	*	10.9	10.9	11.3
Guam	64.2	86.2	86.3	87.9	87.5	78.0	12.7	*	*	*	*	*

* Figure does not meet standards of reliability or precision.
--- Data not available.
1 Care beginning in 3d trimester.
2 Includes races other than white and black and origin not stated.
3 Includes all persons of Hispanic origin of any race.
4 Excludes data for Puerto Rico, Virgin Islands, and Guam.

NOTE: Data on prenatal care are not available for American Samoa.

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, 1997

Number of prenatal visits and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began							
		1st trimester			2d trimester	Late or no care			Not stated
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	
All races	3,880,894	3,119,693	2,391,738	727,955	512,228	148,281	102,041	46,240	100,692
No visits	46,240	...	...	...	...	46,240	...	46,240	...
1-2 visits	39,708	9,521	6,191	3,330	9,811	18,543	18,543	...	1,833
3-4 visits	80,812	22,759	13,031	9,728	29,926	25,906	25,906	...	2,221
5-6 visits	171,906	72,260	42,029	30,231	71,099	25,360	25,360	...	3,187
7-8 visits	320,312	192,513	118,154	74,359	108,458	14,848	14,848	...	4,493
9-10 visits	725,694	566,701	377,717	188,984	142,658	8,402	8,402	...	7,933
11-12 visits	993,183	904,056	693,869	210,187	80,162	3,247	3,247	...	5,718
13-14 visits	658,969	624,402	519,933	104,469	30,424	1,374	1,374	...	2,769
15-16 visits	464,444	441,444	377,387	64,057	19,999	923	923	...	2,078
17-18 visits	100,800	96,513	82,611	13,902	3,613	208	208	...	466
19 visits or more	145,036	137,454	120,801	16,653	6,382	379	379	...	821
Not stated	133,790	52,070	40,015	12,055	9,696	2,851	2,851	...	69,173
Median number of visits	12.3	12.6	12.9	11.7	9.6	5.4	5.4	...	10.3
White, total	3,072,640	2,545,590	1,971,327	574,263	363,139	97,210	69,505	27,705	66,701
No visits	27,705	...	...	...	...	27,705	...	27,705	...
1-2 visits	24,285	5,998	4,033	1,965	5,461	11,790	11,790	...	1,036
3-4 visits	51,959	14,659	8,411	6,248	18,540	17,363	17,363	...	1,397
5-6 visits	118,539	51,238	29,959	21,279	47,723	17,502	17,502	...	2,076
7-8 visits	240,235	149,460	92,770	56,690	77,186	10,486	10,486	...	3,103
9-10 visits	569,728	455,022	306,558	148,464	103,139	5,918	5,918	...	5,649
11-12 visits	818,391	751,585	581,509	170,076	59,847	2,482	2,482	...	4,477
13-14 visits	549,599	523,343	437,443	85,900	22,974	1,045	1,045	...	2,237
15-16 visits	378,548	361,757	311,103	50,654	14,563	677	677	...	1,551
17-18 visits	83,131	79,907	68,768	11,139	2,702	150	150	...	372
19 visits or more	118,118	112,781	99,842	12,939	4,432	269	269	...	636
Not stated	92,402	39,840	30,931	8,909	6,572	1,823	1,823	...	44,167
Median number of visits	12.4	12.7	12.9	11.8	9.8	5.5	5.5	...	10.5
White, non-Hispanic	2,333,363	2,014,137	1,591,887	422,250	223,753	54,238	38,205	16,033	41,235
No visits	16,033	...	...	...	...	16,033	...	16,033	...
1-2 visits	13,106	3,464	2,390	1,074	2,968	6,076	6,076	...	598
3-4 visits	29,081	8,946	5,336	3,610	10,222	9,063	9,063	...	850
5-6 visits	72,141	34,279	20,887	13,392	27,212	9,393	9,393	...	1,257
7-8 visits	162,353	108,559	69,581	38,978	45,842	6,015	6,015	...	1,937
9-10 visits	413,280	342,713	237,365	105,348	63,161	3,531	3,531	...	3,875
11-12 visits	653,753	607,759	477,151	130,608	40,982	1,612	1,612	...	3,400
13-14 visits	451,319	432,695	364,260	68,435	16,173	728	728	...	1,723
15-16 visits	299,638	288,998	252,189	36,809	9,022	432	432	...	1,186
17-18 visits	68,575	66,221	57,432	8,789	1,962	102	102	...	290
19 visits or more	97,235	93,568	83,450	10,118	2,982	184	184	...	501
Not stated	56,849	26,935	21,846	5,089	3,227	1,069	1,069	...	25,618
Median number of visits	12.5	12.7	12.9	12.0	10.0	5.7	5.7	...	10.8
Black, total	599,913	414,251	301,287	112,964	117,343	41,592	25,356	16,236	26,727
No visits	16,236	...	...	...	...	16,236	...	16,236	...
1-2 visits	12,789	2,948	1,809	1,139	3,729	5,441	5,441	...	671
3-4 visits	23,230	6,584	3,758	2,826	9,306	6,663	6,663	...	677
5-6 visits	41,313	16,119	9,321	6,798	18,294	6,047	6,047	...	853
7-8 visits	59,099	30,810	18,100	12,710	23,895	3,337	3,337	...	1,057
9-10 visits	114,753	80,122	50,638	29,484	30,995	1,933	1,933	...	1,703
11-12 visits	122,612	105,509	77,157	28,352	15,645	556	556	...	902
13-14 visits	77,816	71,340	57,736	13,604	5,846	232	232	...	398
15-16 visits	63,784	58,693	48,478	10,215	4,503	171	171	...	417
17-18 visits	13,450	12,599	10,404	2,195	730	44	44	...	77
19 visits or more	21,562	19,605	16,560	3,045	1,710	94	94	...	153
Not stated	33,269	9,922	7,326	2,596	2,690	838	838	...	19,819
Median number of visits	11.7	12.5	12.8	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, 1997 --Con.

Number of prenatal visits and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began							
		1st trimester			2d trimester	Late or no care			Not stated
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	
Black, non-Hispanic	581,431	401,994	292,736	109,258	113,971	40,425	24,502	15,923	25,041
No visits	15,923	...	...	...	...	15,923	...	15,923	...
1-2 visits	12,450	2,866	1,758	1,108	3,635	5,321	5,321	...	628
3-4 visits	22,576	6,406	3,660	2,746	9,081	6,450	6,450	...	639
5-6 visits	39,967	15,596	9,024	6,572	17,762	5,803	5,803	...	806
7-8 visits	56,994	29,648	17,432	12,216	23,159	3,206	3,206	...	981
9-10 visits	110,519	77,036	48,646	28,390	30,086	1,855	1,855	...	1,542
11-12 visits	118,878	102,383	74,964	27,419	15,152	536	536	...	807
13-14 visits	75,818	69,533	56,342	13,191	5,685	220	220	...	380
15-16 visits	62,332	57,378	47,395	9,983	4,404	163	163	...	387
17-18 visits	13,136	12,310	10,179	2,131	711	43	43	...	72
19 visits or more	21,077	19,179	16,197	2,982	1,672	92	92	...	134
Not stated	31,761	9,659	7,139	2,520	2,624	813	813	...	18,665
Median number of visits	11.7	12.5	12.8	11.3	9.2	5.0	5.0	...	9.3
Hispanic [2]	709,767	506,442	358,733	147,709	138,218	42,666	31,283	11,383	22,441
No visits	11,383	...	...	...	...	11,383	...	11,383	...
1-2 visits	11,107	2,486	1,603	883	2,484	5,698	5,698	...	439
3-4 visits	22,809	5,665	3,052	2,613	8,295	8,309	8,309	...	540
5-6 visits	46,050	16,586	8,820	7,766	20,535	8,136	8,136	...	793
7-8 visits	75,990	39,271	21,933	17,338	31,106	4,468	4,468	...	1,145
9-10 visits	151,885	108,105	65,966	42,139	39,666	2,388	2,388	...	1,726
11-12 visits	155,352	134,974	96,969	38,005	18,510	855	855	...	1,013
13-14 visits	92,954	85,554	68,895	16,659	6,652	309	309	...	439
15-16 visits	75,953	69,874	56,350	13,524	5,496	253	253	...	330
17-18 visits	13,895	13,048	10,751	2,297	727	48	48	...	72
19 visits or more	20,153	18,500	15,728	2,772	1,446	84	84	...	123
Not stated	32,236	12,379	8,666	3,713	3,301	735	735	...	15,821
Median number of visits	11.5	12.4	12.7	11.1	9.4	5.3	5.3	...	9.7

... Category not applicable.
1 Includes races other than white and black and origin not stated.
2 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, 1997

[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	40-54 years	
All races [1]										
Amniocentesis	3,880,894	118,298	30.7	8.1	9.9	13.6	26.6	131.0	177.2	30,008
Electronic fetal monitoring	3,880,894	3,207,918	833.0	843.0	836.7	835.4	830.5	818.2	800.4	30,008
Induction of labor	3,880,894	708,151	183.9	165.0	178.7	192.2	189.5	184.4	185.1	30,008
Stimulation of labor	3,880,894	670,409	174.1	184.7	179.0	176.4	170.4	157.1	147.1	30,008
Tocolysis	3,880,894	85,834	22.3	24.5	23.1	21.9	21.3	21.0	21.7	30,008
Ultrasound	3,880,894	2,480,726	644.2	620.1	634.6	651.9	655.0	652.3	641.5	30,008
White										
Amniocentesis	3,072,640	101,043	33.1	8.5	10.1	14.0	27.8	138.7	189.8	22,716
Electronic fetal monitoring	3,072,640	2,548,914	835.7	845.0	838.4	838.7	834.6	821.6	803.4	22,716
Induction of labor	3,072,640	598,273	196.2	179.3	192.2	203.9	199.9	193.8	194.7	22,716
Stimulation of labor	3,072,640	541,361	177.5	191.5	183.7	179.3	173.2	160.1	149.8	22,716
Tocolysis	3,072,640	68,238	22.4	25.2	23.4	22.0	21.3	21.0	21.2	22,716
Ultrasound	3,072,640	2,008,198	658.4	640.5	649.8	664.6	666.1	663.8	652.8	22,716
Black										
Amniocentesis	599,913	10,209	17.1	7.0	8.9	12.2	18.9	74.2	99.6	3,453
Electronic fetal monitoring	599,913	497,949	834.8	844.9	839.9	833.2	824.1	817.1	810.1	3,453
Induction of labor	599,913	82,039	137.5	131.0	134.6	142.2	140.9	144.9	151.1	3,453
Stimulation of labor	599,913	95,011	159.3	170.7	164.5	157.9	149.6	135.3	128.8	3,453
Tocolysis	599,913	13,002	21.8	22.2	21.9	21.6	21.8	20.5	23.4	3,453
Ultrasound	599,913	349,846	586.5	573.3	584.9	595.2	593.4	591.4	588.4	3,453

[1] 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 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, 1997

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

Complication and race of mother	All births [1]	Complication reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races [2]										
Febrile	3,880,894	60,114	15.7	18.7	16.1	16.1	14.7	12.4	12.6	40,352
Meconium, moderate/heavy	3,880,894	215,127	56.0	60.2	56.3	54.4	54.7	56.6	60.1	40,352
Premature rupture of membrane	3,880,894	108,831	28.3	28.8	26.9	27.7	28.9	30.4	33.7	40,352
Abruptio placenta	3,880,894	22,063	5.7	5.3	5.4	5.4	5.9	7.2	8.8	40,352
Placenta previa	3,880,894	12,477	3.2	1.1	1.9	2.9	4.4	6.5	9.1	40,352
Other excessive bleeding	3,880,894	21,797	5.7	5.4	5.4	5.4	5.7	6.7	7.7	40,352
Seizures during labor	3,880,894	1,286	0.3	0.7	0.3	0.3	0.2	0.2	0.4	40,352
Precipitous labor	3,880,894	79,713	20.8	14.6	19.6	20.7	23.3	24.9	24.3	40,352
Prolonged labor	3,880,894	32,728	8.5	8.9	8.7	8.7	8.2	8.0	8.7	40,352
Dysfunctional labor	3,880,894	106,157	27.6	25.9	26.7	28.4	28.3	28.1	30.6	40,352
Breech/Malpresentation	3,880,894	147,248	38.3	29.8	31.8	37.9	43.9	49.5	55.4	40,352
Cephalopelvic disproportion	3,880,894	81,208	21.1	19.5	19.6	22.4	22.1	21.0	21.9	40,352
Cord prolapse	3,880,894	7,868	2.0	1.6	1.7	2.0	2.3	2.6	2.9	40,352
Anesthetic complication [3]	3,546,920	2,181	0.6	0.4	0.5	0.6	0.7	0.8	0.7	42,875
Fetal distress [3]	3,546,920	141,502	40.4	44.3	39.8	38.6	39.1	42.8	49.3	42,875
White										
Febrile	3,072,640	45,442	14.9	17.8	15.6	15.6	14.0	11.8	11.8	31,747
Meconium, moderate/heavy	3,072,640	156,876	51.6	53.7	51.5	50.4	51.0	53.1	56.3	31,747
Premature rupture of membrane	3,072,640	83,123	27.3	27.1	25.7	26.9	28.0	29.6	33.0	31,747
Abruptio placenta	3,072,640	16,943	5.6	5.3	5.2	5.2	5.7	6.9	8.6	31,747
Placenta previa	3,072,640	9,834	3.2	1.1	1.8	2.8	4.3	6.2	8.8	31,747
Other excessive bleeding	3,072,640	17,234	5.7	5.8	5.6	5.4	5.6	6.4	7.2	31,747
Seizures during labor	3,072,640	921	0.3	0.6	0.3	0.3	0.2	0.2	0.4	31,747
Precipitous labor	3,072,640	62,027	20.4	13.4	18.7	20.1	23.3	25.1	24.0	31,747
Prolonged labor	3,072,640	26,681	8.8	9.5	9.1	8.8	8.3	8.2	9.2	31,747
Dysfunctional labor	3,072,640	85,168	28.0	26.3	27.3	28.8	28.3	27.9	30.9	31,747
Breech/Malpresentation	3,072,640	122,347	40.2	32.7	33.6	39.6	44.9	50.4	56.2	31,747
Cephalopelvic disproportion	3,072,640	66,674	21.9	20.2	20.7	23.3	22.6	21.3	21.8	31,747
Cord prolapse	3,072,640	6,220	2.0	1.5	1.8	2.0	2.3	2.5	2.9	31,747
Anesthetic complication [3]	2,788,319	1,795	0.7	0.5	0.5	0.7	0.7	0.8	0.7	33,844
Fetal distress [3]	2,788,319	105,621	38.3	41.6	37.8	36.9	37.4	40.7	46.1	33,844
Black										
Febrile	599,913	10,127	17.0	20.9	17.0	16.1	15.1	13.1	12.6	4,747
Meconium, moderate/heavy	599,913	46,465	78.1	76.5	74.7	78.4	82.9	83.8	84.6	4,747
Premature rupture of membrane	599,913	19,703	33.1	32.1	30.8	32.7	36.4	38.1	41.5	4,747
Abruptio placenta	599,913	4,061	6.8	5.6	6.2	6.8	8.1	9.6	10.0	4,747
Placenta previa	599,913	1,708	2.9	1.0	1.8	3.2	4.6	6.9	8.2	4,747
Other excessive bleeding	599,913	2,850	4.8	4.0	4.2	4.9	5.4	7.0	8.4	4,747
Seizures during labor	599,913	299	0.5	0.9	0.4	0.4	0.4	*	*	4,747
Precipitous labor	599,913	13,155	22.1	16.7	22.2	24.1	25.1	24.7	26.4	4,747
Prolonged labor	599,913	3,988	6.7	7.1	6.5	6.8	6.7	6.1	5.3	4,747
Dysfunctional labor	599,913	15,143	25.4	23.9	24.0	26.0	27.5	28.8	28.7	4,747
Breech/Malpresentation	599,913	17,870	30.0	22.7	25.3	30.0	39.6	46.4	52.1	4,747
Cephalopelvic disproportion	599,913	9,931	16.7	18.1	15.6	16.8	17.3	15.5	15.3	4,747
Cord prolapse	599,913	1,268	2.1	1.8	1.7	2.3	2.7	3.0	3.2	4,747
Anesthetic complication [3]	560,429	290	0.5	0.3	0.5	0.5	0.6	1.0	*	5,123
Fetal distress [3]	560,429	29,248	52.7	52.0	49.4	52.2	54.8	60.7	73.7	5,123

* Figure does not meet standards of reliability or precision.
1 Total number of births to residents of areas reporting specified complication.
2 Includes races other than white and black.
3 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, 1997

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		
All races [1]									
Total	3,880,894	3,584,686	3,435,037	149,649	272,201	258,227	13,974	22,207	1,800
In hospital[2]	3,843,506	3,579,057	3,430,553	148,504	251,758	248,802	2,956	12,052	639
Not in hospital	36,521	5,419	4,372	1,047	20,164	9,179	10,985	9,911	1,027
Freestanding birthing center	10,264	1,484	880	604	8,596	6,239	2,357	177	7
Clinic or doctor's office	705	385	308	77	168	89	79	130	22
Residence	23,236	2,792	2,473	319	11,082	2,664	8,418	8,545	817
Other	2,316	758	711	47	318	187	131	1,059	181
Not specified	867	210	112	98	279	246	33	244	134
White, total									
Total	3,072,640	2,843,483	2,714,373	129,110	210,960	198,333	12,627	16,836	1,361
In hospital[2]	3,040,220	2,839,398	2,711,370	128,028	191,618	189,639	1,979	8,718	486
Not in hospital	31,629	3,901	2,915	986	19,075	8,460	10,615	7,885	768
Freestanding birthing center	9,626	1,429	829	600	8,023	5,764	2,259	167	7
Clinic or doctor's office	564	306	234	72	152	79	73	88	18
Residence	19,973	1,787	1,503	284	10,624	2,462	8,162	6,909	653
Other	1,466	379	349	30	276	155	121	721	90
Not specified	791	184	88	96	267	234	33	233	107
White, non-Hispanic									
Total	2,333,363	2,173,703	2,067,425	106,278	146,174	135,666	10,508	12,525	961
In hospital[2]	2,306,735	2,170,275	2,065,032	105,243	130,390	128,742	1,648	5,747	323
Not in hospital	25,976	3,257	2,314	943	15,578	6,751	8,827	6,555	586
Freestanding birthing center	6,933	1,237	645	592	5,558	4,368	1,190	136	2
Clinic or doctor's office	505	279	208	71	129	64	65	79	18
Residence	17,518	1,472	1,217	255	9,682	2,217	7,465	5,844	520
Other	1,020	269	244	25	209	102	107	496	46
Not specified	652	171	79	92	206	173	33	223	52
Black, total									
Total	599,913	551,569	536,066	15,503	44,190	43,182	1,008	3,842	312
In hospital[2]	596,216	550,309	534,857	15,452	43,519	42,686	833	2,265	123
Not in hospital	3,637	1,241	1,192	49	664	489	175	1,566	166
Freestanding birthing center	421	25	24	1	391	330	61	5	-
Clinic or doctor's office	52	30	29	1	8	5	3	12	2
Residence	2,522	888	856	32	236	131	105	1,301	97
Other	642	298	283	15	29	23	6	248	67
Not specified	60	19	17	2	7	7	-	11	23
Black, non-Hispanic									
Total	581,431	536,324	521,396	14,928	41,072	40,094	978	3,751	284
In hospital[2]	577,882	535,099	520,221	14,878	40,450	39,633	817	2,216	117
Not in hospital	3,502	1,206	1,158	48	615	454	161	1,525	156
Freestanding birthing center	407	25	24	1	377	317	60	5	-
Clinic or doctor's office	51	29	28	1	8	5	3	12	2
Residence	2,423	859	827	32	203	110	93	1,267	94
Other	621	293	279	14	27	22	5	241	60
Not specified	47	19	17	2	7	7	-	10	11
Hispanic [3]									
Total	709,767	641,734	620,710	21,024	63,812	61,866	1,946	3,952	269
In hospital[2]	704,762	641,153	620,167	20,986	60,527	60,238	289	2,937	145
Not in hospital	4,984	572	538	34	3,278	1,621	1,657	1,013	121
Freestanding birthing center	2,662	186	178	8	2,441	1,374	1,067	30	5
Clinic or doctor's office	58	28	27	1	21	14	7	9	-
Residence	1,863	255	234	21	755	184	571	767	86
Other	401	103	99	4	61	49	12	207	30
Not specified	21	9	5	4	7	7	-	2	3

- Quantity zero.
1 Includes races other than white and black and origin not stated.
2 Includes births occurring en route to or on arrival at hospital.
3 Includes all persons of Hispanic origin 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, 1989-97

Year and race and Hispanic origin of mother	Births by method of delivery							Cesarean delivery rate		Rate of vaginal birth after previous cesarean [3]
	All births	Vaginal		Cesarean			Not stated	Total [1]	Primary [2]	
		Total	After previous cesarean	Total	Primary	Repeat				
All races [4]										
1997	3,880,894	3,046,621	112,145	799,033	502,526	296,507	35,240	20.8	14.6	27.4
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 [5]	4,110,563	3,111,421	84,299	914,096	575,066	339,030	85,046	22.7	16.0	19.9
1989 [6]	3,798,734	2,793,463	71,019	826,955	521,873	305,082	178,316	22.8	16.1	18.9
White, total										
1997	3,072,640	2,415,236	89,522	630,613	393,603	237,010	26,791	20.7	14.5	27.4
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 [5]	3,252,473	2,453,857	67,191	732,713	458,656	274,057	65,903	23.0	16.1	19.7
1989 [6]	3,022,537	2,212,843	56,851	667,114	418,177	248,937	142,580	23.2	16.2	18.6
White, non-Hispanic										
1997	2,333,363	1,829,213	70,284	481,982	305,605	176,377	22,168	20.9	14.8	28.5
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 [8]	2,527,207	1,916,414	63,828	566,788	352,470	214,318	44,005	22.8	16.0	22.9
1991 [8]	2,589,878	1,941,726	60,174	587,802	368,721	219,081	60,350	23.2	16.4	21.5
1990 [5, 9]	2,626,500	1,972,754	55,952	603,467	378,508	224,959	50,279	23.4	16.5	19.9
1989 [6, 10]	2,526,367	1,806,753	47,559	556,585	349,858	206,727	163,029	23.6	16.6	18.7
Black, total										
1997	599,913	466,001	16,986	130,142	83,025	47,117	3,770	21.8	15.6	26.5
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 [5]	679,236	516,581	13,496	146,472	93,476	52,996	16,183	22.1	15.7	20.3
1989 [6]	611,147	452,291	11,104	127,907	82,695	45,212	30,319	22.0	15.8	19.7
Black, non-Hispanic										
1997	581,431	451,744	16,353	126,138	80,599	45,539	3,549	21.8	15.6	26.4
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 [8]	657,450	502,669	14,950	143,153	91,086	52,067	11,628	22.2	15.7	22.3
1991 [8]	666,758	507,522	13,847	142,417	90,664	51,753	16,819	21.9	15.5	21.1
1990 [5, 9]	661,701	503,720	13,157	142,838	91,175	51,663	15,143	22.1	15.7	20.3
1989 [6, 10]	611,269	440,310	10,726	125,290	81,177	44,113	45,669	22.2	15.9	19.6
Hispanic [7]										
1997	709,767	563,114	17,942	142,907	84,410	58,497	3,746	20.2	13.4	23.5
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 [8]	643,271	494,338	13,111	133,369	81,211	52,158	15,564	21.2	14.4	20.1
1991 [8]	623,085	472,126	11,615	129,752	80,228	49,524	21,207	21.6	14.8	19.0
1990 [5, 9]	595,073	458,242	10,395	122,969	76,027	46,942	13,862	21.2	14.5	18.1
1989 [6, 10]	532,249	385,462	8,549	105,268	64,905	40,363	41,519	21.5	14.7	17.5

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 Includes races other than white and black and origin not stated.
5 Excludes data for Oklahoma, which did not report method of delivery on the birth certificate.
6 Excludes data for Louisiana, Maryland, Nebraska, Nevada, and Oklahoma, which did not report method of delivery on the birth certificate.
7 Includes Persons of Hispanic origin of any race.
8 Excludes data for New Hampshire which did not report Hispanic origin.
9 Excludes data for New Hampshire and Oklahoma which did not report Hispanic origin.
10 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, 1997

Age and race and Hispanic origin of mother	Births by method of delivery							Cesarean delivery rate		Rate of vaginal birth after previous cesarean [3]
	All births	Vaginal		Cesarean			Not stated	Total [1]	Primary [2]	
		Total	After previous cesarean	Total	Primary	Repeat				
All races [4]	3,880,894	3,046,621	112,145	799,033	502,526	296,507	35,240	20.8	14.6	27.4
Under 20 years	493,341	419,228	3,813	70,087	62,475	7,612	4,026	14.3	13.1	33.4
20-24 years	942,048	772,126	21,144	161,513	111,725	49,788	8,409	17.3	13.0	29.8
25-29 years	1,069,436	841,432	32,613	218,191	135,972	82,219	9,813	20.6	14.4	28.4
30-34 years	886,798	668,566	34,843	210,052	117,119	92,933	8,180	23.9	15.6	27.3
35-39 years	409,710	292,033	16,964	113,669	60,466	53,203	4,008	28.0	18.0	24.2
40-54 years	79,561	53,236	2,768	25,521	14,769	10,752	804	32.4	22.6	20.5
White, total	3,072,640	2,415,236	89,522	630,613	393,603	237,010	26,791	20.7	14.5	27.4
Under 20 years	343,293	292,651	2,305	47,871	43,057	4,814	2,771	14.1	12.9	32.4
20-24 years	720,546	592,302	15,363	122,079	85,365	36,714	6,165	17.1	12.9	29.5
25-29 years	871,636	687,177	26,121	176,754	110,265	66,489	7,705	20.5	14.3	28.2
30-34 years	735,571	557,241	29,173	171,868	95,029	76,839	6,462	23.6	15.3	27.5
35-39 years	337,423	242,492	14,281	91,847	48,265	43,582	3,084	27.5	17.5	24.7
40-54 years	64,171	43,373	2,279	20,194	11,622	8,572	604	31.8	22.0	21.0
White, non-Hispanic	2,333,363	1,829,213	70,284	481,982	305,605	176,377	22,168	20.9	14.8	28.5
Under 20 years	222,097	188,388	1,373	31,542	28,692	2,850	2,167	14.3	13.3	32.5
20-24 years	500,928	410,557	10,598	85,343	60,966	24,377	5,028	17.2	13.2	30.3
25-29 years	674,498	532,371	19,930	135,686	87,865	47,821	6,441	20.3	14.6	29.4
30-34 years	603,304	459,428	24,227	138,407	78,568	59,839	5,469	23.2	15.3	28.8
35-39 years	280,393	203,068	12,227	74,751	40,065	34,686	2,574	26.9	17.4	26.1
40-54 years	52,143	35,401	1,929	16,253	9,449	6,804	489	31.5	22.0	22.1
Black, total	599,913	466,001	16,986	130,142	83,025	47,117	3,770	21.8	15.6	26.5
Under 20 years	133,251	112,077	1,370	20,460	17,817	2,643	714	15.4	13.9	34.1
20-24 years	182,600	147,284	4,992	34,154	22,315	11,839	1,162	18.8	13.6	29.7
25-29 years	135,529	103,457	4,966	31,181	18,184	12,997	891	23.2	15.6	27.6
30-34 years	94,123	67,106	3,756	26,410	14,684	11,726	607	28.2	18.8	24.3
35-39 years	45,069	30,162	1,631	14,585	8,073	6,512	322	32.6	22.1	20.0
40-54 years	9,341	5,915	271	3,352	1,952	1,400	74	36.2	25.7	16.2
Black, non-Hispanic	581,431	451,744	16,353	126,138	80,599	45,539	3,549	21.8	15.6	26.4
Under 20 years	129,956	109,246	1,344	20,032	17,436	2,596	678	15.5	13.9	34.1
20-24 years	177,494	143,145	4,847	33,243	21,676	11,567	1,106	18.8	13.5	29.5
25-29 years	130,942	99,907	4,776	30,201	17,623	12,578	834	23.2	15.6	27.5
30-34 years	90,637	64,665	3,561	25,408	14,174	11,234	564	28.2	18.8	24.1
35-39 years	43,434	29,085	1,562	14,047	7,816	6,231	302	32.6	22.1	20.0
40-54 years	8,968	5,696	263	3,207	1,874	1,333	65	36.0	25.6	16.5
Hispanic [5]	709,767	563,114	17,942	142,907	84,410	58,497	3,746	20.2	13.4	23.5
Under 20 years	120,955	104,084	934	16,230	14,269	1,961	641	13.5	12.2	32.3
20-24 years	216,152	178,775	4,651	36,257	24,023	12,234	1,120	16.9	12.1	27.5
25-29 years	188,669	148,107	5,912	39,563	21,361	18,202	999	21.1	13.1	24.5
30-34 years	121,539	89,530	4,413	31,382	15,226	16,156	627	26.0	15.2	21.5
35-39 years	51,601	35,460	1,743	15,836	7,552	8,284	305	30.9	18.3	17.4
40-54 years	10,851	7,158	289	3,639	1,979	1,660	54	33.7	22.4	14.8

[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] Includes races other than white and black and origin not stated.
[5] Includes all persons of Hispanic origin 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, 1997

[By place of residence]

State	Cesarean delivery rate [1]						Rate of vaginal births after previous cesarean [2]					
		White		Black				White		Black		
	All races [3]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [4]	All races [3]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [4]
United States [5]	20.8	20.7	20.9	21.8	21.8	20.2	27.4	27.4	28.5	26.5	26.4	23.5
Alabama	23.9	24.5	24.6	22.6	22.6	20.9	22.3	21.6	21.4	23.7	23.7	27.4
Alaska	16.8	19.2	19.1	22.8	23.0	21.4	33.4	27.8	27.7	*	*	*
Arizona	16.8	16.8	18.1	19.9	20.0	15.1	26.4	25.3	25.7	24.2	23.2	25.0
Arkansas	24.5	24.3	24.6	25.6	25.6	18.8	19.3	18.9	18.5	20.2	20.2	25.8
California	21.0	21.0	21.9	23.3	23.3	20.3	20.6	20.4	21.7	18.1	18.1	19.5
Colorado	15.3	15.2	15.4	17.8	17.9	14.4	35.7	36.0	35.4	35.5	35.8	37.4
Connecticut	19.8	19.7	20.1	20.2	20.4	17.2	33.2	33.5	34.2	30.3	30.6	31.2
Delaware	21.0	20.9	21.3	20.9	21.0	15.4	31.0	30.2	29.5	33.5	32.9	39.6
District of Columbia	21.2	20.3	22.1	21.7	21.8	16.5	23.4	17.9	*	24.6	24.3	*
Florida	22.2	22.6	21.9	20.9	20.9	24.5	24.2	24.1	26.4	24.1	24.1	18.1
Georgia	20.8	20.6	21.1	21.2	21.3	16.3	23.7	24.1	23.8	22.9	22.8	26.9
Hawaii	16.7	19.8	19.7	20.8	21.2	17.5	44.7	37.0	37.6	39.1	37.1	45.3
Idaho	16.4	16.4	16.2	*	*	17.7	33.5	33.8	34.4	*	*	27.6
Illinois	19.1	19.2	19.9	19.0	19.0	16.8	32.7	33.7	33.5	28.6	28.6	34.4
Indiana	19.7	19.6	19.6	20.2	20.2	19.9	27.7	27.9	28.0	26.1	26.2	28.0
Iowa	18.9	19.0	19.2	17.7	16.8	16.2	33.6	33.8	33.3	27.6	30.0	42.2
Kansas	18.5	18.6	18.8	18.5	18.5	16.4	27.1	26.4	26.5	32.8	32.8	26.1
Kentucky	22.4	22.4	22.5	22.0	21.9	17.5	24.1	24.0	23.8	26.1	26.1	28.9
Louisiana	25.4	26.4	26.5	24.2	24.2	24.4	13.0	10.5	10.4	16.9	16.8	*
Maine	20.8	20.8	20.8	*	*	20.7	29.3	28.9	29.3	*	*	*
Maryland	21.0	20.6	21.0	21.9	22.0	16.7	31.1	31.7	31.5	29.3	29.3	31.4
Massachusetts	19.7	19.8	20.2	21.0	20.8	17.7	33.7	33.8	33.9	29.8	30.2	31.6
Michigan	20.1	20.2	20.3	19.8	19.9	19.9	27.1	27.4	27.2	25.9	25.7	29.2
Minnesota	17.1	17.6	17.7	16.3	16.2	17.5	34.7	33.7	33.5	43.6	43.8	37.6
Mississippi	26.7	27.8	27.9	25.5	25.5	22.3	15.6	13.9	13.7	17.4	17.4	*
Missouri	20.1	20.4	20.5	18.0	18.0	19.9	30.8	30.0	30.1	36.4	36.3	30.5
Montana	19.0	18.5	18.5	*	*	18.6	32.5	34.2	34.0	*	*	*
Nebraska	20.2	20.3	20.5	18.9	19.0	18.6	27.6	27.5	27.2	28.5	28.5	28.1
Nevada	20.1	19.6	20.9	23.2	23.4	17.0	26.6	26.9	25.6	25.5	25.4	29.5
New Hampshire	19.3	19.3	19.5	19.4	*	15.8	36.3	36.4	36.3	*	*	*
New Jersey	24.9	25.0	25.0	24.4	24.1	25.2	34.1	33.4	34.3	37.7	39.1	29.5
New Mexico	16.6	17.2	17.5	21.9	22.0	16.9	39.3	38.2	38.7	*	*	38.0
New York	23.0	23.0	23.5	23.4	23.5	22.2	31.7	32.2	31.6	30.7	30.8	30.6
North Carolina	21.2	21.2	21.6	21.6	21.6	16.6	28.2	28.1	27.7	28.1	28.2	33.6
North Dakota	18.4	18.2	18.2	*	*	21.2	32.3	32.4	32.3	*	*	*
Ohio	19.0	19.1	19.1	18.9	18.8	20.1	35.5	35.3	35.3	36.9	37.0	33.8
Oklahoma	22.3	22.1	22.3	23.0	23.0	20.8	21.6	21.0	20.6	24.7	24.5	25.2
Oregon	16.9	16.9	17.1	19.3	19.0	15.5	37.6	37.6	37.2	38.2	37.6	40.5
Pennsylvania	19.4	19.5	19.7	18.9	18.9	17.1	35.0	34.2	33.9	39.3	39.4	38.2
Rhode Island	18.6	18.8	19.5	19.5	18.9	16.5	31.8	31.3	31.0	27.7	28.4	31.8
South Carolina	22.8	23.0	23.1	22.5	22.5	18.0	23.3	24.0	23.5	21.7	21.8	35.6
South Dakota	20.0	19.8	19.8	22.2	22.7	20.6	23.6	25.2	25.0	*	*	*
Tennessee	21.9	21.9	22.0	21.7	21.7	19.2	25.6	24.9	24.8	27.7	27.7	30.1
Texas	23.1	23.0	23.7	24.8	24.9	22.3	19.5	19.5	21.8	18.1	18.2	17.4
Utah	15.8	15.7	15.6	18.8	19.4	17.1	32.9	32.7	32.2	*	*	36.4
Vermont	15.6	15.6	15.6	*	*	*	39.3	39.5	39.6	*	*	*
Virginia	21.5	21.1	21.1	22.8	22.9	20.3	31.6	31.6	31.5	31.2	31.2	31.8
Washington	17.2	17.0	17.0	21.4	21.5	17.1	34.3	34.2	34.4	30.0	29.7	33.8
West Virginia	24.4	24.2	24.3	28.9	28.9	*	21.2	21.3	21.3	*	*	*
Wisconsin	15.7	16.2	16.3	13.1	13.1	15.3	33.6	33.8	34.0	28.9	29.1	29.8
Wyoming	18.6	18.5	18.3	*	*	20.4	31.6	31.1	32.2	*	*	*
Puerto Rico	33.4	33.8	---	28.7	---	---	8.0	7.9	---	8.7	---	---
Virgin Islands	22.8	24.3	26.2	22.7	22.6	21.8	19.8	*	*	21.8	22.9	*
Guam	15.8	15.4	15.1	*	*	*	30.8	*	*	*	*	*

* 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 Includes all persons of Hispanic origin of any race.
5 Excludes data for Puerto Rico, Virgin Islands, and Guam.
NOTE: Data on method of delivery are not available for American Samoa.

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, 1997

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* [3]
		Total [1]	*Primary* [2]	
Medical risk factors				
Anemia	77,334	22.3	15.7	30.7
Cardiac disease	19,929	24.5	17.5	31.6
Acute or chronic lung disease	37,153	24.0	17.2	30.3
Diabetes	101,176	35.6	25.6	19.9
Genital herpes [4]	31,550	35.0	29.1	29.7
Hydramnios/Oligohydramnios	50,025	35.8	30.6	25.6
Hemoglobinopathy	3,123	25.1	17.7	25.2
Hypertension, chronic	26,378	39.7	30.1	18.2
Hypertension, pregnancy-associated	141,235	35.5	30.7	21.7
Eclampsia	12,782	48.0	43.8	15.5
Incompetent cervix	10,208	31.2	24.5	29.1
Renal disease [5]	10,886	24.7	18.0	30.0
Rh sensitization [6]	24,505	21.7	15.4	33.5
Uterine bleeding [4]	24,463	31.2	24.4	24.9
Complications of labor and/or delivery				
Febrile	60,114	30.1	28.2	49.1
Meconium, moderate/heavy	215,127	20.1	17.2	47.4
Premature rupture of membrane	108,831	25.1	22.1	40.7
Abruptio placenta	22,063	58.2	53.5	17.7
Placenta previa	12,477	82.0	78.3	5.0
Other excessive bleeding [7]	21,797	26.7	21.1	34.4
Seizures during labor	1,286	49.1	46.7	25.7
Precipitous labor (less than 3 hours)	79,713	2.4	1.5	78.2
Prolonged labor (more than 20 hours)	32,728	35.0	33.6	47.8
Dysfunctional labor	106,157	63.2	60.6	16.8
Breech/Malpresentation	147,248	84.5	82.9	5.3
Cephalopelvic disproportion	81,208	96.2	95.7	1.7
Cord prolapse	7,868	66.4	64.1	14.3
Anesthetic complication [8]	2,181	41.4	32.9	23.5
Fetal distress [8]	141,502	54.4	51.6	23.5

[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, 1997

Birthweight [1] and race and Hispanic origin of mother	All births	Period of gestation [2]										
		Preterm					Term				Postterm	Not stated
		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 [3]	3,880,894	436,600	28,005	46,398	204,232	157,965	3,103,295	1,793,421	851,729	458,145	302,541	38,458
Less than 500 grams	5,634	5,433	5,181	230	20	2	9	6	3	-	-	192
500-999 grams	21,747	21,069	15,710	4,811	509	39	177	107	50	20	27	474
1,000-1,499 grams	27,592	25,518	3,717	14,592	6,691	518	1,437	1,044	258	135	211	426
1,500-1,999 grams	56,821	46,647	924	10,973	29,912	4,838	8,621	7,196	953	472	805	748
2,000-2,499 grams	179,360	90,369	753	4,222	58,005	27,389	81,735	66,806	10,140	4,789	5,293	1,963
2,500-2,999 grams	642,089	114,384	1,075	4,186	51,623	57,500	485,777	355,560	89,868	40,349	35,795	6,133
3,000-3,499 grams	1,435,290	87,284	-	4,784	36,478	46,022	1,224,614	744,090	322,681	157,843	110,227	13,165
3,500-3,999 grams	1,117,562	36,031	-	2,485	16,375	17,171	965,920	479,036	311,000	175,884	105,620	9,991
4,000-4,499 grams	330,894	7,449	-	-	3,801	3,648	283,482	118,881	99,133	65,468	36,934	3,029
4,500-4,999 grams	53,936	1,202	-	-	542	660	45,459	17,842	15,804	11,813	6,734	541
5,000 grams or more	5,941	184	-	-	94	90	4,933	2,188	1,542	1,203	754	70
Not stated	4,028	1,030	645	115	182	88	1,131	665	297	169	141	1,726
	Percent											
Very low birthweight [4]	1.4	11.9	89.9	42.4	3.5	0.4	0.1	0.1	0.0	0.0	0.1	3.0
Low birthweight [5]	7.5	43.4	96.1	75.3	46.6	20.8	3.0	4.2	1.3	1.2	2.1	10.4
	Number											
White, total	3,072,640	310,843	16,204	30,326	145,634	118,679	2,489,555	1,417,786	693,618	378,151	243,494	28,748
Less than 500 grams	3,107	2,989	2,839	138	12	-	7	5	2	-	-	111
500-999 grams	13,168	12,730	9,336	3,044	324	26	132	79	38	15	22	284
1,000-1,499 grams	18,277	16,900	2,228	9,711	4,604	357	963	698	170	95	139	275
1,500-1,999 grams	38,988	32,041	472	7,504	20,757	3,308	5,898	4,908	668	322	560	489
2,000-2,499 grams	124,855	63,982	397	2,554	41,642	19,389	56,058	45,995	6,770	3,293	3,574	1,241
2,500-2,999 grams	459,648	82,319	557	2,431	36,746	42,585	347,844	254,771	63,942	29,131	25,347	4,138
3,000-3,499 grams	1,123,452	64,411	-	3,060	25,701	35,650	963,272	584,706	253,597	124,969	85,897	9,872
3,500-3,999 grams	944,304	27,651	-	1,800	12,185	13,666	819,688	404,583	264,834	150,271	88,817	8,148
4,000-4,499 grams	291,179	6,026	-	-	3,005	3,021	250,218	104,131	87,867	58,220	32,336	2,599
4,500-4,999 grams	47,790	965	-	-	436	529	40,325	15,557	14,132	10,636	6,033	467
5,000 grams or more	5,129	160	-	-	79	81	4,261	1,847	1,347	1,067	661	47
Not stated	2,743	669	375	84	143	67	889	506	251	132	108	1,077
	Percent											
Very low birthweight [4]	1.1	10.5	91.0	42.6	3.4	0.3	0.0	0.1	0.0	0.0	0.1	2.4
Low birthweight [5]	6.5	41.5	96.5	75.9	46.3	19.5	2.5	3.6	1.1	1.0	1.8	8.7
	Number											
White, non-Hispanic	2,333,363	230,592	11,997	22,452	106,487	89,656	1,905,396	1,080,746	532,826	291,824	183,691	13,684
Less than 500 grams	2,280	2,228	2,116	104	8	-	3	3	-	-	-	49
500-999 grams	9,890	9,648	6,993	2,402	236	17	100	61	27	12	16	126
1,000-1,499 grams	13,919	13,033	1,609	7,606	3,547	271	645	472	114	59	105	136
1,500-1,999 grams	29,986	24,898	322	5,803	16,233	2,540	4,445	3,738	468	239	401	242
2,000-2,499 grams	94,875	49,574	290	1,768	32,455	15,061	42,041	34,666	4,988	2,387	2,657	603
2,500-2,999 grams	337,656	61,850	378	1,523	27,170	32,779	255,464	188,193	46,201	21,070	18,436	1,906
3,000-3,499 grams	834,586	45,247	-	1,978	16,695	26,574	722,037	439,589	189,575	92,873	62,895	4,407
3,500-3,999 grams	731,509	18,707	-	1,197	7,701	9,809	640,904	315,887	207,152	117,865	67,946	3,952
4,000-4,499 grams	233,974	4,098	-	-	1,998	2,100	202,789	83,735	71,532	47,522	25,761	1,326
4,500-4,999 grams	38,647	658	-	-	275	383	32,884	12,589	11,484	8,811	4,863	242
5,000 grams or more	4,040	113	-	-	54	59	3,381	1,418	1,083	880	522	24
Not stated	2,001	538	289	71	115	63	703	395	202	106	89	671
	Percent											
Very low birthweight [4]	1.1	10.8	91.5	45.2	3.6	0.3	0.0	0.0	0.0	0.0	0.1	2.4
Low birthweight [5]	6.5	43.2	96.8	79.0	49.3	20.0	2.5	3.6	1.1	0.9	1.7	8.9

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, 1997 --Con.

Birthweight [1] and race and Hispanic origin of mother	All births	Period of gestation [2]										
		Preterm					Term				Postterm	Not stated
		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	599,913	104,152	10,736	14,040	48,350	31,026	445,747	273,351	113,749	58,647	44,745	5,269
Less than 500 grams	2,343	2,274	2,179	87	6	2	1	1	-	-	-	68
500-999 grams	7,732	7,537	5,799	1,571	156	11	39	23	12	4	4	152
1,000-1,499 grams	8,109	7,540	1,328	4,294	1,780	138	396	291	69	36	64	109
1,500-1,999 grams	15,151	12,473	422	3,032	7,746	1,273	2,296	1,919	247	130	206	176
2,000-2,499 grams	44,584	21,976	314	1,495	13,644	6,523	20,673	16,697	2,735	1,241	1,440	495
2,500-2,999 grams	139,623	25,940	449	1,528	12,230	11,733	104,096	75,695	19,656	8,745	8,460	1,127
3,000-3,499 grams	227,388	18,309	-	1,434	8,797	8,078	188,839	114,619	49,959	24,261	18,576	1,664
3,500-3,999 grams	122,093	6,540	-	575	3,270	2,695	102,421	51,947	32,164	18,310	12,236	896
4,000-4,499 grams	27,335	1,049	-	-	596	453	22,879	10,240	7,627	5,012	3,225	182
4,500-4,999 grams	4,164	182	-	-	84	98	3,495	1,580	1,114	801	455	32
5,000 grams or more	530	19	-	-	12	7	447	235	132	80	55	9
Not stated	861	313	245	24	29	15	165	104	34	27	24	359
						Percent						
Very low birthweight [4]	3.0	16.7	88.7	42.5	4.0	0.5	0.1	0.1	0.1	0.1	0.2	6.7
Low birthweight [5]	13.0	49.9	95.7	74.8	48.3	25.6	5.3	6.9	2.7	2.4	3.8	20.4
						Number						
Black, non-Hispanic	581,431	101,533	10,462	13,710	47,201	30,160	431,630	265,226	109,923	56,481	43,296	4,972
Less than 500 grams	2,286	2,219	2,124	87	6	2	1	1	-	-	-	66
500-999 grams	7,523	7,339	5,643	1,536	149	11	36	21	12	3	4	144
1,000-1,499 grams	7,909	7,360	1,295	4,194	1,737	134	384	282	66	36	60	105
1,500-1,999 grams	14,850	12,227	414	2,973	7,602	1,238	2,254	1,884	243	127	200	169
2,000-2,499 grams	43,566	21,481	306	1,461	13,332	6,382	20,210	16,334	2,664	1,212	1,402	473
2,500-2,999 grams	136,016	25,260	440	1,494	11,934	11,392	101,437	73,830	19,134	8,473	8,234	1,085
3,000-3,499 grams	220,324	17,816	-	1,390	8,576	7,850	182,924	111,185	48,317	23,422	18,009	1,575
3,500-3,999 grams	117,581	6,330	-	551	3,171	2,608	98,621	50,044	30,984	17,593	11,791	839
4,000-4,499 grams	26,133	1,008	-	-	576	432	21,870	9,818	7,287	4,765	3,085	170
4,500-4,999 grams	3,941	169	-	-	79	90	3,306	1,502	1,054	750	435	31
5,000 grams or more	514	18	-	-	11	7	433	229	130	74	54	9
Not stated	788	306	240	24	28	14	154	96	32	26	22	306
						Percent						
Very low birthweight [4]	3.1	16.7	88.7	42.5	4.0	0.5	0.1	0.1	0.1	0.1	0.1	6.8
Low birthweight [5]	13.1	50.0	95.7	74.9	48.4	25.8	5.3	7.0	2.7	2.4	3.8	20.5
						Number						
Hispanic [6]	709,767	77,919	4,004	7,671	38,052	28,192	560,079	324,508	153,514	82,057	57,582	14,187
Less than 500 grams	734	671	638	30	3	-	4	2	2	-	-	59
500-999 grams	3,137	2,944	2,246	609	82	7	35	20	11	4	3	155
1,000-1,499 grams	4,177	3,701	602	2,021	997	81	313	222	58	33	26	137
1,500-1,999 grams	8,566	6,774	148	1,615	4,279	732	1,407	1,133	190	84	156	229
2,000-2,499 grams	28,897	13,822	108	766	8,790	4,158	13,593	10,963	1,745	885	889	593
2,500-2,999 grams	118,520	19,943	183	913	9,331	9,516	89,648	64,567	17,236	7,845	6,786	2,143
3,000-3,499 grams	279,074	18,840	-	1,097	8,904	8,839	232,674	140,137	61,703	30,834	22,296	5,264
3,500-3,999 grams	202,811	8,863	-	608	4,466	3,789	169,967	84,788	54,572	30,607	19,990	3,991
4,000-4,499 grams	53,773	1,891	-	-	990	901	44,471	19,331	15,261	9,879	6,204	1,207
4,500-4,999 grams	8,550	299	-	-	155	144	6,956	2,821	2,447	1,688	1,084	211
5,000 grams or more	1,039	47	-	-	27	20	837	417	244	176	132	23
Not stated	489	124	79	12	28	5	174	107	45	22	16	175
						Percent						
Very low birthweight [4]	1.1	9.4	88.8	34.7	2.8	0.3	0.1	0.1	0.0	0.0	0.1	2.5
Low birthweight [5]	6.4	35.9	95.3	65.8	37.2	17.7	2.7	3.8	1.3	1.2	1.9	8.4

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

Table 44. Percent of live births very preterm and preterm and percent of live births of very low birthweight and low birthweight, by race and Hispanic origin of mother: United States, 1981-97

Year	*Very preterm* [1]						*Preterm* [2]					
		White		*Black*				*White*		*Black*		
	All races [3]	*Total*	*Non-Hispanic*	*Total*	*Non-Hispanic*	*Hispanic* [4]	*All races* [3]	*Total*	*Non-Hispanic*	*Total*	*Non-Hispanic*	*Hispanic* [4]
1997	1.94	1.53	1.49	4.17	4.19	1.68	11.4	10.2	9.9	17.5	17.6	11.2
1996	1.89	1.48	1.43	4.13	4.17	1.66	11.0	9.8	9.5	17.4	17.5	10.9
1995	1.89	1.46	1.41	4.25	4.29	1.66	11.0	9.7	9.4	17.7	17.8	10.9
1994	1.91	1.45	1.39	4.32	4.36	1.67	11.0	9.6	9.3	18.1	18.2	10.9
1993	1.93	1.45	1.39	4.41	4.45	1.67	11.0	9.5	9.1	18.5	18.6	11.0
1992 [7]	1.91	1.40	1.33	4.47	4.50	1.64	10.7	9.1	8.7	18.4	18.5	10.7
1991 [7]	1.94	1.41	1.35	4.62	4.65	1.65	10.8	9.1	8.7	18.9	19.0	11.0
1990 [8]	1.92	1.39	1.33	4.61	4.63	1.69	10.6	8.9	8.5	18.8	18.9	11.0
1989 [9]	1.95	1.41	1.34	4.64	4.68	1.76	10.6	8.8	8.4	18.9	19.0	11.1
1988	1.96	1.42	---	4.72	---	---	10.2	8.5	---	18.7	---	---
1987	1.96	1.44	---	4.61	---	---	10.2	8.5	---	18.4	---	---
1986	1.90	1.41	---	4.47	---	---	10.0	8.4	---	18.0	---	---
1985	1.88	1.42	---	4.37	---	---	9.8	8.2	---	17.8	---	---
1984	1.83	1.38	---	4.22	---	---	9.4	7.9	---	17.1	---	---
1983	1.86	1.40	---	4.34	---	---	9.6	8.0	---	17.7	---	---
1982	1.84	1.40	---	4.22	---	---	9.5	8.0	---	17.4	---	---
1981	1.81	1.37	---	4.13	---	---	9.4	7.9	---	17.3	---	---
	Very low birthweight [5]						*Low birthweight* [6]					
		White		*Black*				*White*		*Black*		
	All races [3]	*Total*	*Non-Hispanic*	*Total*	*Non-Hispanic*	*Hispanic* [4]	*All races* [3]	*Total*	*Non-Hispanic*	*Total*	*Non-Hispanic*	*Hispanic* [4]
1997	1.42	1.13	1.12	3.04	3.05	1.13	7.5	6.5	6.5	13.0	13.1	6.4
1996	1.37	1.09	1.08	2.99	3.02	1.12	7.4	6.3	6.4	13.0	13.1	6.3
1995	1.35	1.06	1.04	2.97	2.98	1.11	7.3	6.2	6.2	13.1	13.2	6.3
1994	1.33	1.02	1.01	2.96	2.99	1.08	7.3	6.1	6.1	13.2	13.3	6.2
1993	1.33	1.01	1.00	2.96	2.99	1.06	7.2	6.0	5.9	13.3	13.4	6.2
1992 [7]	1.29	0.96	0.94	2.96	2.97	1.04	7.1	5.8	5.7	13.3	13.4	6.1
1991 [7]	1.29	0.96	0.94	2.96	2.97	1.02	7.1	5.8	5.7	13.6	13.6	6.1
1990 [8]	1.27	0.95	0.93	2.92	2.93	1.03	7.0	5.7	5.6	13.3	13.3	6.1
1989 [9]	1.28	0.95	0.93	2.95	2.97	1.05	7.0	5.7	5.6	13.5	13.6	6.2
1988	1.24	0.93	---	2.86	---	---	6.9	5.7	---	13.3	---	---
1987	1.24	0.94	---	2.79	---	---	6.9	5.7	---	13.0	---	---
1986	1.21	0.93	---	2.73	---	---	6.8	5.7	---	12.8	---	---
1985	1.21	0.93	---	2.71	---	---	6.8	5.7	---	12.6	---	---
1984	1.19	0.93	---	2.60	---	---	6.7	5.6	---	12.6	---	---
1983	1.19	0.92	---	2.60	---	---	6.8	5.7	---	12.8	---	---
1982	1.18	0.91	---	2.56	---	---	6.8	5.6	---	12.6	---	---
1981	1.16	0.91	---	2.52	---	---	6.8	5.7	---	12.7	---	---

--- Data not available.
1 Births of less than 32 completed weeks of gestation.
2 Births of less than 37 completed weeks of gestation.
3 Includes races other than white and black and origin not stated.
4 Includes all persons of Hispanic origin of any race.
5 Less than 1,500 grams (3 lb. 4 oz.).
6 Less than 2,500 grams (5 lb. 8 oz.).
7 Data by Hispanic origin exclude New Hampshire, which did not report Hispanic origin.
8 Data by Hispanic origin exclude New Hampshire and Oklahoma, which did not report Hispanic origin.
9 Data by Hispanic origin exclude New Hampshire, Oklahoma, and Louisiana, which did not report Hispanic origin.

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, 1997

Age and race and Hispanic origin of mother	Low birthweight [1]		Birthweight [2]												
	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
All races [3]															
All ages	291,154	7.5	3,880,894	5,634	21,747	27,592	56,821	179,360	642,089	1,435,290	1,117,562	330,894	53,936	5,941	4,028
Under 15 years	1,374	13.6	10,121	38	137	135	275	789	2,537	3,996	1,876	303	25	4	6
15-19 years	46,036	9.5	483,220	852	3,478	4,245	8,628	28,833	104,318	193,281	111,723	24,160	2,932	242	528
15 years	3,052	11.6	26,340	75	247	340	511	1,879	6,308	10,669	5,280	904	87	5	35
16 years	5,963	10.5	57,038	109	473	588	1,188	3,605	13,118	22,942	12,296	2,402	241	13	63
17 years	9,583	9.9	96,776	146	726	904	1,772	6,035	21,342	39,083	21,654	4,448	522	38	106
18 years	12,721	9.5	134,595	269	929	1,140	2,409	7,974	28,823	53,874	31,355	6,794	803	62	163
19 years	14,717	8.7	168,471	253	1,103	1,273	2,748	9,340	34,727	66,713	41,138	9,612	1,279	124	161
20-24 years	69,983	7.4	942,048	1,415	5,182	6,263	13,008	44,115	171,927	365,259	256,023	67,026	9,846	1,001	983
25-29 years	70,633	6.6	1,069,436	1,383	5,223	6,610	13,562	43,855	162,496	394,109	325,234	98,310	15,954	1,650	1,050
30-34 years	61,142	6.9	886,798	1,171	4,569	6,046	12,328	37,028	127,164	312,195	276,934	91,035	15,694	1,772	862
35-39 years	33,998	8.3	409,710	645	2,575	3,441	7,238	20,099	60,889	139,903	123,387	42,136	7,866	1,038	493
40-44 years	7,386	9.7	76,084	126	543	760	1,629	4,328	12,123	25,473	21,598	7,630	1,557	219	98
45-54 years	602	17.4	3,477	4	40	92	153	313	635	1,074	787	294	62	15	8
White, total															
All ages	198,395	6.5	3,072,640	3,107	13,168	18,277	38,988	124,855	459,648	1,123,452	944,304	291,179	47,790	5,129	2,743
Under 15 years	567	11.3	5,021	10	59	52	122	324	1,101	2,036	1,121	176	16	1	3
15-19 years	27,588	8.2	338,272	409	1,899	2,515	5,125	17,640	65,945	135,751	86,262	19,801	2,422	196	307
15 years	1,565	9.8	15,959	35	111	185	253	981	3,381	6,582	3,651	686	70	4	20
16 years	3,271	8.8	37,324	48	255	332	651	1,985	7,634	15,285	9,013	1,897	182	9	33
17 years	5,693	8.5	66,882	65	393	501	1,051	3,683	13,260	27,246	16,514	3,631	440	34	64
18 years	7,844	8.2	95,436	132	518	726	1,438	5,030	18,680	38,099	24,463	5,561	655	48	86
19 years	9,215	7.5	122,671	129	622	771	1,732	5,961	22,990	48,539	32,621	8,026	1,075	101	104
20-24 years	45,608	6.3	720,546	718	2,938	3,914	8,430	29,608	119,717	277,910	209,999	57,371	8,459	848	634
25-29 years	49,747	5.7	871,636	775	3,232	4,441	9,628	31,671	120,570	317,509	279,910	87,383	14,331	1,444	742
30-34 years	44,506	6.1	735,571	695	2,976	4,306	9,102	27,427	96,522	255,216	241,258	81,796	14,125	1,528	620
35-39 years	24,596	7.3	337,423	413	1,674	2,453	5,286	14,770	46,310	113,907	106,686	37,653	7,004	906	361
40-44 years	5,291	8.6	61,417	83	356	520	1,169	3,163	9,022	20,312	18,409	6,744	1,376	193	70
45-54 years	492	17.9	2,754	4	34	76	126	252	461	811	659	255	57	13	6
White, non-Hispanic															
All ages	150,950	6.5	2,333,363	2,280	9,890	13,919	29,986	94,875	337,656	834,586	731,509	233,974	38,647	4,040	2,001
Under 15 years	264	11.8	2,240	5	31	28	57	143	478	855	537	96	6	1	3
15-19 years	18,207	8.3	219,857	286	1,291	1,685	3,477	11,468	41,285	85,637	58,085	14,453	1,842	138	210
15 years	837	10.2	8,244	20	72	99	141	505	1,658	3,239	2,025	428	43	1	13
16 years	1,954	9.1	21,536	29	164	215	400	1,146	4,202	8,519	5,438	1,268	127	7	21
17 years	3,592	8.5	42,088	43	251	332	676	2,290	8,014	16,634	10,869	2,580	326	27	46
18 years	5,396	8.5	63,787	92	375	513	1,002	3,414	12,041	24,836	16,776	4,128	522	32	56
19 years	6,428	7.6	84,202	102	429	526	1,258	4,113	15,370	32,409	22,977	6,049	824	71	74
20-24 years	32,510	6.5	500,928	522	2,146	2,816	5,987	21,039	81,263	188,264	148,630	42,722	6,457	634	448
25-29 years	38,813	5.8	674,498	570	2,469	3,467	7,542	24,765	91,214	241,750	219,163	70,392	11,497	1,142	527
30-34 years	36,295	6.0	603,304	515	2,350	3,450	7,482	22,498	77,831	207,028	199,878	68,781	11,766	1,244	481
35-39 years	20,195	7.2	280,393	315	1,302	1,995	4,384	12,199	38,009	93,970	89,571	31,749	5,910	713	276
40-44 years	4,245	8.5	49,908	64	277	411	945	2,548	7,205	16,421	15,124	5,586	1,116	159	52
45-54 years	421	18.9	2,235	3	24	67	112	215	371	661	521	195	53	9	4

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, 1997--Con.

Age and race and Hispanic origin of mother	Low birthweight [1]		Birthweight [2]												
	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
Black, total															
All ages	77,919	13.0	599,913	2,343	7,732	8,109	15,151	44,584	139,623	227,388	122,093	27,335	4,164	530	861
Under 15 years	761	16.2	4,712	26	73	80	140	442	1,329	1,822	682	105	7	3	3
15-19 years	16,995	13.2	128,539	422	1,487	1,618	3,250	10,218	34,721	50,978	21,775	3,480	387	30	173
15 years	1,370	14.6	9,381	38	131	145	234	822	2,688	3,674	1,438	185	14	1	11
16 years	2,493	14.1	17,658	58	207	240	502	1,486	4,986	6,856	2,834	415	47	2	25
17 years	3,579	13.5	26,595	79	307	376	669	2,148	7,335	10,521	4,430	633	62	1	34
18 years	4,504	13.0	34,712	130	389	384	905	2,696	9,189	13,925	5,927	985	115	11	56
19 years	5,049	12.6	40,193	117	453	473	940	3,066	10,523	16,002	7,146	1,262	149	15	47
20-24 years	21,644	11.9	182,600	664	2,091	2,131	4,117	12,641	43,788	71,770	36,633	7,384	1,031	107	243
25-29 years	16,767	12.4	135,529	560	1,793	1,843	3,237	9,334	28,950	50,886	30,100	7,364	1,108	144	210
30-34 years	12,873	13.7	94,123	430	1,380	1,445	2,524	7,094	19,351	33,604	21,245	5,756	998	153	143
35-39 years	7,245	16.1	45,069	201	757	806	1,520	3,961	9,450	15,263	9,733	2,706	514	81	77
40-44 years	1,563	17.4	8,981	40	147	177	345	854	1,950	2,931	1,876	522	116	11	12
45-54 years	71	19.7	360	-	4	9	18	40	84	134	49	18	3	1	-
Black, non-Hispanic															
All ages	76,134	13.1	581,431	2,286	7,523	7,909	14,850	43,566	136,016	220,324	117,581	26,133	3,941	514	788
Under 15 years	743	16.1	4,613	24	72	78	139	430	1,307	1,785	662	103	7	3	3
15-19 years	16,678	13.3	125,343	417	1,461	1,586	3,193	10,021	33,934	49,669	21,130	3,370	373	30	159
15 years	1,345	14.7	9,163	38	131	140	231	805	2,628	3,584	1,399	182	13	1	11
16 years	2,451	14.2	17,235	58	205	235	496	1,457	4,887	6,669	2,758	401	47	2	20
17 years	3,526	13.6	25,940	79	305	369	659	2,114	7,164	10,248	4,295	616	60	1	30
18 years	4,412	13.0	33,870	129	381	375	882	2,645	8,983	13,595	5,757	946	112	11	54
19 years	4,944	12.6	39,135	113	439	467	925	3,000	10,272	15,573	6,921	1,225	141	15	44
20-24 years	21,174	11.9	177,494	649	2,041	2,079	4,043	12,362	42,725	69,770	35,413	7,113	967	105	227
25-29 years	16,353	12.5	130,942	552	1,743	1,787	3,182	9,089	28,141	49,149	28,888	7,019	1,057	139	196
30-34 years	12,562	13.9	90,637	417	1,335	1,412	2,475	6,923	18,749	32,358	20,294	5,461	936	148	129
35-39 years	7,041	16.2	43,434	189	730	783	1,472	3,867	9,178	14,665	9,366	2,553	489	77	65
40-44 years	1,514	17.6	8,624	38	138	175	328	835	1,899	2,803	1,782	497	109	11	9
45-54 years	69	20.1	344	-	3	9	18	39	83	125	46	17	3	1	-
Hispanic [4]															
All ages	45,511	6.4	709,767	734	3,137	4,177	8,566	28,897	118,520	279,074	202,811	53,773	8,550	1,039	489
Under 15 years	309	10.9	2,833	5	26	25	69	184	643	1,198	592	81	10	-	-
15-19 years	9,324	7.9	118,122	117	593	819	1,624	6,171	24,783	50,118	27,945	5,249	565	55	83
15 years	741	9.5	7,778	15	38	86	112	490	1,742	3,367	1,635	257	28	3	5
16 years	1,318	8.3	15,870	18	88	119	247	846	3,470	6,822	3,565	625	53	3	14
17 years	2,069	8.4	24,768	21	136	166	369	1,377	5,278	10,632	5,622	1,034	109	7	17
18 years	2,431	7.7	31,542	35	140	212	435	1,609	6,653	13,263	7,609	1,414	133	15	24
19 years	2,765	7.2	38,164	28	191	236	461	1,849	7,640	16,034	9,514	1,919	242	27	23
20-24 years	12,846	5.9	216,152	176	761	1,074	2,384	8,451	38,058	88,447	60,274	14,231	1,951	206	139
25-29 years	10,448	5.5	188,669	175	740	948	1,978	6,607	28,288	72,911	57,914	15,999	2,671	294	144
30-34 years	7,550	6.2	121,539	157	578	781	1,477	4,557	17,426	44,493	37,755	11,820	2,144	266	85
35-39 years	4,015	7.8	51,601	84	353	423	818	2,337	7,585	18,214	15,283	5,310	976	186	32
40-44 years	964	9.3	10,405	19	79	100	205	561	1,663	3,558	2,929	1,028	230	28	5
45-54 years	55	12.4	446	1	7	7	11	29	74	135	119	55	3	4	1

- Quantity zero.
1 Less than 2,500 grams.
2 Equivalents of gram weights in terms of pounds and ounces are shown in Technical notes.
3 Includes races other than white and black and origin not stated.
4 Includes all persons of Hispanic origin 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, Guam, and American Samoa, 1997

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

State	Number						Percent					
		White		Black				White		Black		
	All races [1]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [2]	All races [1]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [2]
United States [3]	291,154	198,395	150,950	77,919	76,134	45,511	7.5	6.5	6.5	13.0	13.1	6.4
Alabama	5,627	2,986	2,912	2,592	2,586	77	9.2	7.4	7.4	13.1	13.1	7.3
Alaska	584	362	322	56	56	43	5.9	5.5	5.3	12.3	12.6	7.1
Arizona	5,205	4,398	2,525	340	323	1,889	6.9	6.6	6.7	13.6	13.6	6.6
Arkansas	3,044	2,014	1,915	990	989	100	8.4	7.2	7.2	12.7	12.7	6.5
California	32,301	23,683	9,833	4,483	4,364	13,888	6.2	5.6	5.5	12.0	12.1	5.6
Colorado	5,000	4,392	3,205	390	376	1,209	8.8	8.5	8.3	15.1	15.1	9.1
Connecticut	3,145	2,349	1,749	658	599	472	7.3	6.5	6.2	12.3	12.2	8.3
Delaware	895	520	464	352	348	51	8.7	6.9	6.8	14.1	14.1	8.0
District of Columbia	1,064	117	73	937	917	43	13.4	5.9	5.7	16.1	16.2	6.2
Florida	15,444	9,724	7,304	5,330	5,236	2,505	8.0	6.8	6.8	12.3	12.3	6.7
Georgia	10,390	4,967	4,541	5,162	5,132	384	8.8	6.6	6.7	13.0	13.0	5.4
Hawaii	1,235	226	189	59	54	156	7.2	5.1	5.1	10.2	9.9	7.4
Idaho	1,165	1,126	936	8	8	174	6.3	6.3	6.1	*	*	7.4
Illinois	14,278	8,817	6,779	4,936	4,915	2,055	7.9	6.4	6.4	13.9	14.0	6.2
Indiana	6,417	5,155	4,899	1,189	1,186	237	7.7	7.0	7.0	13.6	13.6	7.0
Iowa	2,336	2,143	2,008	114	107	105	6.4	6.2	6.1	10.4	10.2	6.6
Kansas	2,580	2,126	1,894	361	359	210	6.9	6.4	6.4	12.9	13.0	5.9
Kentucky	4,156	3,541	3,499	558	552	52	7.8	7.4	7.4	12.0	12.0	7.2
Louisiana	6,704	2,637	2,571	3,950	3,948	70	10.2	7.0	7.1	14.6	14.6	5.5
Maine	812	789	765	13	11	4	5.9	5.9	6.0	*	*	*
Maryland	6,142	2,832	2,606	3,109	3,067	216	8.8	6.4	6.4	13.6	13.6	6.6
Massachusetts	5,584	4,500	3,907	808	679	683	7.0	6.6	6.4	10.6	11.0	8.3
Michigan	10,282	6,825	5,961	3,191	3,135	366	7.7	6.5	6.4	13.2	13.1	6.7
Minnesota	3,782	3,143	2,874	369	365	179	5.9	5.5	5.6	11.1	11.1	6.8
Mississippi	4,191	1,619	1,599	2,539	2,538	20	10.1	7.4	7.4	13.4	13.4	6.1
Missouri	5,703	4,102	3,995	1,488	1,484	108	7.7	6.7	6.7	13.5	13.5	6.1
Montana	684	578	526	2	-	23	6.3	6.1	6.0	*	*	7.6
Nebraska	1,633	1,422	1,281	146	144	103	7.0	6.7	6.8	11.7	11.7	5.2
Nevada	2,055	1,608	1,117	292	287	482	7.6	7.0	7.4	13.7	13.9	6.3
New Hampshire	833	819	768	3	3	20	5.8	5.9	5.8	*	*	8.8
New Jersey	8,888	5,462	4,089	2,875	2,745	1,449	7.9	6.5	6.2	13.7	14.3	7.4
New Mexico	2,083	1,769	737	78	75	1,045	7.8	7.8	7.7	15.4	15.8	7.9
New York	20,111	12,333	7,293	6,495	5,791	3,875	7.8	6.7	6.2	11.8	12.3	7.6
North Carolina	9,447	5,395	4,986	3,743	3,732	421	8.8	7.1	7.2	13.6	13.6	6.1
North Dakota	516	459	443	6	6	11	6.2	6.2	6.2	*	*	*
Ohio	11,717	8,495	8,217	3,065	2,986	258	7.7	6.7	6.7	13.6	13.5	7.5
Oklahoma	3,482	2,561	2,377	577	572	182	7.3	6.8	6.9	12.3	12.3	5.7
Oregon	2,406	2,121	1,811	103	99	317	5.5	5.3	5.3	11.0	10.8	5.4
Pennsylvania	10,920	7,812	7,204	2,840	2,771	606	7.6	6.5	6.4	13.9	13.9	9.2
Rhode Island	919	748	497	112	79	138	7.4	6.9	6.4	11.9	10.2	7.8
South Carolina	4,789	2,240	2,179	2,490	2,489	66	9.2	6.8	6.8	13.5	13.5	5.9
South Dakota	563	472	465	9	9	7	5.5	5.6	5.6	*	*	*
Tennessee	6,534	4,212	4,104	2,234	2,232	108	8.8	7.4	7.4	13.7	13.7	6.3
Texas	24,250	18,578	8,878	4,908	4,860	9,683	7.3	6.5	6.5	12.4	12.5	6.6
Utah	2,833	2,649	2,326	36	35	317	6.6	6.5	6.4	13.8	14.5	7.4
Vermont	413	409	382	2	2	-	6.3	6.3	6.1	*	*	*
Virginia	7,085	4,158	3,820	2,642	2,634	341	7.7	6.2	6.2	12.6	12.6	6.3
Washington	4,377	3,600	2,979	324	303	500	5.6	5.3	5.3	10.2	10.2	5.4
West Virginia	1,717	1,613	1,609	95	95	6	8.3	8.1	8.1	12.8	12.8	*
Wisconsin	4,261	3,242	3,038	853	845	214	6.4	5.6	5.6	13.3	13.3	6.7
Wyoming	572	547	499	7	6	43	9.0	9.0	9.0	*	*	8.0
Puerto Rico	6,830	6,360	---	467	---	---	10.7	10.7	---	9.8	---	---
Virgin Islands	164	14	1	148	133	22	8.1	*	*	9.3	9.5	5.9
Guam	306	21	18	3	3	3	7.1	5.0	*	*	*	*
American Samoa	53	1	---	---	---	---	3.2	---	---	---	---	---

* Figure does not meet standards of reliability or precision.
--- Data not available.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin of any race.
3 Excludes data for Puerto Rico, Virgin Islands, Guam, and American Samoa.

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, Guam, and American Samoa, 1997

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

State	Number						Percent					
		White		Black				White		Black		
	All races [1]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [2]	All races [1]	Total	Non-Hispanic	Total	Non-Hispanic	Hispanic [2]
United States [3]	54,973	34,552	26,089	18,184	17,718	8,048	1.4	1.1	1.1	3.0	3.1	1.1
Alabama	1,135	501	494	627	625	9	1.9	1.2	1.3	3.2	3.2	*
Alaska	120	71	60	11	11	13	1.2	1.1	1.0	*	*	*
Arizona	868	733	423	64	62	310	1.1	1.1	1.1	2.6	2.6	1.1
Arkansas	539	321	304	209	209	17	1.5	1.1	1.1	2.7	2.7	*
California	5,863	4,229	1,725	1,024	994	2,514	1.1	1.0	1.0	2.7	2.8	1.0
Colorado	756	660	492	70	65	168	1.3	1.3	1.3	2.7	2.6	1.3
Connecticut	659	445	334	184	163	89	1.5	1.2	1.2	3.4	3.3	1.6
Delaware	189	93	81	93	93	10	1.8	1.2	1.2	3.7	3.8	*
District of Columbia	273	29	13	241	232	16	3.4	1.5	*	4.2	4.1	*
Florida	2,931	1,694	1,260	1,192	1,165	448	1.5	1.2	1.2	2.7	2.7	1.2
Georgia	2,127	879	809	1,210	1,202	66	1.8	1.2	1.2	3.0	3.1	0.9
Hawaii	186	31	27	13	13	18	1.1	0.7	0.7	*	*	*
Idaho	157	154	120	1	1	30	0.8	0.9	0.8	*	*	1.3
Illinois	2,846	1,663	1,271	1,098	1,088	396	1.6	1.2	1.2	3.1	3.1	1.2
Indiana	1,117	861	812	244	244	46	1.3	1.2	1.2	2.8	2.8	1.4
Iowa	459	415	388	26	24	20	1.3	1.2	1.2	2.4	2.3	1.2
Kansas	436	351	311	74	74	38	1.2	1.1	1.1	2.6	2.7	1.1
Kentucky	739	600	589	133	132	13	1.4	1.3	1.2	2.9	2.9	*
Louisiana	1,342	427	416	901	900	11	2.0	1.1	1.1	3.3	3.3	*
Maine	135	129	124	3	3	-	1.0	1.0	1.0	*	*	*
Maryland	1,367	503	469	827	817	33	1.9	1.1	1.1	3.6	3.6	1.0
Massachusetts	1,078	841	713	206	179	138	1.3	1.2	1.2	2.7	2.9	1.7
Michigan	2,033	1,215	1,059	775	755	64	1.5	1.2	1.1	3.2	3.2	1.2
Minnesota	703	557	517	92	91	33	1.1	1.0	1.0	2.8	2.8	1.3
Mississippi	828	291	287	530	530	4	2.0	1.3	1.3	2.8	2.8	*
Missouri	1,005	675	652	312	312	23	1.4	1.1	1.1	2.8	2.8	1.3
Montana	109	92	85	-	-	2	1.0	1.0	1.0	*	*	*
Nebraska	297	260	239	29	29	18	1.3	1.2	1.3	2.3	2.3	*
Nevada	323	245	160	54	52	85	1.2	1.1	1.1	2.5	2.5	1.1
New Hampshire	162	158	147	2	2	5	1.1	1.1	1.1	*	*	*
New Jersey	1,845	1,028	749	754	722	292	1.6	1.2	1.1	3.6	3.7	1.5
New Mexico	265	228	105	11	11	123	1.0	1.0	1.1	*	*	0.9
New York	3,965	2,166	1,200	1,598	1,419	724	1.5	1.2	1.0	2.9	3.0	1.4
North Carolina	2,027	1,022	959	938	935	66	1.9	1.3	1.4	3.4	3.4	1.0
North Dakota	94	87	85	2	2	2	1.1	1.2	1.2	*	*	*
Ohio	2,174	1,472	1,423	680	657	43	1.4	1.2	1.2	3.0	3.0	1.3
Oklahoma	591	414	382	129	128	32	1.2	1.1	1.1	2.7	2.8	1.0
Oregon	384	334	291	21	21	42	0.9	0.8	0.8	2.2	2.3	0.7
Pennsylvania	2,083	1,381	1,258	663	645	119	1.4	1.1	1.1	3.3	3.2	1.8
Rhode Island	186	149	93	27	16	29	1.5	1.4	1.2	2.9	*	1.6
South Carolina	981	397	387	575	575	9	1.9	1.2	1.2	3.1	3.1	*
South Dakota	108	84	83	4	4	-	1.1	1.0	1.0	*	*	*
Tennessee	1,199	687	668	499	498	20	1.6	1.2	1.2	3.1	3.1	1.2
Texas	4,439	3,173	1,526	1,165	1,158	1,643	1.3	1.1	1.1	3.0	3.0	1.1
Utah	435	405	342	7	7	60	1.0	1.0	0.9	*	*	1.4
Vermont	62	62	57	-	-	-	0.9	1.0	0.9	*	*	*
Virginia	1,424	779	709	597	592	72	1.6	1.2	1.2	2.8	2.8	1.3
Washington	756	629	505	66	61	88	1.0	0.9	0.9	2.1	2.1	0.9
West Virginia	307	287	286	18	18	1	1.5	1.4	1.4	*	*	*
Wisconsin	789	572	538	183	180	38	1.2	1.0	1.0	2.9	2.8	1.2
Wyoming	77	73	62	2	2	8	1.2	1.2	1.1	*	*	*
Puerto Rico	848	798	---	50	---	---	1.3	1.3	---	1.1	---	---
Virgin Islands	41	4	-	36	32	6	2.0	*	*	2.3	2.3	*
Guam	34	2	1	2	2	1	0.8	*	*	*	*	*
American Samoa	5	---	---	---	---	---	---	---	---	---	---	---

* Figure does not meet standards of reliability or precision.
- Quantity zero.
--- Data not available.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin of any race.
3 Excludes data for Puerto Rico, Virgin Islands, Guam, and American Samoa.

Table 48. Live births with selected abnormal conditions of the newborn and rates by age of mother, by race of mother: United States, 1997

[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 [1]	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	40-54 years	
All races [2]										
Anemia	3,880,894	4,209	1.1	1.1	1.1	1.1	1.1	1.2	1.4	82,248
Birth injury [3]	3,523,601	10,604	3.1	3.1	3.1	3.2	3.0	2.9	2.8	86,017
Fetal alcohol syndrome [4]	3,814,337	288	0.1	0.1	0.1	0.1	0.1	0.1	*	83,320
Hyaline membrane disease/RDS	3,880,894	24,456	6.4	7.5	6.6	6.0	6.1	6.4	7.0	82,248
Meconium aspiration syndrome	3,880,894	8,638	2.3	2.5	2.3	2.2	2.2	2.4	2.6	82,248
Assisted ventilation less than 30 minutes [5]	3,761,991	78,867	21.5	21.9	20.5	21.3	21.8	23.0	23.2	90,726
Assisted ventilation 30 minutes or longer [5]	3,761,991	33,275	9.1	10.6	9.1	8.4	8.5	9.7	11.0	90,726
Seizures	3,880,894	2,253	0.6	0.7	0.6	0.6	0.6	0.6	0.6	82,248
White										
Anemia	3,072,640	3,058	1.0	1.0	0.9	1.0	1.0	1.2	1.3	60,739
Birth injury [3]	2,767,011	9,088	3.4	3.6	3.4	3.5	3.2	3.1	2.9	63,896
Fetal alcohol syndrome [4]	3,015,240	156	0.1	*	0.0	0.0	0.1	0.1	*	61,765
Hyaline membrane disease/RDS	3,072,640	19,506	6.5	7.7	6.7	6.1	6.2	6.5	6.8	60,739
Meconium aspiration syndrome	3,072,640	6,396	2.1	2.2	2.2	2.1	2.0	2.2	2.5	60,739
Assisted ventilation less than 30 minutes [5]	3,007,467	63,454	21.6	21.8	20.2	21.4	22.0	23.5	23.1	68,011
Assisted ventilation 30 minutes or longer [5]	3,007,467	25,580	8.7	10.3	8.7	8.1	8.2	9.5	10.4	68,011
Seizures	3,072,640	1,785	0.6	0.7	0.6	0.6	0.6	0.7	0.7	60,739
Black										
Anemia	599,913	931	1.6	1.6	1.4	1.6	1.8	1.7	*	12,908
Birth injury [3]	559,176	878	1.6	1.7	1.6	1.5	1.5	1.4	*	13,290
Fetal alcohol syndrome [4]	593,499	60	0.1	*	*	*	*	*	*	12,937
Hyaline membrane disease/RDS	599,913	4,157	7.1	7.3	6.7	7.0	7.4	7.2	9.1	12,908
Meconium aspiration syndrome	599,913	1,860	3.2	3.0	2.8	3.2	3.8	3.7	3.6	12,908
Assisted ventilation less than 30 minutes [5]	559,264	12,045	22.1	22.1	21.6	21.6	23.1	23.0	25.2	13,662
Assisted ventilation 30 minutes or longer [5]	559,264	6,434	11.8	11.5	11.1	11.8	12.8	13.0	16.0	13,662
Seizures	599,913	379	0.6	0.7	0.6	0.5	0.7	0.7	*	12,908

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

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

[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 [1]	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	40-54 years	
All races [2]										
Anencephalus	3,854,023	491	12.9	13.9	12.7	11.8	14.1	12.5	*	59,264
Spina bifida/Meningocele	3,854,023	921	24.3	25.6	27.6	23.4	21.1	23.7	27.0	59,264
Hydrocephalus	3,854,023	993	26.2	28.1	28.4	24.6	25.2	22.7	38.6	59,264
Microcephalus	3,854,023	255	6.7	9.1	7.0	6.1	5.9	6.5	*	59,264
Other central nervous system anomalies	3,854,023	775	20.4	25.6	20.2	17.6	18.9	24.2	27.0	59,264
Heart malformations	3,854,023	4,423	116.6	110.3	104.0	116.4	119.4	132.5	191.6	59,264
Other circulatory/respiratory anomalies	3,854,023	5,282	139.2	139.8	134.8	133.4	137.0	161.2	177.5	59,264
Rectal atresia/stenosis	3,854,023	340	9.0	9.6	9.0	9.6	8.3	6.7	*	59,264
Tracheo-esophageal fistula/Esophageal atresia	3,854,023	566	14.9	16.6	13.9	13.3	13.9	19.0	28.3	59,264
Omphalocele/Gastroschisis	3,854,023	1,067	28.1	63.6	34.2	20.3	16.4	18.0	*	59,264
Other gastrointestinal anomalies	3,854,023	1,174	30.9	37.8	30.9	27.9	28.8	30.9	54.0	59,264
Malformed genitalia	3,854,023	2,956	77.9	80.4	73.5	79.4	79.7	77.1	78.4	59,264
Renal agenesis	3,854,023	535	14.1	16.8	13.6	14.1	12.8	14.0	*	59,264
Other urogenital anomalies	3,854,023	4,228	111.4	97.0	107.0	115.5	113.6	119.0	133.7	59,264
Cleft lip/palate	3,854,023	3,166	83.4	85.4	87.2	79.1	77.2	92.1	110.6	59,264
Polydactyly/Syndactyly/Adactyly	3,854,023	3,261	85.9	121.1	92.6	77.3	74.8	75.4	84.9	59,264
Clubfoot	3,854,023	2,261	59.6	65.9	63.9	58.8	55.5	51.7	65.6	59,264
Diaphragmatic hernia	3,854,023	451	11.9	12.9	12.9	11.6	10.3	12.5	*	59,264
Other musculoskeletal/integumental anomalies	3,854,023	7,874	207.5	217.1	205.4	200.9	209.3	211.4	221.2	59,264
Down's syndrome	3,854,023	1,662	43.8	22.4	25.2	25.4	46.2	98.1	336.9	59,264
Other chromosomal anomalies	3,854,023	1,458	38.4	32.4	35.8	28.7	34.0	66.1	145.3	59,264
White										
Anencephalus	3,049,910	383	12.7	15.3	12.2	11.4	13.6	11.8	*	43,850
Spina bifida/Meningocele	3,049,910	784	26.1	30.8	31.4	24.2	21.9	23.6	*	43,850
Hydrocephalus	3,049,910	813	27.0	28.4	29.3	26.4	24.8	25.1	39.8	43,850
Microcephalus	3,049,910	196	6.5	9.6	7.0	6.3	5.0	6.7	*	43,850
Other central nervous system anomalies	3,049,910	625	20.8	28.1	20.3	18.0	19.7	22.7	*	43,850
Heart malformations	3,049,910	3,612	120.2	113.6	107.7	120.4	122.5	131.7	203.9	43,850
Other circulatory/respiratory anomalies	3,049,910	4,300	143.0	154.6	139.5	133.5	139.0	164.4	184.8	43,850
Rectal atresia/stenosis	3,049,910	277	9.2	9.3	9.2	10.2	8.3	7.0	*	43,850
Tracheo-esophageal fistula/Esophageal atresia	3,049,910	478	15.9	19.1	14.9	14.4	14.6	19.1	*	43,850
Omphalocele/Gastroschisis	3,049,910	809	26.9	69.4	33.8	18.6	15.4	17.0	*	43,850
Other gastrointestinal anomalies	3,049,910	924	30.7	37.7	30.0	28.6	28.6	31.2	54.2	43,850
Malformed genitalia	3,049,910	2,491	82.9	85.8	81.7	84.4	82.6	78.1	87.6	43,850
Renal agenesis	3,049,910	441	14.7	17.6	14.1	14.5	13.3	15.4	*	43,850
Other urogenital anomalies	3,049,910	3,675	122.3	114.2	118.7	123.7	122.8	128.1	148.2	43,850
Cleft lip/palate	3,049,910	2,739	91.1	102.6	96.6	85.7	82.0	97.5	113.1	43,850
Polydactyly/Syndactyly/Adactyly	3,049,910	1,814	60.3	77.8	58.8	58.4	56.2	58.1	70.1	43,850
Clubfoot	3,049,910	1,952	64.9	77.8	68.7	64.2	59.5	56.0	73.3	43,850
Diaphragmatic hernia	3,049,910	370	12.3	14.4	13.6	11.6	10.1	13.6	*	43,850
Other musculoskeletal/integumental anomalies	3,049,910	5,959	198.2	214.4	196.2	192.1	195.8	204.7	213.5	43,850
Down's syndrome	3,049,910	1,450	48.2	23.9	28.4	27.6	49.8	105.4	361.7	43,850
Other chromosomal anomalies	3,049,910	1,232	41.0	35.3	39.1	29.3	35.2	70.5	162.5	43,850

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, 1997 --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 [1]	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	40-54 years	
Black										
Anencephalus	599,407	75	12.7	*	14.4	*	*	*	*	7,927
Spina bifida/Meningocele	599,407	117	19.8	*	16.7	22.5	22.6	*	*	7,927
Hydrocephalus	599,407	146	24.7	25.9	24.4	18.0	35.6	*	*	7,927
Microcephalus	599,407	50	8.5	*	*	*	*	*	*	7,927
Other central nervous system anomalies	599,407	116	19.6	20.5	19.4	17.2	*	*	*	7,927
Heart malformations	599,407	590	99.7	101.9	87.8	92.8	108.9	135.0	*	7,927
Other circulatory/respiratory anomalies	599,407	632	106.9	91.3	100.0	125.8	106.7	130.5	*	7,927
Rectal atresia/stenosis	599,407	49	8.3	*	*	*	*	*	*	7,927
Tracheo-esophageal fistula/Esophageal atresia	599,407	69	11.7	*	11.7	*	*	*	*	7,927
Omphalocele/Gastroschisis	599,407	213	36.0	45.6	37.2	31.4	26.9	*	*	7,927
Other gastrointestinal anomalies	599,407	199	33.6	38.8	33.9	25.5	33.4	*	*	7,927
Malformed genitalia	599,407	330	55.8	63.9	45.0	50.9	70.1	63.0	*	7,927
Renal agenesis	599,407	75	12.7	*	12.2	*	*	*	*	7,927
Other urogenital anomalies	599,407	375	63.4	54.8	63.9	70.4	59.3	67.5	*	7,927
Cleft lip/palate	599,407	260	44.0	38.8	49.4	43.4	33.4	58.5	*	7,927
Polydactyly/Syndactyly/Adactyly	599,407	1,337	226.0	233.5	232.7	200.7	240.4	222.8	228.1	7,927
Clubfoot	599,407	227	38.4	34.2	45.0	32.9	38.8	*	*	7,927
Diaphragmatic hernia	599,407	61	10.3	*	*	*	*	*	*	7,927
Other musculoskeletal/integumental anomalies	599,407	1,133	191.6	187.9	188.3	182.7	221.0	189.1	*	7,927
Down's syndrome	599,407	150	25.4	19.8	13.9	15.0	31.3	67.5	217.2	7,927
Other chromosomal anomalies	599,407	149	25.2	21.3	23.3	22.5	28.0	*	*	7,927

* 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 birth certificates. In this table all women (including Hispanic women) are classified only according to their 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, 1997

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	45-54 years
			Total	15-17 years	18-19 years						
	Number										
All live births											
All races [1]	3,880,894	10,121	483,220	180,154	303,066	942,048	1,069,436	886,798	409,710	76,084	3,477
White, total	3,072,640	5,021	338,272	120,165	218,107	720,546	871,636	735,571	337,423	61,417	2,754
White, non-Hispanic	2,333,363	2,240	219,857	71,868	147,989	500,928	674,498	603,304	280,393	49,908	2,235
Black, total	599,913	4,712	128,539	53,634	74,905	182,600	135,529	94,123	45,069	8,981	360
Black, non-Hispanic	581,431	4,613	125,343	52,338	73,005	177,494	130,942	90,637	43,434	8,624	344
Hispanic [2]	709,767	2,833	118,122	48,416	69,706	216,152	188,669	121,539	51,601	10,405	446
Live births in single deliveries											
All races [1]	3,770,020	10,004	475,820	177,779	298,041	922,419	1,039,738	854,289	391,945	72,905	2,900
White, total	2,984,532	4,972	333,583	118,722	214,861	706,805	848,041	708,017	322,208	58,676	2,230
White, non-Hispanic	2,260,786	2,213	216,836	71,037	145,799	490,829	655,167	579,405	267,068	47,514	1,754
Black, total	581,394	4,653	125,975	52,752	73,223	177,402	130,633	90,397	43,290	8,704	340
Black, non-Hispanic	563,436	4,556	122,835	51,473	71,362	172,444	126,187	87,019	41,711	8,360	324
Hispanic [2]	695,430	2,811	116,463	47,796	68,667	212,603	184,687	118,339	49,995	10,115	417
Live births in twin deliveries											
All races [1]	104,137	117	7,298	2,330	4,968	19,188	28,083	29,905	16,113	2,939	494
White, total	82,090	49	4,626	1,422	3,204	13,401	22,161	25,128	13,755	2,529	441
White, non-Hispanic	67,191	27	2,988	822	2,166	9,844	18,063	21,683	11,982	2,200	404
Black, total	17,989	59	2,525	858	1,667	5,111	4,754	3,594	1,663	263	20
Black, non-Hispanic	17,472	57	2,469	841	1,628	4,964	4,616	3,489	1,607	250	20
Hispanic [2]	13,821	22	1,629	608	1,021	3,471	3,840	3,038	1,521	277	23
Live births in higher-order multiple deliveries [3]											
All races [1]	6,737	-	102	45	57	441	1,615	2,604	1,652	240	83
White, total	6,018	-	63	21	42	340	1,434	2,426	1,460	212	83
White, non-Hispanic	5,386	-	33	9	24	255	1,268	2,216	1,343	194	77
Black, total	530	-	39	24	15	87	142	132	116	14	-
Black, non-Hispanic	523	-	39	24	15	86	139	129	116	14	-
Hispanic [2]	516	-	30	12	18	78	142	162	85	13	6
	Ratio per 1,000 live births										
All multiple births											
All races [1]	28.6	11.6	15.3	13.2	16.6	20.8	27.8	36.7	43.4	41.8	165.9
White, total	28.7	9.8	13.9	12.0	14.9	19.1	27.1	37.5	45.1	44.6	190.3
White, non-Hispanic	31.1	12.1	13.7	11.6	14.8	20.2	28.7	39.6	47.5	48.0	215.2
Black, total	30.9	12.5	19.9	16.4	22.5	28.5	36.1	39.6	39.5	30.8	55.6
Black, non-Hispanic	30.9	12.4	20.0	16.5	22.5	28.5	36.3	39.9	39.7	30.6	58.1
Hispanic [2]	20.2	7.8	14.0	12.8	14.9	16.4	21.1	26.3	31.1	27.9	65.0
Twin births											
All races [1]	26.8	11.6	15.1	12.9	16.4	20.4	26.3	33.7	39.3	38.6	142.1
White, total	26.7	9.8	13.7	11.8	14.7	18.6	25.4	34.2	40.8	41.2	160.1
White, non-Hispanic	28.8	12.1	13.6	11.4	14.6	19.7	26.8	35.9	42.7	44.1	180.8
Black, total	30.0	12.5	19.6	16.0	22.3	28.0	35.1	38.2	36.9	29.3	55.6
Black, non-Hispanic	30.0	12.4	19.7	16.1	22.3	28.0	35.3	38.5	37.0	29.0	58.1
Hispanic [2]	19.5	7.8	13.8	12.6	14.6	16.1	20.4	25.0	29.5	26.6	51.6
	Ratio per 100,000 live births										
Higher-order multiple births [3]											
All races [1]	173.6	*	21.1	25.0	18.8	46.8	151.0	293.6	403.2	315.4	2387.1
White, total	195.9	*	18.6	17.5	19.3	47.2	164.5	329.8	432.7	345.2	3013.8
White, non-Hispanic	230.8	*	15.0	*	16.2	50.9	188.0	367.3	479.0	388.7	3445.2
Black, total	88.3	*	30.3	44.7	*	47.6	104.8	140.2	257.4	*	*
Black, non-Hispanic	90.0	*	31.1	45.9	*	48.5	106.2	142.3	267.1	*	*
Hispanic [2]	72.7	*	25.4	*	*	36.1	75.3	133.3	164.7	*	*

- Quantity zero.
* Figure does not meet standards of reliability or precision.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin of any race.
3 Births in greater than twin deliveries.

Technical notes

Source of data

Data shown in this report for 1997 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 of 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). From 1964 to 1996, mother's age was edited for ages 10–49 years. Births reported to occur to mothers younger than age 10 or older than age 49 years 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). Beginning in 1997, age of mother is edited for ages 10–54 years. A review and verification of unedited birth data for 1996 showed that the vast majority of births reported as occurring to women aged 50 years and over were to women aged 50–54 years. The numbers of births to women aged 50–54 years are too small for computing age-specific birth rates. These births have been included with births to women aged 45–49 years for computing birth rates.

In 1997 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 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 (68). They include the 1989 revision of the birth certificate, which includes many more health questions that are directly associated with the mother. In 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 1997. Although this proportion has stabilized and declined slightly in the 1990's, it is still higher than in 1977, 11 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.

Race of mother is reported by all registration areas in eight categories: white, black, American Indian, Chinese, Japanese, Hawaiian, Filipino, and "other" Asian or Pacific Islander (API). In addition, eight States (California, Hawaii, Illinois, Minnesota, New Jersey, New York, Texas, and Washington) report data on API subgroups included in the "other" API category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API).

In 1997 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 according to the specific race of the mother on the preceding record with a known race of mother. This was necessary for just 0.4 percent of births in 1997.

Hispanic origin and race are reported independently on the birth certificate, as noted previously. 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. 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 (5). Puerto Rico and American Samoa do not collect this information. The percent of records for which Hispanic origin of the parents was not reported in 1997 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 through 1996, birth certificates in 45 States and the District of Columbia included a question about the mother's marital status. Beginning in 1997, California added a direct question to their birth certificate; thus in 1997, all but four States (Connecticut, Michigan, Nevada, and New York) included a direct question on their birth certificates. Nevada asks for the mother's marital status through the electronic birth registration process but this item is not included on certified or paper copies of the birth certificate.

In the three States that used inferential procedures to compile birth statistics by marital status in 1997, 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 prior to 1997 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 (19). 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; this is now the key indicator in the nonreporting States. The inferential procedures in effect since 1980 represent 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 (23).

The procedures for reporting marital status in California, Nevada, and New York City changed beginning January 1, 1997. Up to that date, the mother's marital status was inferred in California by comparing the surnames of the mother, father, and child. Beginning in 1997, two changes were implemented. First, a law went into effect mandating that the father's name could not be included on the birth certificate unless the parents were married or a paternity affidavit was filed. Second, the marital status of women giving birth in California is now determined by a direct question on the birth certificate, "Mother married at any time during this pregnancy?" similar to the question asked in most other States. Reporting procedures for marital status in California are now essentially the same as those in most other States.

Procedures for inferring marital status for births in New York City changed effective in 1997; New York City is a separate registration area. Beginning in 1997, the mother is assumed to be unmarried if the father's name is missing from the birth certificate, or if a paternity affidavit was filed; these are the same procedures that have been in effect in the balance of New York State for many years. Through 1996, the inferential criteria had included a comparison of the surnames of the mother and father (21,22).

Data on marital status for Nevada prior to 1997 are based on inferential procedures with the key criterion relying on a comparison of parental surnames. Beginning in 1997, Nevada is collecting information on the mother's marital status through the electronic birth registration process. This item is not included, however, on certified or paper copies of the birth certificate. Because of a recently discovered computer processing error, the data previously reported by Nevada for 1995 and 1996 substantially overestimated the number and percent of births to unmarried women. Corrected summary data are now available. The percent unmarried was 38.8 percent in 1995 and 39.3 percent in 1996. Based on the direct question, 35.5 percent of births in 1997 were to unmarried women. If the inferential procedures had remained in effect in 1997, however, Nevada estimates that 39.8 percent of births in that year were to unmarried women (slightly higher than in 1996). The change in reporting procedures therefore accounts for nearly all of the reported change in nonmarital births in Nevada in 1997.

Because California and New York City together account for 17 percent of U.S. births, data by marital status for these areas were examined carefully to determine the effect of these reporting changes on the national data. The reporting changes had little impact on the total numbers and proportions of nonmarital births for the United States as a whole, and relatively little impact on the overall data for California. The changes affected the overall data for New York State (including New York City) as well as the data by age. In general, there was a tendency for the proportion unmarried to increase between 1996 and 1997 for women aged 15–24 years, and for the proportions to decrease for women aged 30–44 years; changes for women aged 25–29 years were not consistent. The contrasts by age were very pronounced in the data for California. Large decreases in nonmarital births were found for all age groups for New York.

The tendency for considerable increases in the proportions of nonmarital births among teenagers and the concurrent decline for older women in California is a direct reflection of the changes in reporting procedures in that State. Previously, unmarried women were frequently listing the father's name on the birth certificate. In many cases, especially among younger Hispanic and Asian or Pacific Islander women, the inferential procedures identified these births incorrectly as occurring to married women, a result of variations in naming practices among these population groups. National and State laws now preclude the father's name from being listed unless the parents are married or a paternity affidavit has been filed. Among older married women who have retained their birth surname after marriage, particularly well-educated white women, there was a tendency for their births to be considered nonmarital, because the surnames did not match. For California, the changes in nonmarital birth patterns by age were compensating, so that the overall levels of nonmarital births for California in 1997 are only moderately higher than in 1996. For New York, the changes in inferential procedures affected all age groups, identifying fewer births as nonmarital in 1997; without these changes, levels of nonmarital births would have been unchanged (21,22).

The use of inferential marital status data together with information from a direct question 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 until 1997) has been published (69). 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. The results of this evaluation show that trends in birth rates for unmarried women for rates computed on the basis of estimated data and on the basis of inferred data are essentially the same.

The mother's marital status was not reported in 1997 on 0.05 percent of the birth records in the 46 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 primary measure used to determine the gestational age of the newborn 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. These data are edited for LMP-based gestational ages that are clearly inconsistent with the infant's plurality and birthweight (see below), but reporting problems for this item persist and may occur more frequently among some subpopulations and among births with shorter gestations (59, 70).

The U.S. Standard Certificate of Live Birth includes an item, "clinical estimate of gestation," that is being compared with length of gestation computed from the date 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 4.9 percent of the births in 1997 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 300 births or less than 0.01 percent of all birth records in 1997. The levels of the adjustments in 1997 data were similar to those for 1996 and earlier years (19).

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. The proportion of VBAC deliveries among births in Hawaii in 1997 is overstated because of incomplete reporting in some hospitals.

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 1997 shown in tables 1, 3–6, 8–9, and 13–14 are based on populations estimated as of July 1, 1997. These populations are shown in tables II and III. The population estimates have been published by the U.S. Bureau of the Census (13) 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 (71).

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 that are consistent with the U.S. populations (72). 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 1997 estimates. Rates for unmarried women shown in tables 17 and 18 are based on distributions of the population by marital status as of March 1997 provided by the U.S. Bureau of the Census (73), which have been adjusted to July 1997 population levels (13) by the Division of Vital Statistics, NCHS (23).

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, 1997 (13). Rates for Hispanic subgroups are based on special population estimates that are presented in table III in the Technical notes (74).

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 (1.4 percent) were actually to

Table I. Percent of birth records on which specified items were not stated: United States and each State, Puerto Rico, Virgin Islands, Guam, and American Samoa: 1997

[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[1]	3,880,894	0.0	0.0	0.2	14.5	14.9	1.4	15.6	1.5	0.5	1.0	2.6	3.4
Alabama	60,914	–	0.0	0.1	24.7	24.8	0.0	24.7	0.4	0.0	0.1	0.5	0.9
Alaska	9,947	0.0	0.0	0.1	14.1	16.0	0.2	14.7	1.0	0.1	0.1	1.5	1.0
Arizona	75,699	0.0	0.1	0.3	21.6	23.7	1.3	24.1	2.1	0.3	0.2	1.3	1.7
Arkansas	36,478	0.0	0.1	0.3	20.4	21.2	0.2	20.7	0.8	0.2	0.4	2.4	3.2
California	524,840	0.0	0.1	0.1	7.5	6.6	0.5	6.0	1.3	0.1	[2]5.0	1.2	2.6
Colorado	56,533	–	0.0	0.2	10.0	10.6	0.1	10.8	1.2	0.1	0.0	0.7	1.4
Connecticut	43,109	0.0	0.0	0.4	9.3	11.0	6.1	14.8	4.8	8.2	1.2	6.7	10.4
Delaware	10,253	0.0	0.0	0.3	29.1	30.3	0.5	30.1	0.3	0.2	0.2	0.6	0.8
District of Columbia	7,927	0.0	–	0.0	47.5	54.3	1.9	48.0	9.5	0.4	0.5	15.8	17.9
Florida	192,383	0.0	–	0.1	18.1	18.1	0.1	19.3	0.4	0.0	0.1	1.1	1.7
Georgia	118,221	0.0	0.0	0.2	18.5	18.7	0.9	19.2	1.3	0.3	0.1	2.0	1.7
Hawaii	17,393	0.0	0.0	0.1	8.5	8.7	0.3	8.9	0.4	0.0	5.3	2.5	3.1
Idaho	18,582	–	0.0	0.2	8.0	11.3	1.5	11.3	8.1	0.9	0.6	4.0	12.7
Illinois	180,803	0.0	0.0	0.1	15.4	16.9	0.0	16.9	0.7	0.1	0.2	1.6	2.0
Indiana	83,436	0.3	0.1	0.2	13.0	13.1	0.4	13.3	1.0	0.7	0.1	2.0	3.4
Iowa	36,659	0.0	0.0	0.3	12.3	14.3	1.0	14.9	1.5	0.1	0.1	1.3	4.4
Kansas	37,289	0.0	0.0	0.1	10.6	10.9	0.9	12.0	0.3	0.1	0.1	0.6	1.0
Kentucky	53,203	0.0	0.0	0.0	22.1	22.7	0.0	24.1	0.2	0.2	0.2	0.9	1.0
Louisiana	66,025	0.0	0.0	0.0	23.1	23.3	0.0	23.2	0.1	0.0	0.1	0.3	0.4
Maine	13,669	0.0	–	–	10.1	14.9	4.2	18.9	0.7	0.2	0.1	0.6	0.7
Maryland	70,215	–	0.0	0.9	8.3	10.7	1.2	6.8	4.8	3.3	1.5	11.4	17.2
Massachusetts	80,364	0.0	0.0	0.1	8.0	7.8	0.6	7.0	0.5	0.5	0.5	1.1	1.0
Michigan	133,714	0.1	0.1	0.1	16.6	18.5	5.3	22.8	1.2	0.5	0.1	3.6	4.2
Minnesota	64,499	0.0	0.0	–	9.2	11.5	5.2	15.4	2.0	0.3	1.0	4.7	4.1
Mississippi	41,533	0.0	0.0	0.1	25.4	24.6	0.1	25.3	0.2	0.1	0.2	0.5	0.8
Missouri	74,037	–	0.0	0.2	18.5	18.7	0.1	19.0	0.9	0.4	0.2	1.9	3.3
Montana	10,849	0.0	0.5	–	9.7	10.7	3.2	13.7	0.2	0.1	0.0	0.6	0.5
Nebraska	23,319	–	–	0.0	12.1	12.6	2.3	14.2	0.1	–	0.0	0.3	0.6
Nevada	26,911	0.0	0.0	0.8	23.3	24.9	0.7	23.1	2.1	0.8	0.8	4.0	9.9
New Hampshire	14,313	0.0	0.0	0.0	8.0	8.7	3.0	10.8	0.8	0.1	0.4	2.9	3.7
New Jersey	113,279	0.1	0.1	0.3	9.0	10.9	0.5	9.7	2.3	0.2	0.2	3.6	3.9
New Mexico	26,871	–	0.0	2.1	26.6	25.9	0.0	25.9	4.4	0.5	0.3	4.8	4.4
New York	257,238	0.1	0.1	0.6	17.9	18.2	9.6	26.0	1.4	0.3	0.2	8.9	5.8
North Carolina	107,015	0.0	0.0	0.0	17.4	17.4	0.0	17.3	0.1	0.0	0.1	0.6	0.6
North Dakota	8,353	–	–	0.0	8.7	9.9	2.9	12.6	0.1	–	0.1	0.4	0.3
Ohio	152,033	0.0	0.1	0.2	11.5	13.9	0.5	13.5	0.5	0.1	0.0	0.4	1.7
Oklahoma	48,269	0.0	0.0	0.1	17.3	19.0	0.4	19.5	3.6	4.1	3.6	10.7	11.3
Oregon	43,809	0.0	1.0	0.1	10.7	4.3	0.2	4.6	1.0	0.0	0.0	0.4	0.5
Pennsylvania	144,224	0.0	0.0	0.6	5.5	3.4	0.6	3.1	2.0	0.3	0.2	1.7	2.9
Rhode Island	12,455	0.0	–	0.2	13.5	14.1	13.0	23.2	2.8	2.2	2.2	8.0	8.6

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, Guam, and American Samoa: 1997—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					
South Carolina	52,214	0.0	0.0	0.3	28.5	28.7	0.1	28.6	4.2	0.4	0.2	1.9	2.0
South Dakota	10,173	–	–	–	11.9	12.1	0.2	12.7	0.3	0.0	0.0	0.6	0.6
Tennessee	74,478	–	0.0	0.1	15.9	16.2	0.1	16.1	0.2	0.1	0.2	1.3	1.6
Texas	333,974	0.0	0.0	0.4	15.7	15.6	0.3	15.6	1.0	0.9	0.4	1.9	4.5
Utah	43,059	–	0.0	0.1	9.8	10.9	0.3	9.2	0.9	0.1	0.1	1.0	1.2
Vermont	6,607	–	0.0	0.0	6.0	9.4	3.0	10.6	2.1	0.1	0.2	3.1	1.0
Virginia	91,862	0.0	0.0	0.1	17.9	19.1	0.1	18.0	0.4	0.2	0.3	0.9	2.0
Washington	78,190	0.0	0.0	0.7	11.6	11.9	3.2	12.1	10.4	3.8	1.5	9.2	12.9
West Virginia	20,730	0.1	0.0	0.1	13.0	15.9	0.0	15.9	0.4	0.2	0.3	3.5	3.2
Wisconsin	66,557	0.0	–	0.0	27.6	27.7	0.0	27.7	0.1	0.0	0.0	0.2	0.3
Wyoming	6,387	–	–	0.1	13.6	13.8	0.3	13.8	0.3	0.0	0.0	0.4	0.4
Puerto Rico	64,109	–	0.0	–	2.7	3.0	---	---	0.2	0.0	0.0	0.2	0.1
Virgin Islands	2,017	–	0.2	–	19.8	21.7	5.4	31.1	1.6	0.3	0.6	0.7	1.6
Guam	4,308	0.1	0.3	0.7	24.8	26.8	1.9	28.2	2.1	1.5	0.9	3.5	4.0
American Samoa	1,634	–	---	4.8	34.6	36.9	---	---	---	---	---	---	---

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, Guam, and American Samoa: 1997—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[1]	3,880,894	0.1	0.6	1.2	1.5	1.4	8.3	0.8	1.0	0.9	2.1	1.5
Alabama	60,914	0.0	0.3	[3]0.1	0.2	0.2	4.4	0.1	0.1	0.2	0.1	0.2
Alaska	9,947	0.3	0.5	0.1	0.3	0.3	1.4	0.1	0.1	0.3	0.1	0.1
Arizona	75,699	0.1	0.4	0.0	1.9	2.1	10.5	0.0	0.0	0.2	0.0	0.4
Arkansas	36,478	0.2	4.6	0.4	1.0	1.1	9.8	0.2	0.4	0.6	0.3	0.3
California	524,840	0.0	- - -	0.0	- - -	- - -	- - -	0.0	0.0	0.0	0.0	0.0
Colorado	56,533	0.0	0.3	0.0	0.2	0.2	4.0	0.0	0.0	0.0	0.0	0.1
Connecticut	43,109	0.0	3.4	14.9	9.8	9.5	23.7	13.1	15.2	7.3	21.0	22.4
Delaware	10,253	0.1	0.3	0.0	0.1	0.1	0.9	0.0	0.0	0.1	0.1	0.1
District of Columbia	7,927	0.1	1.0	–	0.1	0.1	18.8	–	–	0.1	0.0	–
Florida	192,383	0.0	0.2	0.0	0.1	0.1	4.2	0.0	0.0	0.6	0.0	0.0
Georgia	118,221	0.0	0.5	0.4	0.2	0.3	4.7	0.0	0.0	0.4	0.0	0.0
Hawaii	17,393	1.7	4.6	20.2	0.3	0.3	13.8	13.1	7.6	19.4	21.0	22.4
Idaho	18,582	0.1	0.7	0.7	1.8	2.0	10.8	0.5	0.7	0.2	0.4	0.5
Illinois	180,803	0.1	0.3	0.1	1.0	0.2	4.0	0.0	0.1	0.4	0.1	0.1
Indiana	83,436	0.4	0.4	0.2	- - -	0.4	4.0	0.1	0.3	0.4	0.8	0.8
Iowa	36,659	0.0	0.3	0.1	2.2	2.5	6.6	0.0	0.1	0.3	0.1	0.1
Kansas	37,289	0.0	0.3	[4].4	0.5	0.5	0.7	0.3	0.3	2.5	0.3	0.3
Kentucky	53,203	0.1	0.4	6.7	5.3	5.2	9.4	4.0	7.1	4.8	12.5	11.7
Louisiana	66,025	0.1	0.3	0.1	0.2	0.2	7.0	0.1	0.1	0.1	0.1	0.1
Maine	13,669	0.1	0.1	0.1	1.8	2.7	1.1	0.0	0.0	0.1	0.1	0.1
Maryland	70,215	0.1	0.5	0.0	1.1	1.6	12.6	0.0	0.0	0.1	0.0	0.0
Massachusetts	80,364	0.5	0.6	1.2	0.4	0.4	2.0	1.1	1.2	0.8	2.1	1.9
Michigan	133,714	0.3	0.4	0.4	1.5	1.2	9.4	0.1	0.3	0.6	0.6	0.7
Minnesota	64,499	0.1	0.7	7.0	6.1	6.2	15.2	5.2	6.2	4.4	7.1	7.4
Mississippi	41,533	0.0	0.5	0.1	0.2	0.2	5.3	0.1	0.1	0.1	0.1	0.1
Missouri	74,037	0.1	0.4	0.1	0.6	0.6	3.7	0.0	0.0	0.5	0.0	0.0
Montana	10,849	0.0	0.3	0.1	1.3	1.4	0.5	0.1	0.1	0.6	0.1	0.1
Nebraska	23,319	0.0	0.2	0.0	1.0	1.0	1.8	0.0	0.0	0.2	[7].0	0.0
Nevada	26,911	0.0	1.5	1.4	1.5	1.6	9.8	0.2	0.7	0.7	2.2	2.5
New Hampshire	14,313	0.3	0.6	0.3	0.3	0.2	6.5	0.2	0.3	0.2	0.4	0.4
New Jersey	113,279	0.1	0.3	2.1	1.4	1.4	4.5	0.2	2.1	0.4	24.2	2.6
New Mexico	26,871	0.3	3.5	0.2	2.0	2.1	11.2	0.0	0.0	0.4	0.0	. . .
New York	257,238	0.1	0.3	1.1	[5]4.4	0.3	9.7	0.3	0.5	0.4	[8]0.8	0.9
North Carolina	107,015	0.0	0.3	0.0	0.1	0.1	2.8	0.0	0.0	0.3	0.0	0.0
North Dakota	8,353	0.1	0.3	0.1	0.5	0.8	1.5	0.1	0.1	0.7	0.1	0.1
Ohio	152,033	0.1	0.2	0.1	0.3	0.2	3.0	0.0	0.1	0.4	0.1	0.1
Oklahoma	48,269	0.7	5.5	28.8	20.8	21.0	31.4	24.2	28.0	21.2	35.0	35.8
Oregon	43,809	0.0	0.4	0.5	0.6	0.6	3.0	0.0	0.0	0.2	0.0	0.0
Pennsylvania	144,224	0.1	0.4	0.1	0.8	0.4	6.7	0.0	0.1	0.1	0.6	0.5
Rhode Island	12,455	0.3	0.4	4.9	2.5	2.7	10.7	4.9	5.1	0.2	12.1	12.3

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, Guam, and American Samoa: 1997—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
South Carolina	52,214	0.0	0.3	0.0	0.2	0.3	3.5	0.0	0.0	0.6	0.0	0.0
South Dakota	10,173	0.0	0.3	0.0	- - -	- - -	2.0	0.0	0.0	0.1	0.0	0.0
Tennessee	74,478	0.1	0.3	0.1	0.3	0.4	4.5	0.1	0.1	0.5	0.0	0.0
Texas	333,974	0.1	. . .	[6]1.2	0.2	0.2	18.9	0.1	[9].1	0.6	[7].1	0.1
Utah	43,059	0.1	0.3	0.2	0.4	0.4	5.9	0.0	0.1	0.0	0.3	0.5
Vermont	6,607	0.3	0.2	0.1	0.9	0.3	1.5	0.1	0.1	0.1	0.1	0.1
Virginia	91,862	0.1	0.4	0.1	0.2	0.1	7.7	0.1	0.1	0.3	0.3	0.0
Washington	78,190	0.2	0.5	1.7	4.4	13.5	22.9	1.3	4.3	0.5	5.1	4.9
West Virginia	20,730	0.0	0.2	0.5	0.7	2.6	7.8	0.0	0.5	0.2	0.8	0.5
Wisconsin	66,557	0.0	0.4	0.1	0.1	0.1	1.5	0.0	0.1	0.0	[10]0.1	0.1
Wyoming	6,387	0.0	0.2	0.0	1.0	1.0	1.2	0.0	–	0.2	0.0	–
Puerto Rico	64,109	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Virgin Islands	2,017	0.1	2.4	8.3	1.1	1.1	9.5	4.1	9.6	1.5	10.5	10.1
Guam	4,308	0.2	1.9	12.6	3.1	3.3	28.6	11.9	13.3	3.5	15.3	16.0
American Samoa	1,634	0.2	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

0.0 Quantity more than zero but less than 0.05.

– Quantity zero.

- - - Data not available.

[1]Excludes data for Puerto Rico, Virgin Islands, and Guam.

[2]California reports date last normal menses began but does not report clinical estimate of gestation.

[3]Alabama does not report renal disease.

[4]Kansas does not report Rh sensitization.

[5]New York City (but not New York State) reports tobacco use.

[6]Texas does not report genital herpes and uterine bleeding.

[7]Nebraska and Texas do not report birth injury.

[8]New York City does not report assisted ventilation less than 30 minutes or assisted ventilation of 30 minutes or more.

[9]Texas does not report anesthetic complications and fetal distress.

[10]Wisconsin does not report fetal alcohol syndrome.

Table II. Estimated total population by race, and estimated female population by age and race: United States, 1997

[Populations estimated as of July 1]

Age	All races	White	Black	American Indian	Asian or Pacific Islander
Total population	267,636,061	221,334,048	33,947,084	2,322,044	10,032,885
Female population					
15–44 years	59,688,117	48,081,235	8,489,065	558,304	2,559,513
10–14 years	9,283,112	7,343,738	1,444,504	117,894	376,976
15–19 years	9,241,412	7,313,274	1,457,189	108,713	362,236
15–17 years	5,615,997	4,439,844	881,596	68,817	225,740
18–19 years	3,625,415	2,873,430	575,593	39,896	136,496
20–24 years	8,532,461	6,750,471	1,313,327	91,290	377,373
25–29 years	9,398,632	7,476,133	1,362,390	90,965	469,144
30–34 years	10,400,509	8,380,656	1,464,368	90,478	465,007
35–39 years	11,338,341	9,278,207	1,515,068	92,041	453,025
40–44 years	10,776,762	8,882,494	1,376,723	84,817	432,728
45–49 years	9,396,051	7,826,939	1,127,973	68,960	372,179

SOURCE: Hollmann FW, Kuzmeskus LB, Perkins RC, Weber EA. U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. U.S. Bureau of the Census. PPL-91R. Census file NESTV97. Washington: U.S. Department of Commerce. 1998.

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, 1997

[Populations estimated as of July 1]

	Hispanic					Non-Hispanic		
Age	Total	Mexican	Puerto Rican	Cuban	Other Hispanic[1]	Total[2]	White	Black
Total population	29,347,806	18,649,659	3,070,441	1,270,140	6,357,566	238,288,182	194,571,380	32,298,025
Female population								
15–44 years	6,905,020	4,280,140	773,829	224,704	1,626,347	52,783,085	41,803,918	8,090,724
10–14 years	1,226,087	831,089	158,779	24,381	211,838	8,057,024	6,234,838	1,373,508
15–19 years	1,213,370	768,679	161,010	24,179	259,502	8,028,041	6,210,606	1,388,650
15–17 years	730,143	461,327	102,167	12,937	153,712	4,885,849	3,777,361	840,473
18–19 years	483,227	307,352	58,843	11,242	105,790	3,142,192	2,433,245	548,177
20–24 years	1,173,235	777,528	111,628	30,475	253,604	7,359,218	5,678,109	1,249,135
25–29 years	1,166,826	756,901	122,034	29,218	258,673	8,231,801	6,415,665	1,295,990
30–34 years	1,241,080	757,392	141,342	50,680	291,666	9,159,418	7,253,480	1,390,768
35–39 years	1,147,785	653,284	129,945	48,410	316,146	10,190,558	8,236,321	1,446,934
40–44 years	962,724	566,356	107,870	41,742	246,756	9,814,049	8,009,737	1,319,247
45–49 years	746,480	434,267	79,905	36,986	195,322	8,649,573	7,149,004	1,084,124

[1]Includes Central and South American and other and unknown Hispanic.

[2]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: Hollmann FW, Kuzmeskus LB, Perkins RC, Weber EA. U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. U.S. Bureau of the Census. PPL-91R. Census file NESTV97. Washington: U.S. Department of Commerce. 1998.

Hispanic mothers (see table I). In computing the rates, the census-based populations with origin not stated are 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 (table I). In computing birth rates by age of father, births where age of father is 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 2–8** 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

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

2. The "true" rate lies between

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

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 1997 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 49.3 and 78.5 percent. The 1996 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 1996 and 1997 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 (74).

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/or 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 (75).

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 lbs. 14 oz.).

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 10th percentile for gestational age using a standard weight for age chart.

Renal disease—Kidney disease.

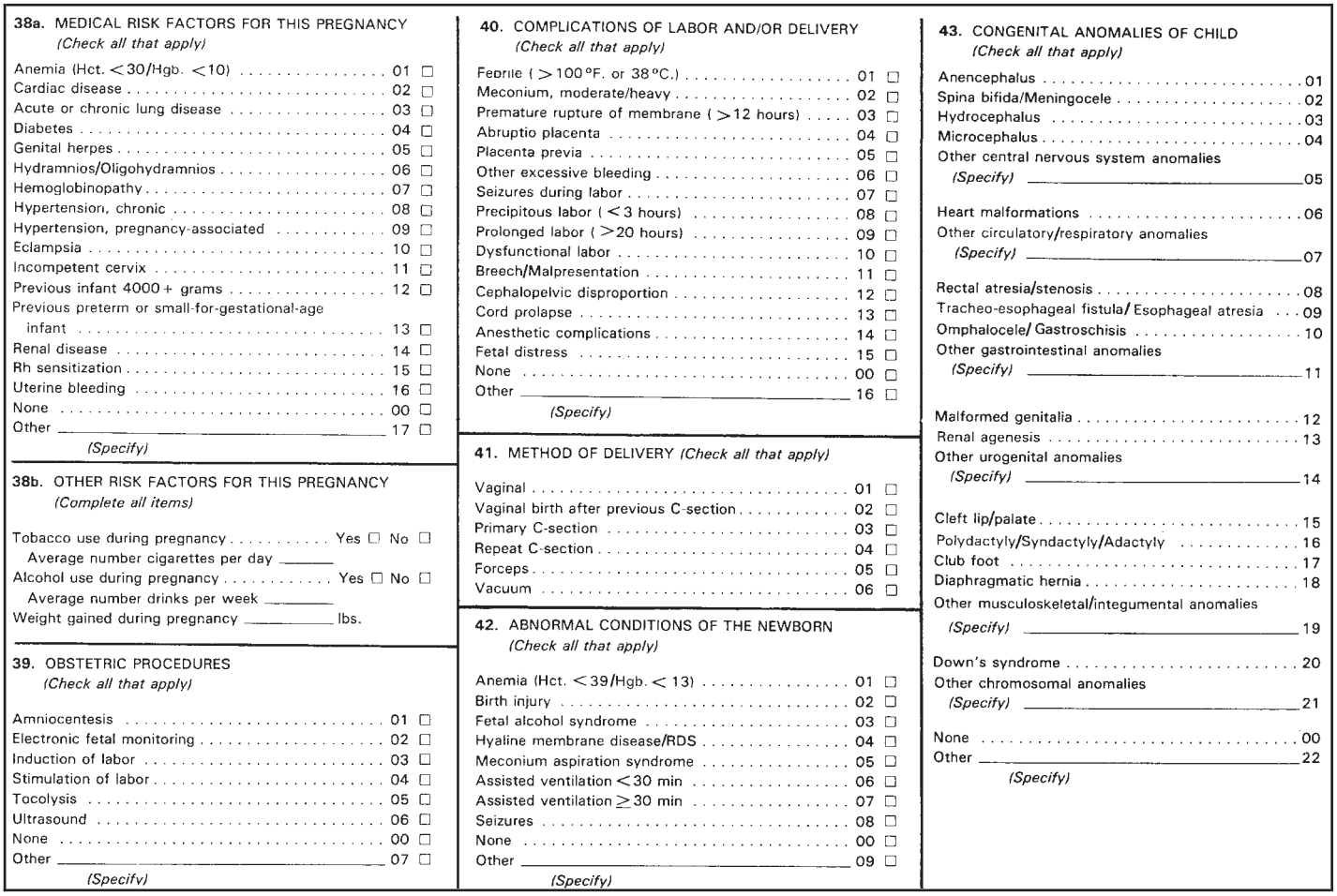
Rh sensitization—The process or state of becoming sensitized to the Rh factor as when an Rh-negative woman is pregnant with an Rh-positive fetus.

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.



38a. MEDICAL RISK FACTORS FOR THIS PREGNANCY
(Check all that apply)

Anemia (Hct. < 30/Hgb. < 10) . . . 01 ☐
Cardiac disease . . . 02 ☐
Acute or chronic lung disease . . . 03 ☐
Diabetes . . . 04 ☐
Genital herpes . . . 05 ☐
Hydramnios/Oligohydramnios . . . 06 ☐
Hemoglobinopathy . . . 07 ☐
Hypertension, chronic . . . 08 ☐
Hypertension, pregnancy-associated . . . 09 ☐
Eclampsia . . . 10 ☐
Incompetent cervix . . . 11 ☐
Previous infant 4000+ grams . . . 12 ☐
Previous preterm or small-for-gestational-age infant . . . 13 ☐
Renal disease . . . 14 ☐
Rh sensitization . . . 15 ☐
Uterine bleeding . . . 16 ☐
None . . . 00 ☐
Other _____ 17 ☐
(Specify)

38b. OTHER RISK FACTORS FOR THIS PREGNANCY
(Complete all items)

Tobacco use during pregnancy . . . Yes ☐ No ☐
Average number cigarettes per day _____
Alcohol use during pregnancy . . . Yes ☐ No ☐
Average number drinks per week _____
Weight gained during pregnancy _____ lbs.

39. OBSTETRIC PROCEDURES
(Check all that apply)

Amniocentesis . . . 01 ☐
Electronic fetal monitoring . . . 02 ☐
Induction of labor . . . 03 ☐
Stimulation of labor . . . 04 ☐
Tocolysis . . . 05 ☐
Ultrasound . . . 06 ☐
None . . . 00 ☐
Other _____ 07 ☐
(Specify)

40. COMPLICATIONS OF LABOR AND/OR DELIVERY
(Check all that apply)

Febrile (> 100 °F. or 38 °C.) . . . 01 ☐
Meconium, moderate/heavy . . . 02 ☐
Premature rupture of membrane (> 12 hours) . . . 03 ☐
Abruptio placenta . . . 04 ☐
Placenta previa . . . 05 ☐
Other excessive bleeding . . . 06 ☐
Seizures during labor . . . 07 ☐
Precipitous labor (< 3 hours) . . . 08 ☐
Prolonged labor (> 20 hours) . . . 09 ☐
Dysfunctional labor . . . 10 ☐
Breech/Malpresentation . . . 11 ☐
Cephalopelvic disproportion . . . 12 ☐
Cord prolapse . . . 13 ☐
Anesthetic complications . . . 14 ☐
Fetal distress . . . 15 ☐
None . . . 00 ☐
Other _____ 16 ☐
(Specify)

41. METHOD OF DELIVERY *(Check all that apply)*

Vaginal . . . 01 ☐
Vaginal birth after previous C-section . . . 02 ☐
Primary C-section . . . 03 ☐
Repeat C-section . . . 04 ☐
Forceps . . . 05 ☐
Vacuum . . . 06 ☐

42. ABNORMAL CONDITIONS OF THE NEWBORN
(Check all that apply)

Anemia (Hct. < 39/Hgb. < 13) . . . 01 ☐
Birth injury . . . 02 ☐
Fetal alcohol syndrome . . . 03 ☐
Hyaline membrane disease/RDS . . . 04 ☐
Meconium aspiration syndrome . . . 05 ☐
Assisted ventilation < 30 min . . . 06 ☐
Assisted ventilation ≥ 30 min . . . 07 ☐
Seizures . . . 08 ☐
None . . . 00 ☐
Other _____ 09 ☐
(Specify)

43. CONGENITAL ANOMALIES OF CHILD
(Check all that apply)

Anencephalus . . . 01
Spina bifida/Meningocele . . . 02
Hydrocephalus . . . 03
Microcephalus . . . 04
Other central nervous system anomalies
(Specify) _____ 05

Heart malformations . . . 06
Other circulatory/respiratory anomalies
(Specify) _____ 07

Rectal atresia/stenosis . . . 08
Tracheo-esophageal fistula/ Esophageal atresia . . . 09
Omphalocele/ Gastroschisis . . . 10
Other gastrointestinal anomalies
(Specify) _____ 11

Malformed genitalia . . . 12
Renal agenesis . . . 13
Other urogenital anomalies
(Specify) _____ 14

Cleft lip/palate . . . 15
Polydactyly/Syndactyly/Adactyly . . . 16
Club foot . . . 17
Diaphragmatic hernia . . . 18
Other musculoskeletal/integumental anomalies
(Specify) _____ 19

Down's syndrome . . . 20
Other chromosomal anomalies
(Specify) _____ 21

None . . . 00
Other _____ 22
(Specify)

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

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 degrees 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.

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 (5), triplet births (64), teenage birth rates by State (6), birth rates by educational attainment of the mother (76), cesarean deliveries (77, 78), birth and fertility rates for States (17), births to unmarried mothers (23), characteristics of births in Asian or Pacific Islander population subgroups (4), trends in pregnancies and pregnancy rates (10), and trends in smoking (35).

This report presents summary tabulations from the final natality statistics for 1997. The National Center for Health Statistics will respond to requests for unpublished data whenever possible.

Contents

Abstract 1
Highlights 1
Introduction 2
Methods 3
Demographic characteristics 3
Births and birth rates 3
Number of births 3
Crude birth rate 3
Fertility rate 3
Age of mother 4
Teenagers 4
Women age 20 years and over:
Women in their twenties 5
Women in their thirties 5
Women in their forties 5
Births to women aged 50 years and over 5
Live-birth order 6
Total fertility rate 6
Births and birth rates by State 6
Birth rates for teenagers 6
Sex ratio 6
Month of birth 7
Day of week of birth 7
Births to unmarried women 7
Age of father 9
Educational attainment 9
Maternal lifestyle and health characteristics 9
Weight gain 9
Medical risk factors 10
Tobacco use during pregnancy 10
Alcohol use during pregnancy 11
Medical services utilization 11
Prenatal care 11
Obsteric procedures 12
Complications of labor and/or delivery 12
Attendant at birth and place of delivery 12
Method of delivery 13
Infant health characteristics 13
Period of gestation 13
Birthweight 14
Apgar score 15
Abnormal conditions of the newborn 15
Congenital anomalies 15
Multiple births 15
References 16
List of tables 18
Guide to tables in Births: Final Data for 1997 20
Technical notes 83

To receive this publication regularly, contact the National Center for Health Statistics by calling 301-436-8500 E-mail: nchsquery@cdc.gov
Internet: www.cdc.gov/nchswww/

Suggested citation

Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Births: Final Data for 1997. National vital statistics reports; vol 47 no. 18. Hyattsville, Maryland: National Center for Health Statistics. 1999.

Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

National Center for Health Statistics

Director, Edward J. Sondik, Ph.D.
Deputy Director, Jack R. Anderson

Division of Vital Statistics

Director, Mary Anne Freedman

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782-2003

DHHS Publication No. (PHS) 99–1120
9-0340 (4/99)

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

FIRST CLASS MAIL
POSTAGE & FEES PAID
CDC/NCHS
PERMIT NO. G-284