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AUTHOR Martin, Joyce A.;Hamilton, Brady E.; Ventura, Stephanie J.; Menacker, Fay; Park, Melissa M.; Sutton, Paul D.

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ABSTRACT

This report presents 2001 data on U.S. births according to maternal demographics (age, live-birth order, marital status, race, Hispanic origin, and educational attainment); maternal characteristics (medical risk factors, weight gain, and tobacco and alcohol use); pregnant women's medical care utilization (prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth, and delivery method); and infant characteristics (gestation period, 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. Data are shown on mother's state of residence, month and day of birth, sex ratio, and father's age. Trends in fertility patterns and maternal and infant characteristics are noted. The number of births, birth rate, fertility rate, and total fertility rates all declined 1 percent in 2001. The teenage birth rate reached another historical low. Birth rates for women in their 20s declined slightly. Rates for women age 30-44 years continued to rise. Births to unmarried women changed very little. Smoking by pregnant women was down again. Women were more likely to begin care in the first trimester of pregnancy. The cesarean delivery rate rose for the 5th consecutive year to 24.4 percent. Preterm and low birthweight levels rose in 2001. (SM)

BIRTHS: FINAL DATA FOR 2001
National Vital Statistics Reports, Volume 51, Number 2

Joyce A. Martin, M.P.H.
Brady E. Hamilton, Ph.D.
Stephanie J. Ventura, M.A.
Fay Menacker, Dr. P.H.
Melissa M. Park, M.P.H.
Paul D. Sutton, Ph.D.

Division of Vital Statistics
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by Joyce A. Martin, M.P.H.; Brady E. Hamilton, Ph.D.; Stephanie J. Ventura, M.A.;
Fay Menacker, Dr. P.H.; Melissa M. Park, M.P.H.; and Paul D. Sutton, Ph.D.; Division of Vital Statistics

Abstract

Objectives—This report presents 2001 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 characteristics (medical risk factors, weight gain, tobacco, and alcohol use); medical care utilization by pregnant women (prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth, and method of delivery); and infant 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, 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 4.026 million births that occurred in 2001 are presented. Denominators for population-based rates are derived from the 1990 U.S. census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin.

Results—The number of births, the birth rate, fertility rate, and total fertility rates all declined 1 percent in 2001. The teenage birth rate reached another historic low. Birth rates for women in their twenties declined slightly, whereas rates for women aged 30 to 44 years continued to rise. Births to unmarried women changed very little. Smoking by pregnant women was down again. Women were more likely to begin care in the first trimester of pregnancy (83.4 percent). The cesarean delivery rate rose for the fifth consecutive year to 24.4 percent; the primary cesarean rate was up 5 percent and the rate of vaginal births after a previous cesarean fell 20 percent. Preterm and low birthweight levels both rose for 2001. The twin birth rate continued to climb, and, following 2 years of decline, the rate of triplet/+ births also increased.

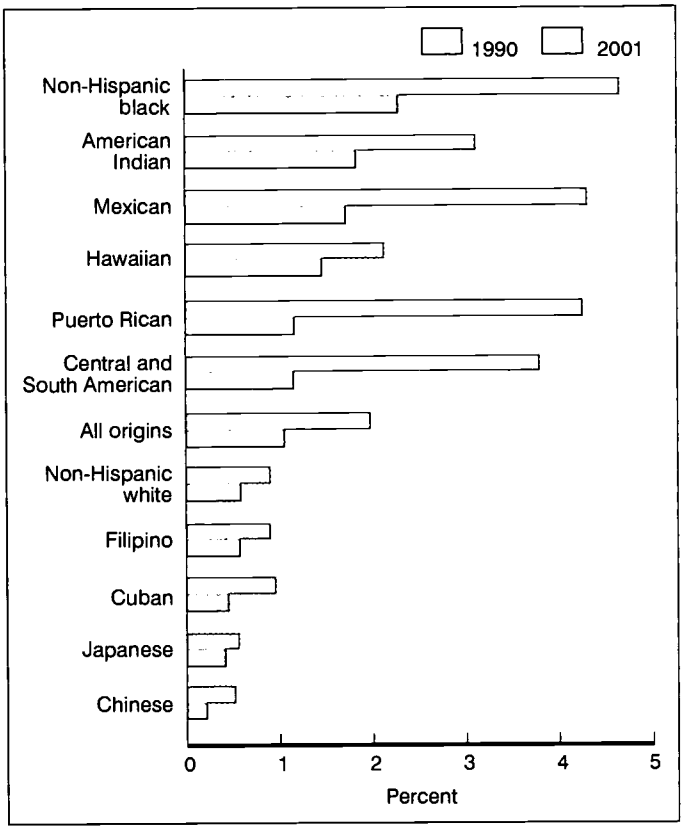

Figure 1. Percent of women with no prenatal care: United States, 1990 and 2001

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

This report is dedicated to Ronald F. Chamblee, M.S.

1947–2002

Ronald F. Chamblee was Chief of the Division of Vital Statistics' Data Acquisition and Evaluation Branch for 18 years. In that role he managed the receipt of vital statistics data from the States and worked with State vital statistics offices to improve the quality and timeliness of natality and mortality data. The early release of this report would not have been possible without his efforts. His perception and advice will be greatly missed by his colleagues and friends at NCHS and in the States.

Acknowledgments

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Highlights

- There were 4,025,933 **births** in the U.S. in 2001, 1 percent fewer than the previous year. This marks the first decline in the number of births following 3 consecutive years of increases. Births to non-Hispanic white and black mothers were down, but the number of births to Hispanic women rose 4 percent.
- The **birth rate** declined from 14.7 to 14.5 per 1,000 total population, matching the record lows reported for 1997 and 1999. The **general fertility rate** also declined 1 percent to 66.9 births per 1,000 women aged 15–44 years. **Fertility rates were down for most racial and Hispanic origin subgroups** in 2001. Rates dropped 1–3 percent for American Indian, non-Hispanic white, Asian or Pacific Islander (API), and non-Hispanic black women, and rose 2 percent for Hispanic women.
- The U.S. **total fertility rate** (TFR) was down slightly for 2001 to 2,114.5. The TFR estimates the number of births that a cohort of 1,000 women would have if they experienced throughout their childbearing years the same age-specific birth rates observed in a given year. TFR declined for most race/ethnic groups for 2001, but increased among Hispanics.
- The **birth rate for teenagers** reached another historic low in 2001, dropping to 45.8 births per 1,000 women aged 15–19 years. The rate has declined 26 percent since 1991 (62.1). Birth rates have fallen for all teenage subgroups. The rate for the youngest teenagers, 10–14 years, declined to 0.8 per 1,000. Rates for teenagers 15–17 and 18–19 years attained record lows for the Nation; the rate for ages 15–17 was 25.2 per 1,000, 35 percent below the 1991 level and the rate for ages 18–19 was 75.5, down 20 percent since 1991. All population groups have recorded declines since 1991, with the rate for young black teenagers 15–17 years falling most steeply, by 46 percent, to its lowest point ever. Teenage pregnancy rates declined as well during the 1990s, reflecting reductions in teen birth and abortion rates.
- **Birth rates for women in their twenties** declined in 2001. The rate for women aged 20–24 years dropped 2 percent to 109.9 per 1,000; the rate for 25–29-year-olds was down very slightly to 121.3. The **birth rate for women 30–34 years** rose 1 percent to [illegible]2 and that for women 35–39 years 2 percent to 41.3 per 1,000; rates for these age groups have risen 20 and 30 percent, respectively, over the last decade. The **birth rate for women 40–44 years** increased to 8.1 per 1,000, matching the previous high in 1970.
- The **first birth rate** declined in 2001 to 26.6 births per 1,000 women aged 15–44 years.
- The tendency of women to postpone childbearing continued; the **median age at first birth** rose from 24.6 to 24.8 years, and has risen from 22.1 years since 1970.
- **Childbearing by unmarried women** changed very little in 2001. The birth rate declined slightly to 45.0 births per 1,000 unmarried women aged 15–44 years. The number of births rose less than 1 percent to 1,349,249, the highest number ever reported, while the percent of births that were to unmarried women increased from 33.2 to 33.5 percent. Births and birth rates for unmarried teenagers continued to decline in 2001.
- **Cigarette smoking** during pregnancy continued to fall in 2001, to 12.0 percent overall, a drop of 38 percent from 1989. As in previous years, women in age groups 18–24 years were most likely to smoke during pregnancy. Smoking rates declined in 2001 for teenagers and for women in age groups 25–54 years; a small increase was reported for women aged 20–24 years. Maternal smoking is a major risk factor for reduced infant birthweight; 11.9 percent of births to smokers were low birthweight compared with 7.3 percent for nonsmokers.
- Women were more likely to have timely **prenatal care** in 2001; 83.4 percent began care in the first trimester of pregnancy in 2001 compared with 83.2 percent in 2000. Timely care has risen 10 percent since 1990. The percent of women with no prenatal care declined to 1.1 percent between 2000 and 2001, down from 2.0 percent since 1990. Strong gains in prenatal care utilization between 1990 and 2001 are seen for all racial/ethnic groups, but are particularly marked for non-Hispanic black (no care dropped from 4.7 to 2.3 percent) and Hispanic women (from 4.0 to 1.6 percent). **See figure 1.**
- The **rate of cesarean delivery** rose for the fifth consecutive year, to 24.4 percent for 2001. The 2001 rate is the highest since these data became available from birth certificates (1989). The **primary cesarean rate** rose 5 percent and the **rate of vaginal births after previous cesarean delivery (VBAC)** fell steeply, by 20 percent. Increases in the total cesarean rate were observed for each State and reporting area.
- The rate of **induction of labor** increased again for 2001 to 20.5 percent, or more than 1 out of every 5 births. The proportion of births which are induced has more than doubled since 1989.
- The **percent of infants born preterm**, or at less than 37 completed weeks of gestation, increased to 11.9 for 2001, the highest level in at least two decades. The preterm birth rate has risen 27 percent since 1981. Preterm rates rose for each of the three largest racial/ethnic groups.
- The **low birthweight rate** (less than 2,500 grams) increased slightly, from 7.6 to 7.7 percent from 2000 to 2001. Influenced in part by the increased rate of multiple births, low birthweight (LBW) has climbed 13 percent since the mid-1980s. The rate of **very low**

birthweight (VLBW) (less than1,500 grams) was 1.44 percent for 2001, essentially unchanged from 2000 (1.45 percent), but up from 1.16 percent in 1981.

- The **twin birth rate** rose 3 percent to 30.1 per 1,000 in 2001, marking the first year in which the proportion of all births which are twins exceeded 3 percent. The twinning rate has risen 33 percent since 1990, and 59 percent since 1980. Following a 2-year decline, the rate of **triplet and other higher order multiple births** (triplet/+) rose 3 percent to 185.6 per 100,000, but remained lower than the 1998 peak. The triplet/+ birth rate has climbed more than 400 percent since 1980.

Introduction

This report presents detailed data on numbers and characteristics of births in 2001, 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 2001 presented data on selected topics based on a substantial sample (96.4 percent) of the 2001 birth file (1). Findings for the selected measures (age, race, Hispanic origin, and marital status of mother, live-birth order, prenatal care, cesarean delivery, and low birthweight) based on the preliminary data are very similar 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 beginning with the 1968 data year, and a selection of tables of detailed data are available on the NCHS homepage at http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab99.htm (2,3).

The U.S. and State-level birth and fertility rates in this report are based on population estimates projected from the 1990 census because detailed populations based on the 2000 census were not available when this report was prepared. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin. See the Methods section and the Technical Notes. Comparison between rates for the current year and for 2000, which also uses population denominators based on the 1990 census, should be affected only marginally when more accurate denominators from the 2000 census are used. Comparisons with rates in the early 1990s will be more affected. Revised estimates based on the 2000 census will be presented in a forthcoming report planned for early 2003.

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 (4). Tables showing data by State also provide separate information for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas. However, these areas are not included in totals for the United States.

In this report, tabulations of births beginning with 1980 data are by race of mother; for years prior to 1980, tabulations are by race of child. Details of the differences in tabulation procedure are described in the Technical Notes. Text references to black births and black mothers or white births and white mothers are used interchangeably for ease in writing.

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 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. Data for American Indian and Asian or Pacific Islander (API) births are not shown separately by Hispanic origin because the majority of these populations are non-Hispanic. Data are also presented for the following five Hispanic subgroups: Mexican, Puerto Rican, Cuban, Central and South American, and other and unknown Hispanic. Data are shown for five API subgroups: Chinese, Japanese, Hawaiian, Filipino, and "other" API. In addition, 11 States report data on API subgroups included in the "other API" category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API); see Technical Notes.

U.S. and State-level birth and fertility rates in this report are computed on the basis of population denominators provided by the U.S. Census Bureau. All population estimates are projected from the 1990 census because detailed populations from the 2000 census were not available when this report was prepared. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin. A comparison of summary 2000 census population results with the unpublished estimates for 2000 projected from the 1990 census indicates that the U.S. Hispanic population used for this report is 8 percent lower than the population based on the 2000 census (5–7). The underestimate for Hispanic women 15–44 years of age is 9.5 percent (compared with an underestimate of 2 percent for all women 15–44 years of age). Therefore, the Hispanic birth and fertility rates presented here are overstated because the population base is too small. Similar but less pronounced effects for other population groups are also likely; see Technical Notes. Revised estimates based on the 2000 census will be presented in a forthcoming report planned for early 2003. Birth rates for Hispanic subgroups for 2001, which are not included in this report, also will be included in the forthcoming publication. Rates by State shown in this report also may differ from rates computed on the basis of other population estimates.

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 2001. (See Technical Notes for additional information.) All other maternal and infant characteristics (except items on which length of gestation is calculated) are not imputed. 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 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 2001. Readers should note that the levels of incomplete or inaccurate reporting for some of the items are quite high in some States. Data for 2001 for the District of Columbia and Washington State are of particular concern.

Demographic Characteristics

Births and birth rates

Number of births

There were 4,025,933 births in the United States in 2001, 1 percent fewer births than in 2000 (4,058,814). This marks the first decline after 3 consecutive years of increase. The number of births fell 7 percent between 1990, the most recent high point in U.S. births, and 1997, the most recent low, but increased 3 percent between 1998 and 2000. Despite the decline in 2001, the number of births was still 4 percent greater than the number in 1997. **(See tables 1–12 for national and State birth data by age, live-birth order, race, and Hispanic origin.)**

Declines in the number of births were observed for most, but not all, **race and ethnic groups** in 2001 **(tables 1 and 6)**. Births to non-Hispanic white and non-Hispanic black women fell 2 percent compared with a very slight rise for American Indian births. Overall Asian or Pacific Islander births declined very slightly; among the Asian or Pacific Islander (API) subgroups, changes ranged from an increase of 2 percent for "other" API, to a decrease of 8 percent for Chinese births. Births to Hispanic mothers rose 4 percent overall; however, increases were limited to Cuban, Mexican, and Central and South American mothers; births to Puerto Rican and "other" Hispanic mothers declined.

Crude birth rate

The crude birth rate declined to 14.5 live births per 1,000 total population in 2001 from 14.7 in 2000, returning to the record lows reported for 1997 and 1999. The birth rate has been comparatively low and stable since 1996. Between 1975 and 1990, the crude birth rate rose 14 percent (from 14.6 to 16.7), but then fell 13 percent between 1990 and 1997 (14.5).

Fertility rate

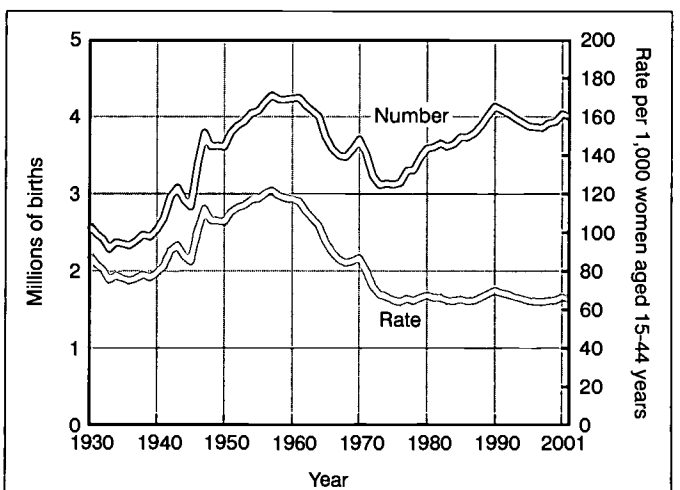
The general fertility rate, which relates births to the number of women in the childbearing ages, was 66.9 live births per 1,000 women aged 15–44 years in 2001, 1 percent lower than the rate in 2000 (67.5), and 6 percent lower than the most recent high (70.9 in 1990). Despite the drop in 2001, the rate was still 3 percent above that in 1997 (65.0), the most recent low **(table 1 and figure 2)**.

Declines in the **fertility rate** were reported for most **race and Hispanic origin groups** between 2000 and 2001. Rates dropped 1 percent for American Indian women (70.8 per 1,000 for 2001), 2 percent for non-Hispanic white (57.6) and Asian or Pacific Islander (API) women (69.4), and 3 percent for non-Hispanic black women (71.6). The fertility rate for Hispanics increased 2 percent in 2001 **(tables 1 and 6)**. (Birth and fertility rates for the API and Hispanic origin subgroups cannot be computed because the necessary populations are not available; see Technical Notes.)

Age of mother

Teenagers—Birth rates for teenagers declined again in 2001, reaching historic lows for the Nation. The **rate for the youngest teenagers** dropped to 0.8 births per 1,000 females aged 10–14 years, down from 0.9 in 1999 and 2000. The rate has declined fairly steadily since 1994 (1.4 per 1,000). The number of babies born to teenagers under age 15 fell to 7,781 in 2001 **(table 2)**, the fewest recorded since 1965 (7,768). Recent declines in births to the youngest teenagers are due entirely to the drop in the birth rate; the number of female teenagers has increased steadily through the 1990s and 2000–2001 (7,8).

The **birth rate for teenagers 15–19 years** dropped 6 percent between 2000 and 2001, to 45.8 births per 1,000 teenagers. During the decade 1991–2001, the rate has fallen 26 percent, more than reversing the steep increases of the late 1980s **(tables A and 4)**. In 2001, the number of babies born to women aged 15–19 years dropped 5 percent



NOTES: Beginning with 1959, trend lines are based on registered live births; trend lines for 1930-59 are based on live births adjusted for underregistration. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S. census. As a result, rates for more current years are generally larger than would be the case if 2000-based estimates were used.

Figure 2. Live births and fertility rates: United States, 1930–2001

Table A. Birth rates for teenagers 15–19 years by age, race, and Hispanic origin of mother: United States, 1991, 2000 and 2001, and percent change, 1991–2001 and 2000–2001

[Rates are live births per 1,000 women in specified group]

Year and age	Total[1]	Non-Hispanic White	Non-Hispanic Black	American Indian[2]	Asian or Pacific Islander[2]	Hispanic[3]
15–19 years						
2001	45.8	30.0	75.6	66.0	20.4	92.5
2000	48.5	32.5	81.9	67.8	21.6	94.4
1991[4]	62.1	43.4	118.9	85.0	27.4	106.7
Percent change, 1991–2001	–26	–31	–36	–22	–26	–13
Percent change, 2000–2001	–6	–8	–8	–3	–6	–2
15–17 years						
2001	25.2	14.1	47.2	36.7	10.2	57.0
2000	27.4	15.8	52.0	39.6	11.5	60.0
1991[4]	38.7	23.6	86.7	52.7	16.1	70.6
Percent change, 1991–2001	–35	–40	–46	–30	–37	–19
Percent change, 2000–2001	–8	–11	–9	–7	–11	–5
18–19 years						
2001	75.5	52.9	116.8	111.9	35.6	143.5
2000	79.2	56.8	125.1	113.1	37.0	143.6
1991[4]	94.4	70.5	163.1	134.3	43.1	158.5
Percent change, 1991–2001	–20	–25	–28	–17	–17	–9
Percent change, 2000–2001	–5	–7	–7	–1	–4	0

[1]Includes races other than white and black and origin not stated.
[2]Includes persons of Hispanic and non-Hispanic origin.
[3]Persons of Hispanic origin may be of any race.
[4]See reference 133 for information on reporting areas in 1991.

NOTES: Denominators for population-based rates are derived from the 1990 U.S. census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin.

to 445,944, falling in spite of continued increases in the number of female teenagers (7,8). Declines in teenage childbearing since the mid-1990s have been concentrated in the rate for first births while there has been little change in the proportion of teenage mothers who are going on to have subsequent births (9).

Teenage birth rates dropped for both younger and older teenagers. The **rate for ages 15–17 years** fell 8 percent to 25.2 per 1,000, whereas the **rate for older teenagers** dropped 5 percent to 75.5, both record lows. During the 1991–2001 period, these rates declined 35 percent for younger teenagers and 20 percent for older teenagers. The number of babies born to 15–17-year-olds dropped to 145,324, the lowest number in nearly half a century (145,122 in 1954). Births to older teenagers also declined steeply, to 300,620, fewer than in any year since 1987 (289,721).

Teenage birth rates differ considerably by race and Hispanic origin (tables 3, 4, 8, and 9). These disparities will be reduced but not eliminated after taking into account the considerable discontinuities in the population data on which these rates are based that occurred between the 1990 and 2000 censuses (described in the Methods section above). In 2001 rates are currently available for fewer population subgroups compared with previous years: non-Hispanic white, non-Hispanic black, American Indian, Asian or Pacific Islander (API), and total Hispanic. Rates for Hispanic subgroups are expected to be published within a few months when the necessary population data become available. In 2001, as in previous years, Hispanic teenagers had the highest birth rate, 92.5 per 1,000, followed by non-Hispanic black (75.6), American Indian (66.0), non-Hispanic white (30.0), and API teenagers (20.4). The rates for all subgroups fell between 2000 and 2001, especially for non-Hispanic white and black teenagers, down 8 percent each. The birth rate for non-Hispanic black teenagers dropped 36 percent between 1991 and 2001.

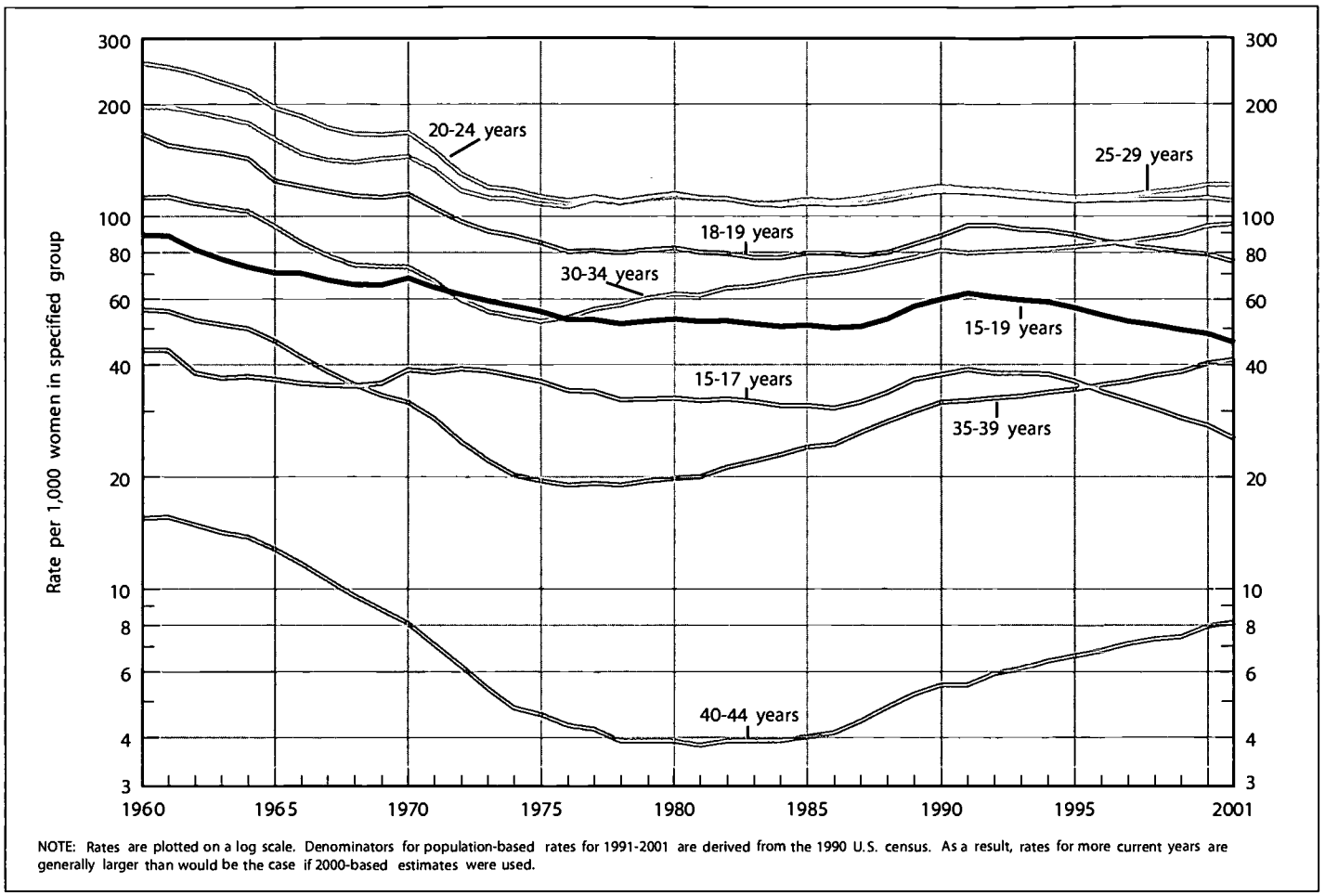
Teenage pregnancy rates (based on the sum of live births, induced abortions, and fetal losses) have declined in recent years as well. The most recent year for which teenage *pregnancy* rates are available is 1997. The overall rate was 94.3 per 1,000 teenagers 15–19 years, down 19 percent from its 1991 peak, 116.5 (10,11). Recently published abortion data for 1998 and 2000 show a continued decline in abortions among teenagers (12,13). Along with the drop in the teenage birth rate, the decline in abortions suggests that the teenage pregnancy rate has fallen as well.

Several factors are believed to account for the downturn in teenage pregnancy and birth rates. The factors, discussed in recent reports, include continued reductions through the late 1990s and in 2000–2001 in the proportions of teenagers who are sexually experienced, coming on the heels of steady increases over the previous two decades (14–16). Since the early 1990s, a wide array of public and private initiatives have stressed the importance of preventing teenage pregnancy by abstinence and responsible behavior (17). Contraceptive use among teenagers has also increased, especially condoms, and some high-risk teenagers are using implants and injectables, which are effective hormonal contraceptives (15,18).

Women aged 20 years and over: *Women in their twenties*—The **birth rate for women aged 20–24 years** dropped 2 percent, from 112.3 in 2000 to 109.9 per 1,000 in 2001. The rate for this group fell 6 percent from 1990 (116.5) to 1995 (109.8), but rose 2 percent between 1997 (110.4) and 2000 (112.3) (**figure 3, tables 3, 4, 8, and 9**). The **rate for women aged 25–29 years** also declined in 2001 but only very slightly, from 121.4 in 2000 to 121.3 per 1,000 in 2001. The rate for this age group declined 7 percent (from 120.2 to 112.2) between 1990 and 1995 but increased 8 percent between 1995 and 2000. Compared with the rates for older women, birth rates for women in their twenties, the principal childbearing ages, have been relatively stable over the past 20 years, changing on average by less than 1 percent annually.

***Women in their thirties*—**The **rate for women aged 30–34 years** increased 1 percent to 95.2 births per 1,000 in 2001, from 94.1 in 2000. The birth rate for women in this age group has increased steadily since 1991, by 20 percent (**tables 4 and 9**) (3,19). The rate of increase has slowed during the last decade to about 2 percent per year compared with the 3 percent annual increase for 1975–90. The number of births to women aged 30–34 years in 2001 (942,697) increased 1 percent from 2000, whereas the population of women in that age group was essentially unchanged (7).

The **birth rate for women aged 35–39 years** also rose in 2001 to 41.3, from 40.4 in 2000, a 2-percent increase. The rate for this age group has more than doubled since 1978 and has risen 30 percent since 1990. The pace of increase for this age group has slowed slightly



NOTE: Rates are plotted on a log scale. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S. census. As a result, rates for more current years are generally larger than would be the case if 2000-based estimates were used.

Figure 3. Birth rates by age of mother: United States, 1960–2001

over the last decade, to 2 percent annually, compared with 4 percent per year for 1978–90. The number of births to women aged 35–39 years in 2001 was 451,723, which represents 11 percent of all births. The number of births to this age group has risen 42 percent since 1990 (317,583), considerably more than the increase in the population of this age group (7,20,21). The proportion of births to women 35–39 years of age also generally has been increasing since 1977 (from 4 percent).

Women in their forties—The **birth rate for women aged 40–44 years** increased to 8.1 per 1,000 in 2001 from 7.9 births in 2000, the highest level reported since 1970. This rate has increased 47 percent since 1990 (5.5), and has more than doubled since 1981 (3.8), the most recent low. Women 40–44 years of age accounted for 2 percent of all births in 2001, compared with 1 percent of births in 1990, and less than 1 percent in 1981.

The **birth rate for women aged 45–49 years** was 0.5 births per 1,000 in 2001, unchanged from 2000, but has more than doubled since 1990. Between 2000 and 2001, the number of births to women in this age group rose 11 percent from 4,349 to 4,844, the highest number in three decades, and has tripled since 1990 (1,638). The increase over the decades reflects not only an increase in the number of women in this age group (who were born between 1952 and 1956), but also a greater likelihood to give birth.

Births to women aged 50 years and over—Data on births to women aged 50–54 years have recently become available again. From 1996, age of mother was edited for ages under 10 years and 50 years or over (see Technical Notes). In 2001, 239 births occurred to women aged 50–54 years, a decline from the 255 births reported for 2000 (**tables 2 and 7 for 2001 data**), but considerably more than for 1997 to 1999 (144 and 174, respectively). Nevertheless, the number of births to women aged 50–54 years remains too small to compute an age-specific birth rate. In computing birth rates by age of mother, births to women aged 50–54 have been included with births to women aged 45–49; the denominator for the rate is women aged 45–49 years (see Technical Notes).

The increase in birth rates for women 35 years of age and over during the last 20 years (**table 4**) has been linked to several factors, including the availability and use of fertility-enhancing therapies (22). Among childless women aged 35–44 years reporting impaired fecundity, according to the National Survey of Family Growth, the proportion seeking fertility treatment rose considerably from 1982 to 1995 (14,23,24). In 2001, 1 out of 20 births to women aged 40–44 years, and 1 out of 5 births to women 45–54 years of age was a multiple delivery, an outcome associated with infertility therapy (see section on Multiple births).

Live-birth order

The first birth rate for women aged 15–44 years was 26.6 in 2001, 2 percent lower than the rate in 2000 (27.1) (**table 5**). The

second order birth rate also decreased slightly between 2000 and 2001, whereas rates for third, fifth, and all higher order births were unchanged. The rate for fourth order births increased by 2 percent.

The decline in the first birth rate for the current year was the result of declines in first birth rates to women under 30 years of age (see **table 3** for 2001 data). Declines in first births were particularly marked for mothers under 20 years of age. First birth rates for mothers 15–17 and 18–19 years of age declined by 8 and 4 percent, respectively, whereas, first birth rates for women aged 20–24 and 25–29 years declined 2 percent. Women under 30 years of age accounted for 75 percent of all first births in 2001, slightly lower than the proportion in 2000 (76 percent) and substantially lower than for 1975 (95 percent) (19). The first birth rates for women aged 30–34 years and 35–39 years were up 1 and 2 percent, respectively, in 2001; first birth rates for women 40 years of age and over remained constant.

Another useful measure for interpreting childbearing patterns is the **median age at first birth**. The median age is the middle value of the distribution of age at first birth. Arranged by age of mother, from the lowest to highest, half of the births would occur above and below the median age. The median age at first birth was 24.8 years in 2001 up from 24.6 years in 2000. The increase in 2001 while modest was consistent with that of recent years. The tendency of women to postpone childbearing, observed since the early 1970s, appears to continue (3). The median age at first birth has risen nearly 3 years since 1970, from 22.1 (data not shown) (3).

The **mean age at first birth** is another useful measure for describing age patterns in fertility. The mean is the sum of values for all observations divided by the total number of observations. The mean age of first-time mothers was 25.0 years in 2001, compared with 24.9 years in 2000. Since 1970, the mean age at first birth has increased 3.6 years. Increases in the mean age at birth were observed for most birth orders and for most racial and Hispanic origin groups (25).

Total fertility rate

The total fertility rate (TFR) in 2001 was 2,114.5 per 1,000 women, or 2.1 births per woman, just slightly lower than the rate in 2000 (2,130.0) (**tables 4 and 9**). The decrease in the TFR in 2001 is the result of declines in the age-specific birth rates for women under 30 years of age (see section above on Age of mother). TFRs for most race and ethnic groups fell 3 percent or less between 2000 and 2001. The TFR for Hispanic women, however, increased 2 percent.

The TFR summarizes the potential impact of current fertility patterns on completed family size. The TFR estimates the number of births that a hypothetical cohort of 1,000 women would have if they experienced throughout their childbearing years the same age-specific birth rates observed in a given year. The rate can be expressed as the average number of children that would be born per woman. Because it is computed from age-specific birth rates, the TFR is age-adjusted and can be readily compared for populations across time or among geographic areas.

As in the past, TFRs among the race and Hispanic origin groups differed considerably. The 2001 TFR was 1,853.0 for non-Hispanic white, 2,035.5 for Asian or Pacific Islander (API), and 2,074.5 for American Indian women. The TFRs for non-Hispanic black and Hispanic women were 2,190.5 and 3,165.0, respectively (**tables 4, 9, 13, and 14**). State-specific total fertility rates for 2001 are discussed in the ection.

The overall U.S. TFR for 2001 remained above the "replacement" rate (2,100) for the second year in a row. The "replacement" rate is considered the value at which a given generation can exactly replace itself.

Births and birth rates by State

Between 2000 and 2001, the **number of births** increased in 17 States, the Virgin Islands, and Northern Marianas, and decreased in 33 States, the District of Columbia, Puerto Rico, Guam, and American Samoa (**tables 10–12**). The change in the number of births ranged from a 4-percent decline in Alabama and Mississippi to a 2-percent gain in Colorado. The only statistically significant increase was for Colorado; however, the number of births fell significantly in 16 States: Alabama, Arkansas, California, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Mississippi, New York, North Carolina, Ohio, Pennsylvania, Tennessee, and Washington.

Crude birth rates by State for the current year ranged from 11 births per 1,000 total population (Maine, Vermont, and West Virginia) to 22 per 1,000 (Utah) (**table 10**). Birth rates declined significantly in 24 States, Puerto Rico, and Guam. Birth rates increased, but not significantly, in only 6 States and the Virgin Islands. Typical decreases in the birth rate were around 2 percent with some significant declines of more than 3 percent (Alabama, Delaware, Kentucky, Louisiana, and Mississippi).

Fertility rates per 1,000 women aged 15–44 years in 2001 ranged from a low of 48 (Vermont) to a high of 95 (Utah) (**table 10**). The fertility rate increased significantly only in Colorado (2 percent). Rates declined significantly in 13 States and Puerto Rico. Declines of around 1 percent were typical.

State-specific **TFRs** for 2001, which provide a summary measure of lifetime fertility, are shown in **table 10**. The total fertility rates by State for 2001 varied substantially from a high of 2,755.5 (or 2.8 births per woman) for Utah to a low of 1,547.0 (1.5 births per woman) for Vermont. Differences in the total fertility rates and changes between 2000 and 2001 by State are quite similar to those for the general fertility rate.

Birth rates for teenagers by State

Birth rates for teenagers also vary considerably by State (**tables B and 10**). In 2001, birth rates for teenagers 15–19 years ranged by State from 21.0 to 66.7 per 1,000. Rates were 25.0 per 1,000 or lower in Massachusetts, New Hampshire, and Vermont. Rates were 60.0 or higher in Arizona, Arkansas, the District of Columbia, Georgia, Mississippi, New Mexico, and Texas. Teenage birth rates in 2001 were lower than in 2000 in every State. The sustained declines in birth rates for U.S. teenagers since 1991 are found in all States; rates in 2001 were significantly lower than in 1991, with overall declines by State ranging from 13 to 42 percent (**table B**). A review of current trends and variations in teenage birth rates by State, by age, race, and Hispanic origin, is presented in a recent report (9).

Sex ratio

The relative number of births by sex is important because it contributes to future population change, and by extension, social and economic processes. In 2001, there were 2,057,922 male and 1,968,011 female live births, or 1,046 males for every 1,000 female

Table B. Birth rates for teenagers 15–19 years by State, 1991 and 2001, and percent change, 1991–2001: United States and each State and territory

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

State	1991	2001	Percent change, 1991–2001	State	1991	2001	Percent change, 1991–2001
United States[1]	62.1	45.8	–26.2	Nebraska	42.4	36.0	–15.1
				Nevada	75.3	56.4	–25.1
Alabama	73.9	57.8	–21.8	New Hampshire	33.3	21.0	–36.9
Alaska	65.4	37.7	–42.4	New Jersey	41.6	29.9	–28.1
Arizona	80.7	65.3	–19.1	New Mexico	79.8	64.5	–19.2
Arkansas	79.8	64.2	–19.5	New York	46.0	34.1	–25.9
California	74.7	45.2	–39.5	North Carolina	70.5	55.2	–21.7
Colorado	58.2	45.7	–21.5	North Dakota	35.6	27.2	–23.6
Connecticut	40.4	29.4	–27.2	Ohio	60.5	42.2	–30.2
Delaware	61.1	48.2	–21.1	Oklahoma	72.1	58.0	–19.6
District of Columbia	114.4	74.9	–34.5	Oregon	54.9	40.9	–25.5
Florida	68.8	49.3	–28.3	Pennsylvania	46.9	33.6	–28.4
Georgia	76.3	60.9	–20.2	Rhode Island	45.4	37.4	–17.6
Hawaii	58.7	42.5	–27.6	South Carolina	72.9	57.4	–21.3
Idaho	53.9	40.6	–24.7	South Dakota	47.5	37.1	–21.9
Illinois	64.8	47.3	–27.0	Tennessee	75.2	58.4	–22.3
Indiana	60.5	47.2	–22.0	Texas	78.9	68.5	–13.2
Iowa	42.6	33.0	–22.5	Utah	48.2	38.2	–20.7
Kansas	55.4	43.0	–22.4	Vermont	39.2	23.9	–39.0
Kentucky	68.9	51.4	–25.4	Virginia	53.5	39.4	–26.4
Louisiana	76.1	57.8	–24.0	Washington	53.7	34.9	–35.0
Maine	43.5	27.1	–37.7	West Virginia	57.8	45.5	–21.3
Maryland	54.3	38.2	–29.7	Wisconsin	43.7	33.4	–23.6
Massachusetts	37.8	25.0	–33.9	Wyoming	54.2	38.6	–28.8
Michigan	59.0	37.2	–36.9				
Minnesota	37.3	27.9	–25.2	Puerto Rico	72.4	68.0	–6.1
Mississippi	85.6	66.7	–22.1	Virgin Islands	77.9	51.5	–33.9
Missouri	64.5	46.1	–28.5	Guam	95.7	70.5	–26.3
Montana	46.7	35.6	–23.8	American Samoa	---	38.9	---
				Northern Marianas	---	56.8	---

--- Data not available.

[1]Excludes data for the territories.

NOTES: Denominators for population-based rates are derived from the 1990 U.S. census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin.

births (**tables 13 and 14**). The 2001 sex ratio is comparable to past years (1,048 in 2000), and has changed very little over the past half century.

Similar to previous years, Asian or Pacific Islander (API) mothers, as a group, had the highest sex ratio (1,067). The sex ratios for individual API subgroups varied considerably, however, from a high of 1,092 for Chinese mothers to a comparatively low 1,000 (equal numbers of male and female births) for Hawaiian mothers. As in previous years, the sex ratio for all Hispanic mothers (1,038) was about midway between non-Hispanic white (1,051) and non-Hispanic black (1,032). Persistent differences in the sex ratio between groups may be due to environmental and/or maternal conditions (26–28).

Month of birth

The monthly average number of births in 2001 was 335,494. The actual number of births per month ranged from 303,534 (February) to 361,802 (August) (**table 15**). Historically, the number of births tends to peak during the summer months and is at its lowest during the winter. The observed birth rate, which takes into account the different number of days in the month, peaked in August and was at its lowest in December.

When compared with 2000, observed monthly birth rates in 2001 were lower for all but 2 months (January and April). The observed monthly fertility rates were higher for 5 and lower for 7 months in 2001. When seasonal variation is filtered from the monthly birth and fertility rates, an estimate of the underlying trends is obtained. In 2001 adjusted birth rates declined for 9 months and adjusted fertility rates fell for 8 months ending 3 consecutive years where increases in the monthly fertility rate outnumbered decreases.

Day of the week of birth

The average number of births on any given day in 2001 was 11,030 (**table 16**). However, the number of births by day of the week varies considerably. In 2001 the average number of daily births ranged from a low of 7,637 on Sunday to a high of 12,496 on Tuesday.

Variation in the daily pattern of births can be measured with an index of occurrence. The index is defined as the ratio of the average number of births per day of the week to the average number of births per day of the year with the base set at 100. In 2001 the index for Tuesday was 113.3, indicating that there were 13.3 percent more births on Tuesday than on the average day. As in previous years, infants were less likely to be born on weekends. The index was lowest for Sunday (69.2), followed by Saturday (79.1). The overall index of occurrence for

Saturday and Sunday has declined 19 and 11 percent, respectively since 1982, indicative of a growing weekend birth "deficit" over this period (data not shown).

A deficit in weekend births is apparent for both vaginal and cesarean deliveries, but is notably larger for cesarean deliveries, particularly repeat cesareans. The Sunday index for vaginal births in 2001 was 75.4, compared with 61.0 for primary cesareans, and 34.1 for repeat cesareans. The weekend birth deficit for all cesarean births has increased noticeably since 1989, when these data first became available. For example, the Sunday index for all cesarean births was 50.7 in 2001 compared with 60.7 in 1989 (data not shown).

Births to unmarried women

Births to unmarried women changed very little for 2001. The **birth rate for unmarried women** declined slightly in 2001, to 45.0 births per 1,000 unmarried women aged 15–44 years (**tables C, 17, and 18**). The rate was 4 percent lower than the historic peak reached in 1994, 46.9. The **number of births to unmarried women** rose less than 1 percent to 1,349,249, the highest number ever, entirely the result of the 1-percent increase in the number of unmarried women (29,30). The number of nonmarital births increased 16 percent since 1990, a far slower pace than during the 1980s, when the total number rose 75 percent and annual increases amounted to about 6 percent. The **percent of all births that were to unmarried women** rose to 33.5 percent in 2001, compared with 33.2 percent in 2000 and 28.0 percent in 1990.

In 2001 all States except for Michigan and New York reported the mother's marital status through a direct question on the birth certificate or in the electronic birth registration process. Michigan and New York infer the mother's marital status on the basis of other information on the birth certificate; see Technical Notes for details.

Birth rates for unmarried women vary considerably by race and Hispanic origin. The rate for Hispanic women was highest in 2001, 98.0 per 1,000, followed by the rate for black women, 70.1, and the rate for non-Hispanic white women, 27.7 (**tables 17 and 18**). The birth rate for non-Hispanic white women has changed very little since 1994 (28.5). The birth rate for black women in 2001 was a record low for the Nation, 27 percent below its historic peak three decades earlier (96.1 in 1971). (Data for black women are available since 1969 (3, 31).) The rate for Hispanic women had declined during 1994–98, and has since risen about 9 percent. The rate for unmarried Asian or Pacific Islander women is the lowest, 23.2 per 1,000 (data not shown).

Birth rates for unmarried women are consistently highest for women aged 20–24 years (73.8 per 1,000), followed by women aged 25–29 (63.7) and 18–19 years (60.1). Rates are successively lower for women in their early thirties, young teenagers, and women in age groups 35 and older (**tables 17 and 18**). Rates for black and Hispanic teenage women are fairly similar, but at ages 20 years and over, rates are considerably higher for Hispanic women.

Between 2000 and 2001, birth rates for unmarried women declined for women under age 25 years and increased for older women (**figure 4**). Since 1994, rates for unmarried teenagers have fallen 30 percent for ages 15–17 years and 14 percent for ages 18–19 years. The rate for black teenagers has fallen steadily since 1991, dropping 34 percent for ages 15–19, and by 43 percent for ages 15–17 years. From its 1994 peak to 2001, the rate for non-Hispanic white teenagers fell 19 percent. The 2001 rate for Hispanic teenagers was 13 percent lower than in 1994.

Birth rates for unmarried women in age groups 25–29 years and older all increased in 2001, by 2 to 4 percent for women aged 25–29

Table C. Number, rate, and percent of births to unmarried women, and birth rate for married women: United States, 1980 and 1985–2001

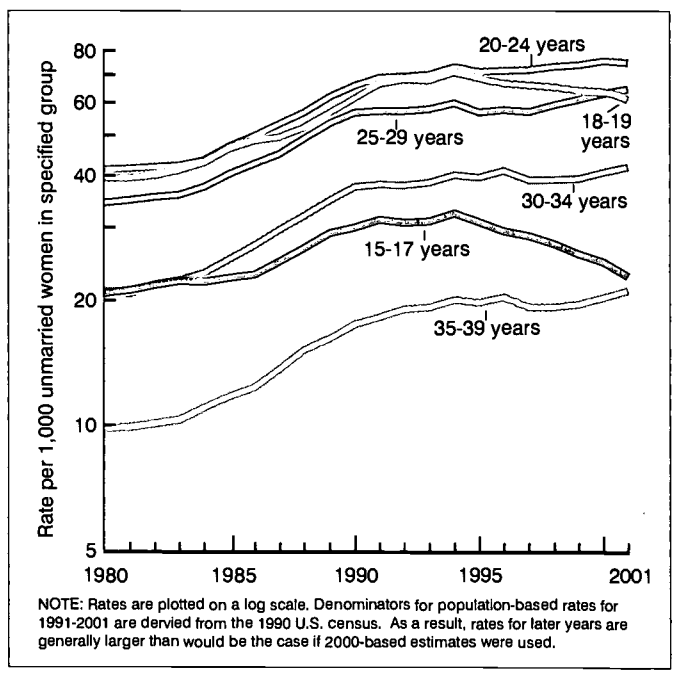
Year	Births to unmarried women			Birth rate for married women[3]
	Number	Rate[1]	Percent[2]	
2001	1,349,249	45.0	33.5	88.7
2000	1,347,043	45.2	33.2	89.3
1999	1,308,560	44.4	33.0	86.5
1998	1,293,567	44.3	32.8	85.7
1997	1,257,444	44.0	32.4	84.3
1996	1,260,306	44.8	32.4	83.7
1995	1,253,976	45.1	32.2	83.7
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.

NOTES: Denominators for population-based rates for 1991–2001 are derived from the 1990 U.S. census. As a result, rates for more current years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin.



NOTE: Rates are plotted on a log scale. Denominators for population-based rates for 1991-2001 are dervied from the 1990 U.S. census. As a result, rates for later years are generally larger than would be the case if 2000-based estimates were used.

Figure 4. Birth rates for unmarried women, by age of mother: United States, 1980–2001

through 35–39 years. The rate for women aged 40–44 years also rose in 2001. Most of these increases were found for Hispanic and non-Hispanic white women.

The **proportions of all births that occurred to unmarried women** changed little for population groups in 2001. The proportions were 22.5 percent for non-Hispanic white women, 68.6 percent for non-Hispanic black women, and 42.5 percent for Hispanic women (**see tables 13, 14, 17, and 19 for 2001 data**).

The modest increase in 2001 in the proportion of births to unmarried women reflects slight changes in births and birth rates for unmarried and married women. Births to unmarried women rose very slightly while the birth rate declined less than 1 percent; concurrently, births to married women and their birth rate each declined about 1 percent (**table C**). Overall, the percent of births to unmarried women has changed little since 1994, ranging from 32.2 to 33.5 percent.

The **numbers and proportions of births to unmarried women by State** by race and Hispanic origin for 2001 are shown in **table 19**. Numbers rose in 32 States and in the Virgin Islands and declined in 18 States and the District of Columbia, Puerto Rico, Guam, and American Samoa. The proportions increased in 40 States, Puerto Rico, the Virgin Islands, and Guam; declined in 6 States, the District of Columbia, and American Samoa; and were unchanged in 4 States.

Age of father

The **birth rate per 1,000 men aged 15–54 years** was 50.6 in 2001 (**table 20**), a decrease of 2 percent from 2000 (51.6). During the first half of the 1990s, the overall birth rate for men declined 11 percent, but since 1996, this rate has fluctuated little, hovering around 51. The relative stability in the overall birth rate belies variation in the age specific birth rates. In general, birth rates declined for men under 30 years of age, increased for men between 30 and 44 years of age, and were little changed for men over 44 years of age. One of the more striking observations is the continued decline in the birth rate for teenage males, which fell another 7 percent between 2000 and 2001, to 18.7, continuing a 7-year downward trend from a peak of 25.0 in 1994. Birth rates for teenagers have been falling since the early 1990s (see section on Age of mother).

Information on age of father is often missing on birth certificates of children born to women less than 25 years of age and unmarried women as well (31). In 2001 the age of father was not reported for 13 percent of all births, 24 percent of births to women less than 25 years of age, and 38 percent of all nonmarital births. In computing birth rates by age of father, births where age of father is not stated were distributed in the same proportion as births where age of father is stated within each 5-year age interval of mother. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded. The procedures for computing birth rates by age of father are described in more detail in the Technical Notes.

Educational attainment

Maternal education has long been considered an important factor in fertility and health. The educational attainment of women has been shown to have a profound effect on the number of births and the risk of adverse birth outcome. Women with higher educational attainment are more likely to desire and give birth to fewer children and to seek timely prenatal care, and are less likely to engage in behaviors detrimental to health and pregnancy.

In 2001, 78 percent of women who gave birth had 12 or more years of schooling (a high school education or equivalent), and 25 percent had 16 or more years of schooling (a college education or equivalent) (**table 21**). The educational attainment of women at birth (based on the completed years of education at birth) has increased substantially over the last few decades. The percentage of mothers with 12 or more years of schooling has risen 3 percent since 1990, and 13 percent since 1970; the percentage of mothers with 16 or more years of schooling has increased 44 percent since 1990 (17.5 percent), and nearly tripled since 1970 (8.6 percent). This trend reflects in part increases in educational attainment of all women during this time period (32,33).

The median educational attainment for all mothers in 2001 was 12.9 years, unchanged from the preceding year (data not shown), but up from 12.7 years in 1990, and 12.4 years of education in 1970. The increase in median educational attainment is more pronounced by age at first birth. Between 1990 and 2001, the median education of women aged 25–29, and 30–34 years rose by 1 year, from 14.2 to 15.2 years, and 15.3 to 16.3 years of education, respectively (data not shown). This pattern is consistent with the delayed childbearing observed for women with higher levels of educational attainment (34).

Differences in educational attainment are also evident by race and ethnicity. Among the Asian or Pacific Islander (API) subgroups, all were well above the national percent (78 percent) for at least a high school education in 2001, ranging from 85 percent for Hawaiian, to 98 percent for Japanese women (**table 13**). The percent of non-Hispanic white mothers having completed high school was 88, compared with 75 percent of non-Hispanic black; 69 percent of American Indian mothers were at this educational level (**tables 13, 14, and 21**). Overall 51 percent of Hispanic mothers had at least 12 years of schooling (**table 14**). Levels among the Hispanic subgroups ranged from 45 percent of Mexican mothers to 88 percent of Cuban mothers.

Differences by race and ethnicity were even more pronounced at higher educational levels. Among the API subgroups, 13 percent of Hawaiian mothers reported 16 or more years of education compared to 56 percent of Chinese mothers. The variation among the Hispanic subgroups was nearly as substantial; 31 percent of Cuban mothers reported at least a college education in 2001 compared with 5 percent of Mexican mothers (data not shown). The level of higher education for non-Hispanic black and American Indian women was 12 and 8 percent, respectively, whereas 33 percent of non-Hispanic white women giving birth in 2001 had at least 16 years of education.

Maternal Lifestyle and Health Characteristics

Weight gain

Maternal weight gain during pregnancy influences pregnancy outcome (35). Inadequate maternal weight gain has been associated with an increased risk of intrauterine growth retardation, shortened period of gestation, low birthweight, and perinatal mortality. High weight gain during pregnancy has been linked with an elevated risk of a large-for-gestational-age (LGA) infant, cesarean delivery, and long-term maternal weight retention (36–38). In 1990 the Institute of Medicine (IOM) published guidelines for weight gain during pregnancy for singleton gestations (39). Based on the mother's body

mass index (BMI), the guidelines recommend that women who are underweight gain 28–40 pounds, those who are of normal weight gain 25–35 pounds, and those who are overweight gain 15–25 pounds. For extremely obese women, the IOM recommends a minimum weight gain of 15 pounds. However, it recommended that weight gain goals be tailored to individual needs (39). Studies suggest that weight gain within these guidelines is associated with the best outcomes; these studies also suggest, however, that a majority of maternal weight gain is outside of the recommended ranges (40,41).

BMI is calculated from a woman's prepregnancy weight and height, neither of which are available from the birth certificate, which only captures information on weight gained during pregnancy. Therefore, it is not possible from these data to determine whether the weight gain was within the recommendations for the mother's BMI. However, these data do allow us to estimate weight gain outside of the recommended ranges for women of any BMI.

Between 1989 (when data became available) and 2001, the percent of mothers who gained less than 16 pounds increased nearly 30 percent (from 9.4 to 12.1) and the percent who gained over 40 pounds rose by a similar amount (from 15.1 to 19.1) (**tables 22, 24, 25**). In short, in 2001, almost 1 in 3 women gained outside the IOM guidelines.

The rise in weight gains of over 40 pounds cannot be attributed to the sharp rise in the multiple birth rate (women with multifetal pregnancies tend to gain more weight than women with singleton pregnancies (39)); women with singleton gestation pregnancies have exhibited increases in excessive weight gain very comparable to trends for all women (from 14.6 to 18.5 percent between 1989 and 2001).

Weight gained during pregnancy differed widely by racial/ethnic groups. The percent of non-Hispanic black women with inadequate weight gains of under 16 pounds was 17.4 in 2001, two-thirds higher than the level for non-Hispanic white women (10.2). Among the Asian or Pacific Islander groups, Japanese women were most likely to gain under 16 pounds in 2001 (11.6 percent) and Chinese women were the least likely (6.9 percent). Wide differences in excessive weight gain of over 40 pounds were apparent among the API subgroups, ranging from a low of 8.5 percent for Japanese to a high of 27.4 percent for Hawaiian women. American Indian women had comparatively high rates of both inadequate and excessive weight gain (16.9 percent under 16 pounds; 19.6 percent over 40 pounds).

Among the Hispanic subgroups, Mexican mothers were twice as likely to gain less than 16 pounds as Cubans (16 compared with 8 percent). Conversely, excessive weight gain was much more common among Cuban (22.4 percent) than among Mexican mothers (13.4 percent).

Levels of both inadequate and excessive weight gain have increased since 1989 for almost all racial and Hispanic origin groups. Japanese women showed the most dramatic increase in inadequate weight gain; the proportion doubled between 1989 and 2001 (from 7.8 to 11.6 percent). Although a comparatively small proportion of Chinese women had excessive weight gain in 2001, the proportion has increased nearly 60 percent since 1989 (from 7.2 to 11.4).

Shortened gestational periods prevent optimal maternal weight gain; groups with the higher levels of inadequate weight gain also tend to have higher preterm rates (under 37 weeks gestation) (**table 22**). Non-Hispanic black and American Indian infants have high levels of inadequate weight gain as well as higher preterm rates compared with non-Hispanic whites. Weight gain discrepancies among these groups narrow as length of gestation increases.

Maternal weight gain also has been shown to have a positive correlation with infant birthweight (38,41). In 2001 as in previous years, the percent of low birthweight infants declined with increasing maternal weight gain through 36–40 pounds (from 13.7 to 5.3 percent) (**table 23**). A similar pattern generally can be observed for non-Hispanic white, non-Hispanic black, and Hispanic infants for each gestational age.

Medical risk factors

Medical risk factors during pregnancy can contribute to serious complications and maternal and infant morbidity and mortality, particularly if not treated properly (42–44). Sixteen medical risk factors that can affect pregnancy outcome are separately identified on the birth certificate (**table 26**). Medical risk factor data were missing from only 0.9 percent of records for 2001, a considerable improvement over previous years. However, birth certificate data may underreport or incorrectly report medical risk factor prevalence due to a lack of adherence to uniform definitions and difficulty in interpreting data from medical records (45). Rates for rarely occurring medical risk factors and for smaller population groups can vary from year to year and should be used with caution.

In 2001 the most frequently reported medical risk factors were pregnancy-associated hypertension (37.7 per 1,000 live births), diabetes (31.1) and anemia (25.0) (**table 26**). These have been the most frequently reported risk factors since these data have been available from birth certificates. Pregnancy-associated hypertension declined slightly in 2001 (from 38.8 in 2000) for the first time in a decade after having risen steadily since 1990 (from 27.2). Rates for diabetes and anemia have also risen about 40 percent over this time period. Pregnancy-associated hypertension, chronic hypertension, and eclampsia are all closely related hypertensive disorders, but the latter two are rarer conditions. The rate for chronic hypertension has increased since 1990 (6.5 in 1990; 8.1 in 2001), whereas the eclampsia rate has declined (4.0 in 1990; 3.2 in 2001).

The reported rate of hydramnios/oligohydramnios (the excess or shortage of amniotic fluid) has consistently increased during the 1990s, more than doubling between 1990 and 2001 (from 5.9 to 13.7). These conditions have been associated with maternal diabetes (35, 46). Acute or chronic lung disease (e.g., asthma, tuberculosis) also has risen dramatically. Although reported for only 1 percent of all women overall, the rate of lung disease has more than tripled between 1990 and 2001 (from 3.0 to 12.1 per 1,000) and has increased for all age groups, most notably for younger women. In the early 1990s, this condition was slightly more prevalent in older women. However, since 1992, the higher risk has shifted strongly toward younger women.

The incidence of medical risk factors during pregnancy can vary greatly by maternal race and ethnicity (**tables 27 and 28**). For 2001, American Indian women had the highest rates of three of the most prevalent maternal medical risk factors: pregnancy-associated hypertension, diabetes, and anemia (5 percent each). Chinese women had a similarly high level of diabetes (5 percent), but have low levels of pregnancy-associated hypertension and anemia. Differences are also found among the Hispanic subgroups. For instance, diabetes levels ranged from 2 percent for Cuban, to 4 percent for Puerto Rican mothers.

The risk of having a medical condition during pregnancy often differs by maternal age (**table 26**). For example, teenage mothers are nearly twice as likely to have anemia during pregnancy compared with women aged 40 and over (36.0 compared with 19.8 per 1,000). Older mothers, conversely, are more prone to chronic conditions such as diabetes (71.7 for mothers 40 years and over compared with 9.2 for mothers under 20); chronic hypertension (25.0 compared with 2.9); and cardiac disease (9.5 compared with 2.7). 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.

Tobacco use during pregnancy

Smoking during pregnancy declined in 2001 to 12.0 percent of women giving birth, down 38 percent from 1989 (19.5 percent) when this information first became available from the birth certificate (47, 48). Among smokers, 27 percent smoked half a pack (11 cigarettes) or more per day in 2001, down from 41 percent in 1989. Information on tobacco use was reported on the birth certificates of all States except for California in 2001. The reporting area of 49 States and the District of Columbia accounted for 87 percent of U.S. births in 2001. The number of States reporting tobacco use increased during the 1990s; information on the impact of these changes on the trends in prenatal smoking is provided in a recent report (48).

Maternal smoking is believed to be somewhat underreported on the birth certificate due to several factors, including the lack of a specific time reference for smoking status, variations in the source of the information for each birth, and the considerable stigma associated with tobacco use which may be intensified in cases of poor birth outcome (48–52). Nonetheless, the trends identified from birth certificate data are generally consistent with trends from several nationally representative surveys. In addition, data from other studies have confirmed the variations in smoking among population subgroups based on birth certificate data (14,53,54).

Tobacco use during pregnancy is one of the key preventable causes of a number of adverse pregnancy outcomes, including low birthweight, intrauterine growth retardation, miscarriage, and infant mortality, as well as negative consequences for child health and development (55,56). The costs associated with these adverse outcomes are substantial (57).

Smoking rates were highest for older teenagers, 18–19 years (19.0 percent), followed by women aged 20–24 years (17.0 percent); rates are lowest for the youngest teenagers and women in their thirties (**tables 24, 25, and 29–32**). Smoking rates declined in 2001 for teenagers and for women in age group 25–54 years. As in 2000, there was a small increase in 2001 for women aged 20–24 years.

Rates of **smoking during pregnancy declined modestly in most racial and Hispanic origin groups**. Substantial variations persist in smoking rates, with the highest rates reported for American Indian, non-Hispanic white, and Hawaiian women, and the lowest rates, for Chinese, Japanese, Mexican, Filipino, and Central and South American women (**tables 24 and 25**). Women born in the 50 States and the District of Columbia have substantially higher smoking rates than women born outside these areas, a pattern that has been noted elsewhere (58). **Disparities in smoking rates are particularly large for teenage population subgroups**. For example, among young women 15–17 years, the proportion smoking ranged from 2 to 3 percent of Mexican and Central and South American teenagers to 29 percent of non-Hispanic white teenagers (**figure 5**). Details of smoking patterns and trends by age, race, and Hispanic origin, and by State are described in a recent report (48).

The likelihood that a woman will smoke during pregnancy is strongly associated with her educational attainment, with smoking rates for women who have attended but not completed high school about 12 times the rates of college educated women (**table 31**). Among women aged 20 years and older, overall, 28 percent with 9–11 years of education smoked during pregnancy, and 48 percent of non-Hispanic white women in this category were smokers (tabular data not shown).

Birth certificate data as well as data from other studies have consistently confirmed the negative impact of smoking on infant birthweight (55,56). In 2001 the rate of low birthweight among babies born to smokers was nearly two-thirds higher than that for nonsmokers, 11.9 percent compared with 7.3 percent, essentially unchanged from 2000. In general, the gap tends to widen with advancing maternal age, probably a consequence of the greater cigarette consumption of older compared with younger women (**table 29**). There is no "safe" level of smoking, even among births to the lightest smokers, that is one to five cigarettes daily, who account for nearly one-third of all smokers. The percent low birthweight for births to the lightest smokers was 11.3 percent in 2001, 55 percent higher than for nonsmokers (tabular data not shown).

Alcohol use during pregnancy

Alcohol use during pregnancy can severely jeopardize birth outcome, independent of other risk factors including tobacco use and other maternal risk factors (59,60). Questions on alcohol use were on the birth certificates of the District of Columbia and all States except California in 2001, accounting for 87 percent of U.S. births.

Maternal alcohol use continues to be substantially underreported on birth certificates compared with information collected in nationally representative surveys of pregnant women. In 2001 as in 2000, fewer

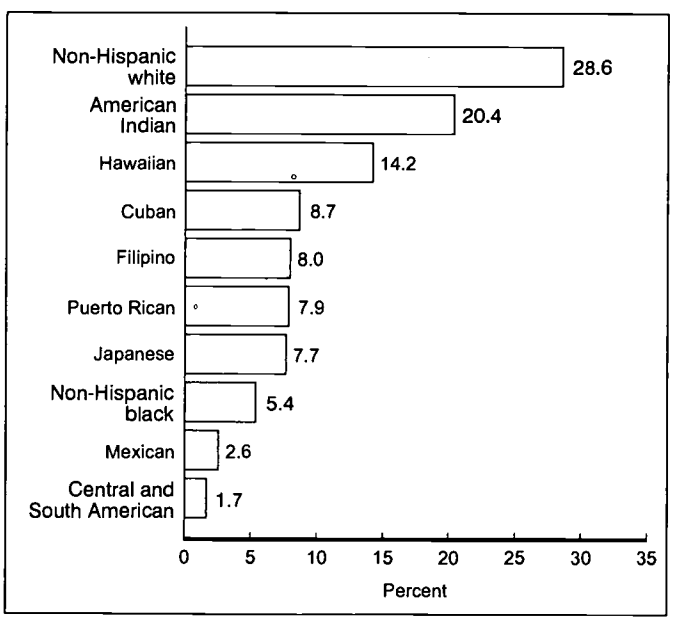


Figure 5. Percent of mothers 15–17 years who smoked during pregnancy by race and ethnicity, 2001

than 1 percent of women reported alcohol use during pregnancy—0.9 percent compared with 4.1 percent in 1989, the first year for which these data were reported on birth certificates (**data for 2001 shown in tables 24 and 25**). The most recent study of alcohol use during pregnancy from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS) found a drinking rate of 12.8 percent in 1999 compared with 1.0 percent reported from birth certificate data for 1999 (61, 62). The BRFSS data suggested an overall decline in alcohol use during the late 1990s, but no change in rates of binge drinking (61).

While alcohol use, especially heavy use, is clearly a major risk factor for poor pregnancy outcome, it appears that the current birth certificate question on alcohol use is not sensitive enough to measure this behavior accurately. The current question has no time reference (alcohol use at any time during pregnancy) nor does it encourage the reporting of very light alcohol use (the question refers to the number of drinks per week). In addition, the stigma of maternal alcohol use likely contributes to the underreporting (61).

Medical Services Utilization

Prenatal care

The proportion of women who began prenatal care in the first trimester of pregnancy rose slightly for 2001 to 83.4 percent, compared with 83.2 percent for 2000. Timely initiation of prenatal care showed little improvement during the 1980s, but has risen fairly steadily since 1990 (from 75.8 percent). **(See table D and tables 33–35.)** The percent of women who began care in the third trimester of pregnancy or received no care at all, declined from 3.9 to 3.7 percent between 2000 and 2001, and has dropped from 6.1 percent in 1990. (The percent of women with no care at all was 1.1 for 2001, nearly half the level reported for 1990 (2.0 percent).) **See figure 1.** Recent studies suggest that the expansion of Medicaid for pregnant women in the late 1980s has contributed to the increase in prenatal care utilization observed for the 1990s (63). Although the effectiveness of prenatal care continues to be debated (64), appropriate prenatal care can enhance pregnancy outcome and long-term maternal health by managing preexisting and pregnancy-related medical conditions, providing health behavior advice, and assessing the risk of poor pregnancy outcome (65,66).

Table D. First trimester prenatal care by race and Hispanic origin of mother: United States, 1980, 1985, and 1990–2001

Year	All races[1]	Non-Hispanic		American Indian[2]	Asian or Pacific Islander[2]	Hispanic[3]
		White	Black			
2001	83.4	88.5	74.5	69.3	84.0	75.7
2000	83.2	88.5	74.3	69.3	84.0	74.4
1999	83.2	88.4	74.1	69.5	83.7	74.4
1998	82.8	87.9	73.3	68.8	83.1	74.3
1997	82.5	87.9	72.3	68.1	82.1	73.7
1996	81.9	87.4	71.5	67.7	81.2	72.2
1995	81.3	87.1	70.4	66.7	79.9	70.8
1994	80.2	86.5	68.3	65.2	79.7	68.9
1993	78.9	85.6	66.1	63.4	77.6	66.6
1992	77.7	84.9	64.0	62.1	76.6	64.2
1991	76.2	83.7	61.9	59.9	75.3	61.0
1990	75.8	83.3	60.7	57.9	75.1	60.2
1989	75.5	82.7	59.9	57.9	74.8	59.5
1985	76.2	---	---	57.5	74.1	---
1980	76.3	---	---	55.8	73.7	---

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

For the current year, first trimester care was unchanged among non-Hispanic white women at 88.5 percent, but continued to improve among non-Hispanic black (from 74.3 to 74.5 percent) and Hispanic mothers (74.4 to 75.7 percent). Large differences in timely initiation of prenatal care persist by race and Hispanic origin, but quite substantial gains have been observed for all groups in recent years. Improvement has been especially marked among groups which historically have tended to utilize care less. Since 1990 the percent of non-Hispanic black mothers with first trimester care has risen 23 percent (from 60.7 in 1990) and the proportion of black mothers who received no care at all dropped from 4.7 to 2.3 percent. Strong gains in prenatal care utilization have also been evident among Hispanic women. The proportion of Hispanic women with timely care rose 26 percent between 1990 and 2001 (from 60.2 percent in 1990) and no care fell from 4.0 to 1.6 percent.

The percent of American Indian women beginning care in the first 3 months of pregnancy was unchanged for 2001 at 69.3. Although this level has risen notably since 1990 (from 57.9 percent), American Indian women continue to be least likely of all racial/ethnic groups to receive first trimester prenatal care.

Among Asian or Pacific Islander (API) women, 90.1 percent of Japanese women initiated care in the first trimester of pregnancy compared with 79.1 percent of Hawaiian women. Although low in comparison with levels of most other API groups, the current level for Hawaiian women represents a 20 percent gain from that reported for 1990.

Mexican, Puerto Rican, and Central and South American mothers were about 25 percent more likely to receive timely prenatal care in 2001 compared with 1990. Large differences among the Hispanic subgroups are still evident however; in 2001, 91.8 percent of Cuban mothers received early care compared with 74.6 percent of Mexican mothers. **See tables 24 and 25 for 2001 data.**

Wide variation in prenatal care initiation can also be seen across the United States. The New England States (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) and Iowa reported the highest proportions of mothers with first trimester prenatal care for 2001. At least 88 percent of women residing in these States began care in the first trimester of pregnancy (**table 34**). In contrast, 69 percent of New Mexico resident mothers accessed care early.

The Adequacy of Prenatal Care Utilization Index (APNCU) was developed to adjust for some of the weaknesses of the two previously used measures; trimester care began and the Kessner Index (an index used widely in the 1990s) (67). The APNCU takes into account the month that prenatal care began, the number of prenatal visits, and adjusts for gestational age (68) (**table E**). The APNCU includes categories for intensive, adequate, intermediate, and inadequate levels of prenatal care utilization. The "intensive" utilization category (the proportion of women for whom the number of prenatal care visits exceeds the American College of Obstetricians and Gynecologists' recommendations by a ratio of observed to expected visits of at least

Table E. Adequacy of Prenatal Care Utilization Index: United States, 1990 and 1995–2001

	Intensive use	Adequate	Intermediate	Inadequate
2001	31.8	42.7	14.0	11.6
2000	31.2	43.0	14.0	11.9
1999	31.6	43.1	13.6	11.7
1998	31.0	43.3	13.8	11.9
1997	30.7	43.3	14.0	12.0
1996	29.3	43.6	14.7	12.4
1995	28.8	43.7	14.7	12.8
1990	24.6	42.3	15.7	17.4

NOTE: See reference 67 for information on calculation of this measure.

110 percent) rose from 31.2 to 31. 8 percent from 2000 to 2001; intensive utilization of care had risen substantially since the early 1980s (67). The percent of women with inadequate care was down slightly between 2000 and 2001 (from 11.9 to 11.6 percent). The APNCU shows a one-third decline in inadequate care since 1990.

Obstetric procedures

Six specific obstetric procedures are listed on the birth certificate. Of these, electronic fetal monitoring (EFM) was the most frequently reported in 2001, as in earlier years. Although the benefits and risks of routine use of EFM remain controversial (69) the rate has continually climbed since 1989, from 68.4 to 84.8 percent for 2001 (almost 3.4 million live births) (**table 36**). More than 67 percent of women who had live births in 2001 received ultrasound. The use of this procedure also has increased steadily since 1989 (47.7 percent). The use of EFM, ultrasound, and other obstetric procedures may be underreported on the birth certificate (70,71).

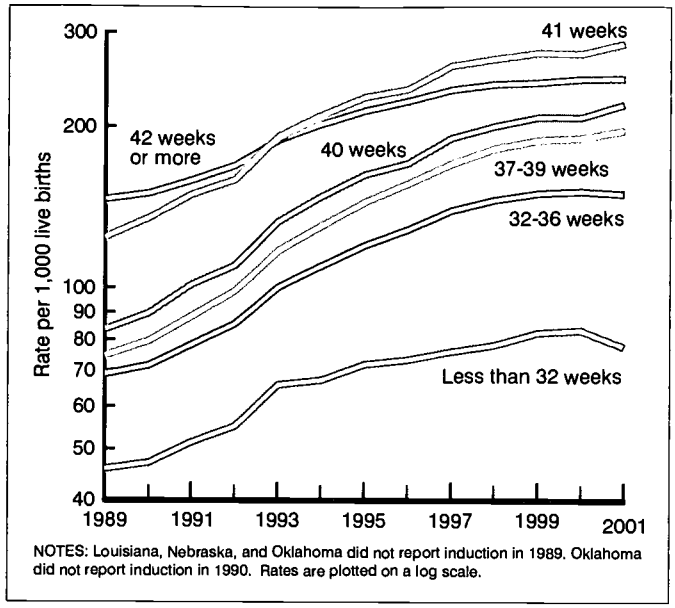
The rate of induction of labor continued to rise between 2000 and 2001 (from 19.9 to 20.5). The rate for 2001 was more than double the 1989 level of 9.0 percent. Between 1989 (the first year these data were reported on the birth certificate) and 2000, the rate of induction rose every year for all gestational ages, including preterm deliveries (less than 37 completed weeks of gestation). However, for 2001, the induction rate rose only for gestational ages of 37 weeks or more. (**figure 6**). This increase was seen for each major racial and ethnic group (data not shown).

Recent articles on the indications for induction suggest that the growth in the induction rate may be due, in part, to an increase in elective inductions (inductions with no medical or obstetric indication) (72,73). Since spontaneous labor (labor that occurs naturally) is associated with fewer complications than induced labor, elective induction is discouraged (35).

The rate of stimulation of labor was 17.5 percent; this rate has fluctuated only slightly since 1997. However, the 2001 rate is almost two-thirds higher than the 1989 level of 10.9 percent.

The overall rate for tocolysis, the use of agents that decrease uterine activity for the management of preterm labor, was 2.1 percent in 2001. The rate of tocolysis has been fairly stable since 1996. Assessment of the safety and efficacy of tocolytic agents is discussed in a recent report (74).

In 2001 the overall rate for amniocentesis decreased to 2.2 percent of births in 2001 from 2.4 percent in 2000, and has declined since 1989 (3.2 percent). This change may reflect the use of screening tests that are noninvasive (e.g., ultrasound and measurement of serum in lieu of amniocentesis.



NOTES: Louisiana, Nebraska, and Oklahoma did not report induction in 1989. Oklahoma did not report induction in 1990. Rates are plotted on a log scale.

Figure 6. Rates of induction of labor by length of gestation in weeks: United States, 1989–2001

Complications of labor and/or delivery

Depending on the severity of the condition, certain complications of labor and delivery reported on the birth certificate may require medical interventions and may affect the health outcome of the infant. Many of the reported conditions are more common among low birthweight and/or preterm infants. Of the 15 complications of labor and/or delivery reported on the birth certificate, the 5 most frequently reported for 2001 were meconium moderate/heavy (51.5 per 1,000 live births), fetal distress (38.7), breech/malpresentation (38.3), dysfunctional labor (28.1), and premature rupture of membrane (PROM) (23.8) (**table 37**). Cord and placental complications are infrequent but are among the top 10 leading causes of infant death (75). Abruptio placenta occurred in almost 22,000 births (5.4 per 1,000); placenta previa occurred in more than 13,000 births (3.3 per 1,000); cord prolapse occurred in over 7,000 births (1.8 per 1,000).

Multiple complications of labor and delivery may be reported for a mother and different complications may be related. For example, causes of fetal distress include placenta abruptio and cord prolapse; cord prolapse is also associated with breech/malpresentation (46). Data on complications of pregnancy were missing from less than 1 percent of records for 2001, but birth certificate data may underreport prevalence of complications. (70,76–78).

Complication rates vary among racial/ethnic groups (**tables 27 and 28**). For example, rates were very divergent for meconium (69.6 per 1,000 for non-Hispanic black compared with 44.6 for non-Hispanic white). Conversely, non-Hispanic white women had substantially higher rates of cephalopelvic disproportion and breech/malpresentation (leading risk factors for cesarean delivery) compared with non-Hispanic black women. A wide range of values was also apparent among Asian or Pacific Islander (API) subgroups. Rates for meconium ranged from 48.1 per 1,000 for Japanese to 66.2 for Hawaiian.

Differences in rates also were evident among Hispanic subgroups. In 2001, rates for meconium ranged from a low of 36.3 for Cuban mothers to a high of 64.1 percent for Central and South American mothers.

Complication rates also can vary by age with risk steadily increasing with age for some conditions (**table 37**). For example, in 2001, only 1 in 1,000 teenage mothers had placenta previa compared to 9 in 1,000 for mothers 40 and older. In contrast, fetal distress exhibits a U-shaped distribution of risk with the highest rates for women under 20 and over 34 years of age.

Attendant at birth and place of delivery

In 2001 the trends in attendant at birth and place of delivery observed for recent years continued. The percent of all births delivered by **physicians in hospitals** continued to decline slowly but steadily, to 91.3 percent of all births (**table 38**) compared with 98.7 percent in 1975. Most physician-attended births were attended by doctors of medicine (MDs). However, the percent of all births attended by doctors of osteopathy (DOs) grew gradually to 4.3 percent by 2001, from 2.8 percent in 1989, the first year data on DOs were available from the birth certificate.

The percent of births **attended by midwives** has increased steadily since 1975, climbing from less than 1.0 percent (79) to 8.0 percent in 2001. Midwifery education and hence practice have grown over the past decade (80). A recent report found that nearly all of the increase in midwife-attended births was for those in hospitals (81). Almost 95 percent of all midwife-attended births in 2001 were by certified nurse midwives (CNMs). This level has been fairly stable since 1996. Due to misclassification of midwife-attended deliveries, these data should be considered lower estimates of the actual number of midwife-attended births (4,79).

Ninety-nine percent of births in 2001 were delivered in hospitals, essentially unchanged for the last several decades. The majority of out-of-hospital births were in a residence (65 percent); 28 percent were in a freestanding birthing center. These levels have been fairly stable since 1989. Controversy persists regarding the safety of planned home births (82).

About 92 percent of births to non-Hispanic white women and non-Hispanic black women were attended by a physician in a hospital compared with 90 percent of births to Hispanic women. In 2001 as in previous years, Hispanic women were more likely to have a midwife-attended hospital birth (9.3 percent) than were either non-Hispanic white or black women (6.8 and 7.3 percent, respectively).

Method of delivery

In 2001 nearly one in four live births were delivered by cesarean section. The **rate of cesarean delivery** climbed to 24.4 percent of all births, a 7 percent rise from 2000 (22.9 percent). This rate fell each year between 1989 and 1996, but has risen each year since 1996, by a total of 18 percent, and is now the highest reported since these data first became available from birth certificates (1989) (**table 39 and 40**). This rise in the total rate is due to both the growth in the primary cesarean rate and a steep decrease in the rate of vaginal birth after cesarean delivery (VBAC) (**figure 7**).

The **primary cesarean rate** in 2001 (16.9 per 100 live births to women who had no previous cesarean) was 5 percent higher than in 2000 (16.1), and 16 percent higher than the low reported for 1996–97 (14.6). A comparable rise is observed for low-risk women (i.e., women with full-term, singleton deliveries, with vertex presentations) (data not shown) (83) . The increase in primary cesarean deliveries may be related to nonmedical factors such as demographics, physician practice patterns, and maternal choice (84–86).

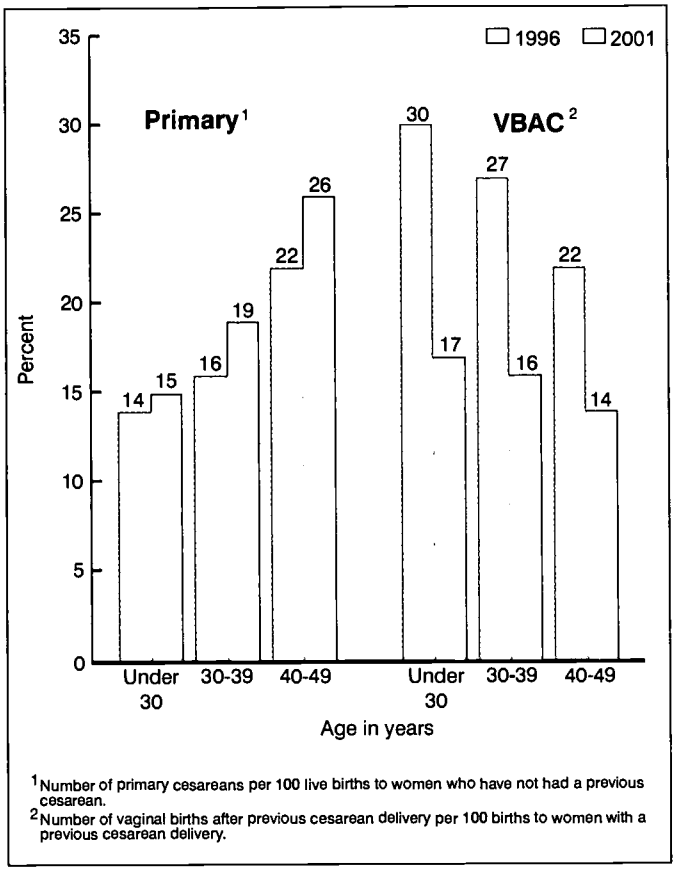


Figure 7. Primary cesarean rates and vaginal birth after cesarean (VBAC) rates by age of mother: United States, 1996 and 2001

The **rate of vaginal birth after previous cesarean delivery (VBAC)** fell 20 percent between 2000 and 2001—from 20.6 per 100 women with a previous cesarean to 16.4. The VBAC rate declined precipitously between 1996 and 2001, by 42 percent, after increasing by 50 percent between 1989 and 1996 (from 18.9 to 28.3). The VBAC rate for low-risk women has fallen at a similar pace (data not shown). The sharp decline in VBAC deliveries may be related to recent reports on the risks associated with VBAC, more conservative practice guidelines, legal pressures (84,87–89), and the continuing controversy regarding the risks and benefits of vaginal birth versus cesarean section, especially with regard to VBAC (84–86).

The primary rate increased and the VBAC rate decreased for all age, racial and ethnic groups (including subgroups). As in previous years, overall cesarean rates rose steadily as maternal age increased; the rate for mothers 40–54 years of age (38.0) was more than twice that of mothers under age 20 (16.8) (**table 40**). The elevated risk of cesarean delivery in older women may be related to biologic factors, patient/practitioner concerns (90) and the increased rate of multiple births.

The primary cesarean rate rose 5 to 6 percent for non-Hispanic white, non-Hispanic black and Hispanic women between 2000 and 2001. The primary rate for non-Hispanic black women (18.3) continued to be higher than the rate for non-Hispanic white women (17.2) and

Hispanic women (15.2). The VBAC rate declined about 20 percent for each group. In 2001 the VBAC rate was similar for non-Hispanic white women (16.8) and non-Hispanic black women (16.7), and lower for Hispanic women (14.7). A detailed discussion of trends in cesarean and VBAC rates by race and Hispanic origin in the 1990s may be found in a recent report (91).

The overall cesarean rate for American Indian women in 2001 (21.6 percent) was lower than that for non-Hispanic white (24.5) and black mothers (25.9) (**tables 24 and 25**). Among the Hispanic subgroups, the rate of cesarean delivery ranged between 22.9 and 25.3, except for Cuban mothers whose rate was considerably greater (34.6), possibly due in part to their older age at childbearing. All API subgroups, except Filipino mothers (26.6), had lower rates of cesarean delivery than either non-Hispanic white or black mothers. Among the API subgroups, Japanese mothers had the lowest rate (20.1), despite having the highest percent of mothers 35 years of age and over.

From 2000 to 2001, overall cesarean rates increased for all 50 States and the District of Columbia. For 2001 as for earlier years, variation in cesarean rates by State was considerable, ranging from 17.2 percent for Utah, to 29.9 percent for Louisiana (**table 41**). The rate for Puerto Rico was 42.0.

Between 2000 and 2001, VBAC rates decreased in 49 States and the District of Columbia. For 2001, rates ranged from 8.2 in Louisiana, to 40.0 per 100 in Vermont.

Cesarean rates were higher than the national rate for most of the selected medical risk factors, and complications of labor and/or delivery in **table 42**. For example, more than half of mothers with eclampsia and almost all mothers with cephalopelvic disproportion (96.5 percent) had a cesarean section.

As might be anticipated, coinciding with the rise in the cesarean delivery rate, the percent of births delivered by either forceps or vacuum extraction decreased between 2000 and 2001, from 7.0 to 6.3 percent (data not shown). The 2001 rate is 34 percent lower than the high of 9.5 percent in 1994 (81).

Infant Health Characteristics

Period of gestation

The **preterm birth rate** rose to 11.9 percent for 2001, the highest level reported in at least 2 decades. The percent of births born preterm (at less than 37 completed weeks of gestation) has risen 12 percent since 1990 (from 10.6 percent), and 27 percent since 1981 (from 9.4 percent). The **very preterm birth rate** (less than 32 completed weeks of gestation) was 1.95 percent for 2001, compared with 1.93 percent for 2000. In contrast to the pronounced upward trend in preterm births overall, the proportion of very preterm infants is essentially unchanged from 1990 (1.92 percent), and only moderately higher than the 1981 level (1.81 percent). **(See tables F, 24, 25, 43, 44, and figure 8.)**

Although much progress has been made in recent years in lowering mortality among infants born too early, preterm newborns, especially those born at the shorter gestational ages, are at heightened risk of long-term disability and death. For 2000, 18 percent of very preterm infants died within the first year of life, compared with 1 percent of moderately preterm infants (32–36 weeks), and 0.03 percent of infants [illegible] at term (37–41 weeks) (75). Further, preterm newborns who do survive are more likely to be neurologically impaired than their term counterparts (92). Experts caution that meaningful reduction in preterm rates is unlikely until the causes of preterm delivery are better understood and effective prevention methods developed (92,93).

Table F. Rate of preterm birth among singletons by race and Hispanic origin of mother, United States: 1990, 1995, 2000, and 2001

	2001	2000	1995	1990[1]
Total, all races, origins[2]		Percent		
Less than 32 weeks	1.57	1.58	1.61	1.69
32–36 weeks	8.81	8.54	8.21	8.01
Total, less than 37 weeks	10.38	10.12	9.82	9.70
Non-Hispanic white				
Less than 32 weeks	1.15	1.14	1.13	1.11
32–36 weeks	7.83	7.55	6.99	6.43
Total, less than 37 weeks	8.98	8.69	8.12	7.54
Non-Hispanic black				
Less than 32 weeks	3.52	3.58	3.83	4.22
32–36 weeks	12.49	12.29	12.70	13.63
Total, less than 37 weeks	16.01	15.87	16.53	17.85
Hispanic[3]				
Less than 32 weeks	1.45	1.48	1.48	1.52
32–36 weeks	9.04	8.82	8.64	8.77
Total, less than 37 weeks	10.49	10.30	10.12	10.29

[1]Data by race and Hispanic origin exclude data for New Hampshire and Oklahoma, which did not require reporting of Hispanic origin of mother.
[2]Includes births to races not shown.
[3]Includes persons of Hispanic origin of any race.

The upward trend in preterm births over the past 20 years, particularly for non-Hispanic whites, has been influenced in part by the rise in the multiple birth rate (preterm rates are much higher among multiple births than among singletons), and by the increase in preterm multiple deliveries (94). Between 1990 and 2001, the singleton very preterm birth rate declined from 1.69 to 1.57 percent (compared with an essentially stable very preterm rate for all births), and the rate of moderately preterm births (32–36 weeks) rose 10 percent for singletons (compared with a 15 percent increase for all pluralities). **See table F for singleton trend.**

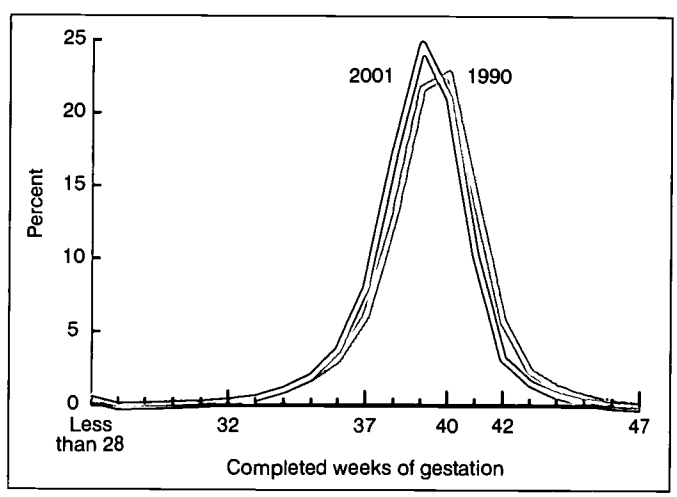


Figure 8. Percent of distribution of singleton births by gestational age: United States, 1990 and 2001

Preterm births were up quite sharply from 2000 to 2001 among non-Hispanic white mothers, from 10.4 to 10.8 percent. Since 1990 the non-Hispanic white preterm rate has climbed by more than 25 percent (from 8.5 percent). The very preterm rate has also risen, though to a lesser extent, from 1.33 to 1.55 percent over this period. A marked rise in preterm *singleton* non-Hispanic white births was also observed between 1990 and 2001 (from 7.5 to 9.0 percent), but this increase was largely limited to moderately preterm births (**see table F**).

The percent of black infants born preterm was up slightly for 2000–2001, from 17.3 to 17.5 percent. The preterm birth rate for black mothers is down from a peak of 18.9 percent in 1991, but is still slightly higher than levels reported for the early 1980s. The very preterm rate for black infants for 2001, 4.02 percent, is the lowest reported since 1981, the earliest year for which comparable data are available. Despite this progress, black mothers of all ages continue to be much more likely than mothers of other racial/ethnic groups to deliver before 32 weeks of gestation (data not shown).

Among Hispanic births, the preterm rate returned to the level reported for 1998–99, 11.4 percent. The proportion of preterm births to Hispanic mothers has been fairly stable since national data became available for this group in 1989. Among the Hispanic subgroups, preterm birth rates ranged from 10.6 percent for Cuban births to 13.7 percent for Puerto Rican births for 2001. **(See table 25 for 2001 data.)**

The 2001 preterm incidence for American Indians was 13.2 percent, compared with 12.7 percent for 2000. In 2001 as in previous years, Chinese and Japanese women were the least likely of any of the racial/Hispanic origin groups to deliver at less than 37 weeks of gestation (7.7 and 8.8 percent, respectively) **(table 24)**.

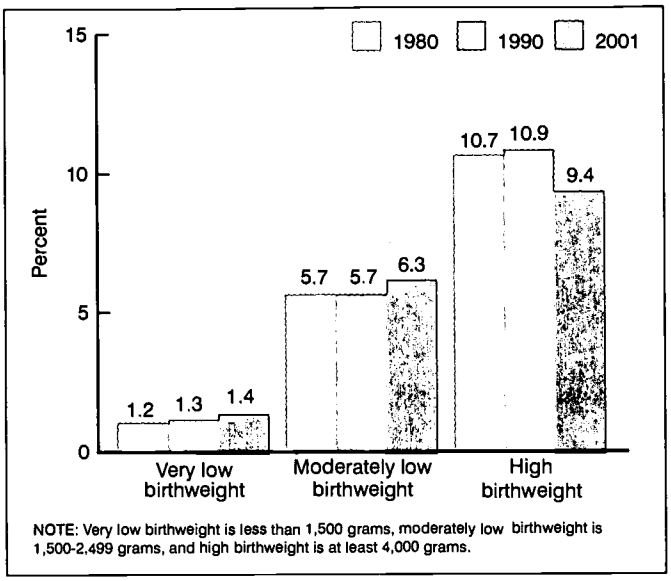
For the current year, 6.9 percent of births were delivered post-term, or at 42 or more weeks of gestation. This represents more than a one-third decline from the level reported for 1990 (11.3 percent).

As would be expected, given the increase in preterm and decrease in post-term deliveries between 1990 and 2001, a marked shift in the gestational age distribution for all births (not shown), and for singletons can be observed for this period (**table F**). The average or mean singleton gestational age also has shortened somewhat (from 39.2 to 38.8 weeks). Numerous factors, including the wider use of medical procedures to induce labor, may be contributing to these changes (72,95).

Birthweight

The **low birthweight rate (LBW)** was 7.7 percent for 2001, up slightly from 7.6 percent for 2000 to the highest level recorded since the early 1970s. The proportion of LBW infants (weight at delivery of less than 2,500 grams or 5 and a half pounds) has climbed 13 percent since the mid 1980s (from 6.8 percent). **(See tables 43–47 and figure 9.)** The percent of **very low birthweight (VLBW)** infants (less than 1,500 grams or 3 and one fourth pounds) was 1.44 for 2001. This measure has been fairly stable since 1997, but has risen from 1.27 percent in 1990, and 1.16 percent in 1981. Although the risk of early death for infants born LBW has attenuated somewhat in recent years, the mortality rate for LBW infants continues to be at least 20 times that of heavier infants (75), and LBW infants who survive, especially VLBW infants, are more likely to suffer long-term disabilities (96).

Although LBW has been on the rise for the Nation as a whole over ast decade, quite different trends are observed by race and



NOTE: Very low birthweight is less than 1,500 grams, moderately low birthweight is 1,500-2,499 grams, and high birthweight is at least 4,000 grams.

Figure 9. Percent very low, moderately low, and high birthweight births: United States, 1980, 1990, and 2001

Hispanic origin. Whereas a distinctly upward trend is evident for non-Hispanic white births, only a very modest rise is reported in Hispanic LBW, and among black infants, a slight decline in LBW is apparent.

The LBW rate among non-Hispanic white births rose from 6.6 to 6.8 percent between 2000 and 2001, and has climbed more than 20 percent since 1990 (from 5.6 percent). Some of this increase can be attributed to the steep rise in the rate of multiple births among this group (infants born in multiple deliveries are about 10 times as likely to be LBW as are singletons), and to a lesser extent, by an increase in LBW among multiples themselves (see the section on multiple births) (94,97).

The LBW rate for non-Hispanic white *singletons* was 4.96 percent for 2001, a small increase from 2000 (4.88 percent) **(table G)**. Since 1990 singleton non-Hispanic white LBW has risen, but at a slower pace than LBW among all pluralities, from 4.56 percent, or by 9 percent. Most of this increase was among moderately low birthweight infants, that is, infants born at 1,500–2,499 grams (from 3.83 to 4.15 percent); VLBW among non-Hispanic white births changed only from 0.73 to 0.81 percent between 1990 and the current year. A recent study found that singletons conceived with assisted-reproductive technology, procedures which account for an increasing number of births (98–101), are at greater risk of LBW than those conceived spontaneously (102).

The 2001 LBW rate for births to non-Hispanic black mothers was 13.1 percent, unchanged from 2000. In contrast to trends for non-Hispanic white infants, LBW among non-Hispanic black infants has improved modestly from levels reported for the early 1990s (13.6 percent in 1991), and has been essentially stable since 1995. The percent of VLBW non-Hispanic black infants was 3.08 in 2001, about the same as that in 2000 (3.10 percent), but up somewhat from the level reported for 1990 (2.93 percent). When only singleton births are examined, the LBW rate among non-Hispanic black births has declined from 11.9 to 11.2 percent between 1990 and 2001, and the VLBW rate has been stable (2.57 percent in 2001) **(table G)**. Despite the more positive trends, singleton infants born to black mothers continue to be more than twice as likely as non-Hispanic white or Hispanic infants to weigh less than 2,500 grams at birth.

Table G. Rate of very low birthweight and low birthweight, and mean birthweight among singletons by race and Hispanic origin of mother, United States: 1990, 1995, 2000, and 2001

	2001	2000	1995	1990[1]
Total, all races, origins[2]				
Percent very low birthweight . .	1.10	1.11	1.08	1.05
Percent low birthweight	6.04	6.00	6.05	5.90
Mean/Standard deviation[3]	3,339(573)	3,348(577)	3,353(581)	3,365(583)
Non-Hispanic white				
Percent very low birthweight . .	0.81	0.80	0.78	0.73
Percent low birthweight	4.96	4.88	4.87	4.56
Mean/Standard deviation[3]	3,399(557)	3,410(560)	3,416(563)	3,433(562)
Non-Hispanic black				
Percent very low birthweight . .	2.57	2.62	2.55	2.54
Percent low birthweight	11.19	11.28	11.66	11.92
Mean/Standard deviation[3]	3,135(632)	3,141(637)	3,132(635)	3,128(635)
Hispanic[4]				
Percent very low birthweight . .	0.93	0.94	0.93	0.87
Percent low birthweight	5.40	5.36	5.36	5.23
Mean/Standard deviation[3]	3,337(550)	3,344(552)	3,343(553)	3,351(552)

[1]Data by race and Hispanic origin exclude data for New Hampshire and Oklahoma, which did not require reporting of Hispanic origin of mother.
[2]Includes births to races not shown separately.
[3]Computed in grams.
[4]Includes persons of Hispanic origin of any race.

NOTE: Very low birthweight is less than 1,500 grams. Low birthweight is less than 2,500 grams.

For 2001, 6.5 percent of Hispanic births weighed less than 2,500 grams compared with 6.4 percent for 1997–2000. Since 1990, this measure has risen moderately for Hispanic births, from 6.1 percent. Hispanic VLBW was 1.14 percent in 2001, unchanged since 1999. Low birthweight among Hispanic singletons was 5.40 percent for 2001 compared with 5.23 percent in 1990; VLBW among Hispanic singletons is essentially unchanged over this period (0.9 percent) (**table G**).

Notwithstanding differences in LBW trends among non-Hispanic white, non-Hispanic black, and Hispanic births, these groups demonstrate similar reductions of 20 to 25 percent in infant mortality rates between 1990 and 2000 (75,103).

The diversity of the Hispanic subgroups is underscored by large differences in LBW risk among the groups; for example, the rate of LBW for births to Puerto Rican mothers (9.3 percent) was more than 50 percent higher than that for births to Mexican mothers (6.1 percent). **(See table 25.)** Among the API subgroups, Chinese infants were the least likely (5.3 percent) and Filipino infants the most likely (8.7 percent), to weigh less than 5 and a half pounds (**table 24**).

The percent of **higher birthweight or macrosomic births** (4,000 grams or more, or at least 8 pounds, 14 ounces) was down markedly between 2000 and 2001, from 9.9 to 9.4 percent. The proportion of higher birthweight infants has generally trended downward after peaking at around 11 percent in the 1980s. **(See figure 9.)** From 2000 to 2001, macrosomia declined quite substantially among non-Hispanic white infants (from 11.7 to 11.1 percent), but was comparatively stable for Hispanic (9 percent), and non-Hispanic black infants (5 percent) (**tables 24 and 25**).

The **mean birthweight** for singleton births for 2001 was 3,339 ...r 7 pounds, 6 ounces (**table G**). The mean weight of non-Hispanic white singletons was 3,399 grams, at least 250 grams (9 ounces) higher than the average weight of non-Hispanic black singletons (3,135 grams).

The risk of delivering an LBW infant is highest for the youngest (less than 15 years) and the oldest mothers (45 years of age and over) (**table 45**). Much of the excess LBW risk of older mothers can be attributed to their higher multiple birth rates. In 2001 one-third of all LBW births to women 45 years of age and over was a multiple birth, compared with 11 percent of LBW births to women under 20 years of age.

There are large differences **among the States in VLBW and LBW rates (tables 46 and 47)**. For 2001, LBW levels for non-Hispanic white births ranged from 5.0 (Alaska) to 8.4 percent (West Virginia). As in previous years, the highest State-specific rate for non-Hispanic white births was lower than the lowest State-specific rate for non-Hispanic black births; 2001 LBW rates for States with at least 1,000 non-Hispanic black births ranged from 9.8 percent in Minnesota, to 14.4 percent in Arizona and Louisiana.

Apgar score

The Apgar score is a routinely performed method of evaluating the general physical condition of the newborn at 1 minute, 5 minutes, and if desired, at additional 5-minute intervals after delivery (104–106). The score measures five easily identifiable infant characteristics—heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each characteristic is assessed and assigned a value of 0 to 2, with 2 being optimum. The total score is the sum of the scores of the five components (104). A score of 0 to 3 indicates an infant in need of resuscitation; a score in the range of 4 to 6 is considered intermediate; a score of 7 or greater indicates that the neonate is in good to excellent physical condition. The 1-minute Apgar (no longer available from national vital statistics data), signals the need for immediate resuscitation. The 5-minute Apgar score can be a useful clinical indicator of the effectiveness of resuscitation efforts, but has limited use in determining the severity of the problem and correlates poorly with future neurologic outcome (105). In 2001 all States except California and Texas reported information on the 5-minute Apgar score, accounting for 78 percent of all U.S. births.

In 2001 the proportion of newborns with Apgar scores of 9 or 10, indicating excellent infant health status has increased very slowly from 88.6 percent in 1978 to 90.3. The proportion of births with low Apgar scores (below 7) declined over 30 percent from 1978 to 1993 (2.1 percent to 1.4) and remained unchanged since then (1.4 percent in 2001) (**tables 24 and 25**).

For non-Hispanic black infants, unfavorable Apgar scores have declined and excellent Apgar ratings have increased in the past decade, while low and high Apgar ratings have remained steady for non-Hispanic whites. Despite the improvement in scores for non-Hispanic black infants, disparities persist between the two groups. In 2001, 2.3 percent of non-Hispanic black infants have Apgar scores under 7 compared with 1.2 percent of non-Hispanic white infants.

Multiple births (twins, triplets, etc.) are at higher risk of poor outcome compared with singletons (see section on Multiple births) and are thus more likely to have lower Apgar scores. Interestingly, Apgar scores have improved among both multiple and singleton births over the last two decades. Between 1978 and 2001 the percent of multiples with low Apgar scores dropped by nearly one-half (from 9.6 to 4.9); low

Apgar scores for singletons declined from 2.0 to 1.2 percent over this period. The amelioration in Apgar scores suggests improvements in resuscitation techniques (107,108).

Abnormal conditions of the newborn

Eight abnormal conditions are reported on the birth certificate. Each year since these data have been collected (1989), the three most frequently reported conditions have been assisted ventilation less than 30 minutes, assisted ventilation of 30 minutes or longer, and hyaline membrane disease/respiratory distress syndrome (RDS) (**table 48**).

In 2001 the rate for assisted ventilation less than 30 minutes was 22.0 per 1,000. The rate has nearly doubled since 1989 (11.4). The rate of assisted ventilation of 30 minutes or longer was 9.3 per 1,000. This rate has also slowly increased since 1989 (6.9). Assisted ventilation is a mainstay in the treatment of respiratory disorders such as RDS (109,110).

The overall rate of hyaline membrane disease (RDS) was 6.0 per 1,000 in 2001 and has been decreasing slowly since the highest levels were reported for 1994–95 (6.7). Hyaline membrane disease/RDS is a frequent cause of morbidity in preterm infants (111). Risk factors include early gestational age, poorly controlled maternal diabetes, multiple births, and fetal asphyxia (109).

The rate for meconium aspiration syndrome (1.6) has been slowly decreasing since 1989 (3.2); the rate for anemia (1.0) was half the 1989 rate (2.0).

Abnormal conditions may be underreported on the birth certificate (77,112). For example, at birth the observable features of fetal alcohol syndrome (FAS), a leading preventable cause of developmental disabilities and birth defects, may be subtle or not recognized (61,113).

Congenital anomalies

The leading cause of infant deaths in the United States, congenital anomalies, are also a cause of metabolic disorders and disabilities (75,106,114,115). Congenital anomalies are reported on the birth certificates of 49 States and the District of Columbia, accounting for more than 99 percent of births in 2001 (**table 49**).

Although congenital anomalies are underreported on the birth certificate, birth certificate data may be a valuable resource for exploratory or corroborative studies (77,116). A recent report using birth certificate data corroborated findings of a positive association between maternal smoking and selected birth defects, including cleft lip/palate and clubfoot (116). Complete reporting of these conditions is limited by difficulties in detection at birth (77,117). Anomalies that are most serious and/or apparently cause functional or cosmetic impairment are more likely to be recognized and reported prior to hospital discharge (117). The congenital anomalies reported on the birth certificate are rare events and a small change in the number of anomalies reported can result in a relatively large change in rates. Therefore, caution should also be used in comparing yearly rates for a specific anomaly.

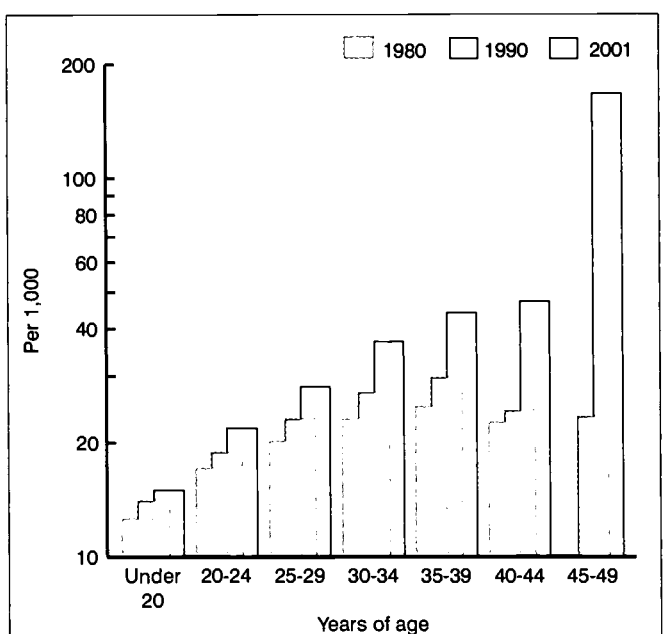
In 2001 rates for the 21 malformations/groups of malformations listed on the birth certificate were essentially unchanged from 2000. The rate of cleft lip/palate was 80.6 per 100,000 births. Clubfoot was reported at a rate of 58.6 per 100,000.

The rate for spina bifida/meningocele in 2001 was 19.9 per 100 births; the rate for anencephalus was 9.9. Since 1992 there has been a nationwide effort to prevent neural tube defects, such as spina bifida and anencephalus, by encouraging increased intake of folic acid among women of childbearing age; fortification of all cereal and grain products with folic acid has been mandatory since 1998 (118). Increased folate use among women of childbearing age was recently reported (119). Significant declines in the rates for these conditions have been observed between 1996 (prefortification) and 2001 (118,120).

Multiple births

The **twin birth rate** continued to climb for 2001, rising 3 percent, to 30.1 per 1,000 total live births. **(See table 50 for 2001 data.)** The twinning rate has climbed 33 percent since 1990 (22.6 per 1,000), and 59 percent since 1980 (18.9 per 1,000). The current year marks the first that the proportion of all U.S. births that are twins exceeded 3 percent. There were 121,246 births in twin deliveries in 2001, 77 percent more than the number reported for 1980 (68,339) (121).

Twinning rates increased between 2000 and 2001 among non-Hispanic white (33.5 per 1,000 in 2001), and non-Hispanic black mothers (33.9), but were essentially unchanged for Hispanics (20.3). Twin birth rates were up for the current year among all age groups except teenagers, but increases were most pronounced for mothers 40 years of age and older. Twinning rates have risen for all age groups over the last decade, but the largest increases have been for older mothers. Between 1990 and 2001, the twin birth rate for women 40–44 years has almost doubled, rising from 24.7 to 48.1 per 1,000; the rate for women 45–49 years has climbed more than 7 times, from 23.8 to 170.1 (**figure 10**). In contrast, the twin birth rate for women 20–24 years has risen a comparatively modest 16 percent, from 19.2 to 22.3 per 1,000 over this period. In 2001, 17 percent of all births to women 45–49 years of age were twins.



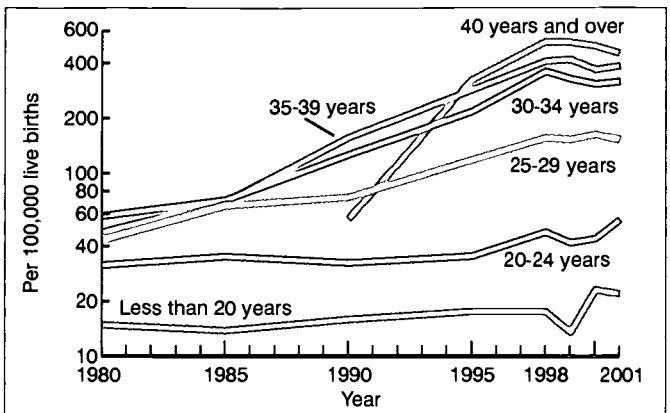
NOTE: The birth rate for women 45-49 years of age for 1980 is not shown because of the small number of twin births. Rates are plotted on a log scale.

Figure 10. Twin birth rates by age of mother: United States, 1980, 1990, and 2001

Following 2 years of decline, the **birth rate for triplets and other higher order multiples** (triplet/+) also rose 3 percent, to 185.6 triplet/+ births per 100,000. After surging dramatically between 1980 and 1998 (from 37.0 to 193.5 per 100,000) the triplet/+ birth rate (the number of triplets, quadruplets, and quintuplets, and other higher order multiples per 100,000 live births) declined slightly in 1999 and 2000. The current level remains lower than the 1998 peak, however. There were 7,471 triplet/+ births in 2001: 6,885 triplets, 501 quadruplets, and 85 quintuplets and other higher order multiples. The number of quadruplets and quintuplets and other higher order multiples has been fairly stable since 1996 (122).

The upsurge in multiple births over the last 2 decades, especially in triplet/+ births, has been associated with two related trends: advances in, and greater access to fertility therapies (assisted reproductive technologies (ART) such as *in vitro* fertilization (IVF), and non-ART procedures such as intrauterine insemination and ovulation-inducing drugs), and with the older age of childbearing (women in their thirties are more likely to have a multiple birth than younger women even without the use of fertility therapies) (123–125). A study of 1997 triplet/+ births estimated that 43 percent resulted from ART, 38 percent were the result of ovulation-inducing drugs; only 20 percent of triplet/+ births were spontaneously conceived (98).

Between 1990 and 1998, the triplet/+ birth rate climbed an average of 13 percent annually. Notwithstanding the 3 percent rise in the triplet/+ rate for the current year, the dramatic surge in triplet births appears to have subsided, at least for the short term. The shift in this trend, particularly among older women (**see figure 11**)—those most likely to seek fertility therapy—suggests the influence of more than changing demographics. In 1999 The American College of Obstetricians and Gynecologists and The American Society of Reproductive Medicine issued recommendations intended to prevent triplets/+ pregnancies because of their elevated risk of poor outcome (126,127). Recent refinements to fertility-enhancing therapies, particularly to IVF, which lower the risk of multifetal pregnancy, also may be affecting the incidence of higher order multiple births (126–129).



NOTES: Triplet/+ include births in greater than twin deliveries. Rates are plotted on a log scale.

Figure 11. Triplet/+ birth rates by age of mother: United States, 1980–2001

The rate of triplet/+ births rose 3 percent between 2000 and 2001 for non-Hispanic white and Hispanic women (to 253.3 and 83.3 per 100,000, respectively), and 8 percent among non-Hispanic black women (90.0). Age-specific triplet/+ birth rates for non-Hispanic white mothers are similar to those of black mothers through age group 20–24 years, but are more than double those of black mothers thereafter.

The elevated risk of multiple births is demonstrated in **text table H**. In 2001 the average twin was delivered more than 3 weeks earlier than the average singleton (35.4 compared with 38.8); the average triplet was born more than 6 weeks earlier (32.0). The average triplet weighed about half of its singleton counterpart at birth. Although infant mortality has declined by about a third for both twins and triplet/+ between 1990 and 2000, the risk of early death for twins continues to be nearly 5 times that of singletons and the risk for triplets/+ 10 times as high (75, 103). Those who survive are at increased risk of long-term disabilities such as cerebral palsy (130). Women with multiple-fetal pregnancies are also at increased risk—they are more likely to develop pregnancy-induced complications (130).

Table H. Gestational age and birthweight characteristics by plurality: United States, 2001

	Twins	Triplets	Quadruplets	Quintuplets/+	Singletons
Number	121,246	6,885	501	85	3,897,216
Percent very preterm[1]	11.8	36.7	64.5	78.6	1.6
Percent preterm[2]	57.4	92.4	97.8	91.7	10.4
Mean gestational age (weeks)/ standard deviation	35.4(3.7)	32.0(4.0)	29.6(4.1)	29.1(3.9)	38.8(2.5)
Percent very low birthweight[3]	10.2	34.8	68.4	77.4	1.1
Percent low birthweight[4]	54.9	94.0	98.4	91.7	6.04
Mean birthweight (grams)/ standard deviation	2,353(647)	1,678(574)	1,290(549)	1,269(676)	3,339(573)

[1]Very preterm is less than 32 completed weeks of gestation.
[2]Preterm is less than 37 completed weeks of gestation.
[3]Very low birthweight is less than 1,500 grams.
[4]Low birthweight is less than 2,500 grams.

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List of Detailed Tables

Guide to Tables in Births: Final Data for 2001

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, American Samoa, and Northern Marianas.
[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 and 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, 1960-2001

[Birth rates are live births per 1,000 population in specified group. Fertility rates are live births 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:															
2001	4,025,933	3,177,626	606,156	41,872	200,279	14.5	13.9	17.0	16.9	17.2	66.9	66.3	69.5	70.8	69.4
2000	4,058,814	3,194,005	622,598	41,668	200,543	14.7	14.1	17.6	17.1	17.8	67.5	66.5	71.7	71.4	70.7
1999	3,959,417	3,132,501	605,970	40,170	180,776	14.5	13.9	17.4	16.8	16.7	65.9	65.1	70.1	69.7	65.6
1998	3,941,553	3,118,727	609,902	40,272	172,652	14.6	14.0	17.7	17.1	16.4	65.6	64.6	71.0	70.7	64.0
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 underregistration															
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.

NOTES: 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. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S.Census. As a result, rates for more recent years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.

Table 2. Live births by age of mother, live-birth order, and race of mother: United States, 2001

[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	4,025,933	7,781	445,944	20,150	45,367	79,807	126,361	174,259	1,021,627	1,058,265	942,697	451,723	92,813	4,844	239
1st child	1,594,954	7,614	349,743	19,268	41,472	68,241	98,653	122,109	468,447	376,247	271,596	100,701	19,380	1,154	72
2d child	1,308,748	132	79,446	757	3,453	10,196	23,448	41,592	351,949	363,743	340,023	146,291	25,938	1,164	62
3d child	675,748	4	12,958	22	212	929	3,317	8,478	143,255	198,094	194,844	106,196	19,540	813	44
4th child	263,242	3	1,692	1	12	63	351	1,265	41,418	76,435	79,868	51,488	11,775	534	29
5th child	95,640	-	190	5	-	7	41	137	10,054	26,216	30,068	22,491	6,250	355	16
6th child	38,436	-	17	-	-	-	5	12	2,330	9,063	12,686	10,556	3,576	200	8
7th child	17,216	-	4	-	1	-	-	3	518	3,262	5,733	5,485	2,064	149	1
8th child and over	18,161	-	2	-	-	-	-	2	176	1,713	4,913	6,980	3,929	442	6
Not stated	13,788	28	1,892	97	217	371	546	661	3,480	3,492	2,966	1,535	361	33	1
White	3,177,626	4,095	318,563	12,584	30,510	56,098	91,284	128,087	779,529	850,343	777,294	368,816	74,856	3,936	194
1st child	1,259,698	3,997	253,947	12,040	28,173	48,612	72,711	92,411	369,796	307,860	224,370	82,773	15,931	965	59
2d child	1,051,422	76	54,299	454	2,046	6,604	15,985	29,210	272,320	299,410	284,130	119,205	20,945	985	52
3d child	535,772	3	7,860	12	116	553	1,957	5,222	102,060	158,157	163,007	88,218	15,786	648	33
4th child	200,992	3	862	1	5	32	168	656	25,885	56,866	65,028	42,484	9,428	413	23
5th child	68,913	-	91	3	-	6	22	60	5,346	17,517	22,912	17,815	4,931	286	15
6th child	26,563	-	10	-	-	-	4	6	1,116	5,328	8,939	8,180	2,826	157	7
7th child	11,487	-	1	-	-	-	-	1	217	1,693	3,766	4,056	1,637	116	1
8th child and over	12,031	-	2	-	-	-	-	2	98	795	2,798	4,903	3,093	339	3
Not stated	10,748	16	1,491	74	170	291	437	519	2,691	2,717	2,344	1,182	279	27	1
Black	606,156	3,455	110,843	6,881	13,163	20,778	30,516	39,485	199,221	137,400	94,660	49,065	11,001	495	16
1st child	226,781	3,394	82,823	6,569	11,771	17,101	22,385	24,997	75,958	33,344	20,450	8,901	1,821	88	2
2d child	178,091	49	22,241	278	1,279	3,244	6,627	10,813	66,880	43,050	29,124	13,902	2,744	97	4
3d child	107,910	1	4,593	10	89	339	1,229	2,926	36,127	31,663	21,721	11,397	2,321	83	4
4th child	50,244	-	764	-	5	29	171	559	13,931	16,234	11,117	6,497	1,623	75	3
5th child	21,954	-	91	2	-	1	18	70	4,297	7,327	5,628	3,576	986	49	-
6th child	9,678	-	6	-	-	-	1	5	1,108	3,147	2,981	1,833	574	28	1
7th child	4,616	-	3	-	1	-	-	2	270	1,351	1,532	1,134	305	21	-
8th child and over	4,752	-	-	-	-	-	-	-	70	776	1,695	1,583	577	49	2
Not stated	2,130	11	322	22	38	64	85	113	580	508	412	242	50	5	-
American Indian [1]	41,872	145	7,939	357	863	1,475	2,257	2,987	14,071	9,878	6,190	2,940	674	34	1
1st child	14,639	139	6,018	342	784	1,261	1,682	1,949	5,177	1,949	944	339	69	3	1
2d child	11,619	5	1,587	15	72	192	496	812	4,975	2,882	1,482	562	123	3	-
3d child	7,560	-	260	-	3	14	62	181	2,653	2,465	1,436	623	119	4	-
4th child	3,989	-	29	-	-	1	3	25	896	1,431	1,017	504	102	10	-
5th child	1,896	-	2	-	-	-	-	2	213	664	564	367	85	1	-
6th child	974	-	-	-	-	-	-	-	53	280	360	226	50	5	-
7th child	480	-	-	-	-	-	-	-	13	97	194	133	41	2	-
8th child and over	479	-	-	-	-	-	-	-	4	50	166	173	80	6	-
Not stated	236	1	43	-	4	7	14	18	87	60	27	13	5	-	-
Asian or Pacific Islander	200,279	86	8,599	328	811	1,456	2,304	3,700	28,806	60,644	64,553	30,902	6,282	379	28
1st child	93,836	84	6,955	317	744	1,267	1,875	2,752	17,516	33,094	25,832	8,688	1,559	98	10
2d child	67,616	2	1,319	10	56	156	340	757	7,774	18,401	25,287	12,622	2,126	79	6
3d child	24,506	-	245	-	4	23	69	149	2,415	5,809	8,680	5,958	1,314	78	7
4th child	8,017	-	37	-	2	1	9	25	706	1,904	2,706	2,003	622	36	3
5th child	2,877	-	6	-	-	-	1	5	198	708	964	733	248	19	1
6th child	1,221	-	1	-	-	-	-	1	53	308	406	317	126	10	-
7th child	633	-	-	-	-	-	-	-	18	121	241	162	81	10	-
8th child and over	899	-	-	-	-	-	-	-	4	92	254	321	179	48	1
Not stated	674	-	36	1	5	9	10	11	122	207	183	98	27	1	-

- 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, 2001

[Rates are live births per 1,000 women in specified age and racial group. Fertility rate computed by relating total births, regardless of age of mother, to women aged 15-44 years. 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	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	66.9	0.8	45.8	25.2	75.5	109.9	121.3	95.2	41.3	8.1	0.5
1st child	26.6	0.8	36.1	22.5	55.7	50.6	43.3	27.5	9.2	1.7	0.1
2d child	21.8	0.0	8.2	2.5	16.4	38.0	41.8	34.4	13.4	2.3	0.1
3d child	11.3	*	1.3	0.2	3.0	15.5	22.8	19.7	9.7	1.7	0.1
4th child	4.4	*	0.2	0.0	0.4	4.5	8.8	8.1	4.7	1.0	0.1
5th child	1.6	*	0.0	*	0.0	1.1	3.0	3.0	2.1	0.5	0.0
6th and 7th child	0.9	*	0.0	*	0.0	0.3	1.4	1.9	1.5	0.5	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.5	0.6	0.3	0.0
White	66.3	0.5	41.4	21.9	69.7	106.2	124.5	98.9	41.9	8.0	0.5
1st child	26.4	0.5	33.2	19.7	52.7	50.5	45.2	28.6	9.4	1.7	0.1
2d child	22.0	0.0	7.1	2.0	14.4	37.2	44.0	36.3	13.6	2.2	0.1
3d child	11.2	*	1.0	0.2	2.3	13.9	23.2	20.8	10.0	1.7	0.1
4th child	4.2	*	0.1	0.0	0.3	3.5	8.4	8.3	4.8	1.0	0.1
5th child	1.4	*	0.0	*	0.0	0.7	2.6	2.9	2.0	0.5	0.0
6th and 7th child	0.8	*	*	*	*	0.2	1.0	1.6	1.4	0.5	0.0
8th child and over	0.3	*	*	*	*	0.0	0.1	0.4	0.6	0.3	0.0
Black	69.5	2.2	73.2	45.6	113.2	138.3	104.1	67.0	32.2	7.3	0.4
1st child	26.1	2.1	54.9	39.7	76.8	52.9	25.4	14.5	5.9	1.2	0.1
2d child	20.5	0.0	14.7	5.4	28.3	46.6	32.7	20.7	9.2	1.8	0.1
3d child	12.4	*	3.0	0.5	6.7	25.2	24.1	15.4	7.5	1.5	0.1
4th child	5.8	*	0.5	0.0	1.2	9.7	12.3	7.9	4.3	1.1	0.1
5th child	2.5	*	0.1	*	0.1	3.0	5.6	4.0	2.4	0.7	0.0
6th and 7th child	1.6	*	*	*	*	1.0	3.4	3.2	2.0	0.6	0.0
8th child and over	0.5	*	*	*	*	0.0	0.6	1.2	1.0	0.4	0.0
American Indian [2]	70.8	1.2	66.0	36.7	111.9	134.0	105.4	68.0	32.5	7.4	0.4
1st child	24.9	1.1	50.3	32.7	78.0	49.6	20.9	10.4	3.8	0.8	*
2d child	19.8	*	13.3	3.8	28.1	47.7	30.9	16.4	6.2	1.4	*
3d child	12.9	*	2.2	*	5.2	25.4	26.5	15.8	6.9	1.3	*
4th child	6.8	*	0.2	*	0.6	8.6	15.4	11.2	5.6	1.1	*
5th child	3.2	*	*	*	*	2.0	7.1	6.2	4.1	0.9	*
6th and 7th child	2.5	*	*	*	*	0.6	4.0	6.1	4.0	1.0	*
8th child and over	0.8	*	*	*	*	*	0.5	1.8	1.9	0.9	*
Asian or Pacific Islander	69.4	0.2	20.4	10.2	35.6	70.1	125.5	118.3	59.2	12.5	0.9
1st child	32.6	0.2	16.5	9.2	27.5	42.8	68.7	47.5	16.7	3.1	0.2
2d child	23.5	*	3.1	0.9	6.5	19.0	38.2	46.5	24.3	4.2	0.2
3d child	8.5	*	0.6	0.1	1.3	5.9	12.1	15.9	11.4	2.6	0.2
4th child	2.8	*	0.1	*	0.2	1.7	4.0	5.0	3.8	1.2	0.1
5th child	1.0	*	*	*	*	0.5	1.5	1.8	1.4	0.5	0.0
6th and 7th child	0.6	*	*	*	*	0.2	0.9	1.2	0.9	0.4	0.0
8th child and over	0.3	*	*	*	*	*	0.2	0.5	0.6	0.4	0.1

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in numerator.
0.0 Quantity more than zero but less than 0.05.
1 Birth rates computed by relating births to women aged 45-54 years to women aged 45-49 years.
2 Includes births to Aleuts and Eskimos.

NOTES: 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. Denominators for population-based rates are derived from the 1990 U.S. Census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.

Table 4. Total fertility rates and birth rates by age of mother: United States, 1970-2001, and by age and race of mother: United States, 1980-2001

[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. Population 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]											
2001	2,114.5	0.8	45.8	25.2	75.5	109.9	121.3	95.2	41.3	8.1	0.5
2000	2,130.0	0.9	48.5	27.4	79.2	112.3	121.4	94.1	40.4	7.9	0.5
1999	2,075.0	0.9	49.6	28.7	80.3	111.0	117.8	89.6	38.3	7.4	0.4
1998	2,058.5	1.0	51.1	30.4	82.0	111.2	115.9	87.4	37.4	7.3	0.4
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											
2001	2,109.5	0.5	41.4	21.9	69.7	106.2	124.5	98.9	41.9	8.0	0.5
2000	2,113.5	0.6	43.6	23.6	72.7	107.9	124.3	97.4	40.7	7.8	0.4
1999	2,065.0	0.6	44.6	24.8	73.5	107.0	121.1	93.2	38.8	7.3	0.4
1998	2,041.0	0.6	45.4	25.9	74.6	107.2	119.1	90.5	37.8	7.2	0.4
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	84.0	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											
2001	2,123.5	2.2	73.2	45.6	113.2	138.3	104.1	67.0	32.2	7.3	0.4
2000	2,193.0	2.4	79.4	50.4	121.3	144.2	105.3	67.5	32.2	7.2	0.4
1999	2,146.5	2.6	81.0	52.0	122.8	141.7	101.9	64.5	30.8	6.5	0.3
1998	2,171.0	2.9	85.4	56.8	126.9	141.9	101.8	64.7	30.5	6.7	0.3
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

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Table 4. Total fertility rates and birth rates by age of mother: United States, 1970-2001, and by age and race of mother: United States, 1980-2001 --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. Population 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]											
2001	2,074.5	1.2	66.0	36.7	111.9	134.0	105.4	68.0	32.5	7.4	0.4
2000	2,100.5	1.3	67.8	39.6	113.1	135.6	106.9	68.3	32.5	7.3	0.4
1999	2,056.5	1.6	67.8	41.4	110.6	137.1	102.4	64.3	30.7	7.1	0.3
1998	2,090.5	1.6	72.1	44.4	118.4	139.3	102.2	66.3	30.2	6.4	*
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											
2001	2,035.5	0.2	20.4	10.2	35.6	70.1	125.5	118.3	59.2	12.5	0.9
2000	2,072.5	0.3	21.6	11.5	37.0	72.0	125.8	120.8	60.4	12.7	0.9
1999	1,927.0	0.3	22.3	12.3	38.0	70.0	116.4	109.3	54.6	11.6	0.9
1998	1,867.5	0.4	23.1	13.8	38.3	68.8	110.4	105.1	52.8	12.0	0.9
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; based on fewer than 20 births in numerator.
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.

NOTES: 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. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S. Census. As a result, rates for more recent years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.

Table 5. Fertility rates and birth rates by live-birth order and race of mother: United States, 1980-2001

[Rates are live births per 1,000 women aged 15-44 years. Population 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]								
2001	66.9	26.6	21.8	11.3	4.4	1.6	0.9	0.3
2000	67.5	27.1	21.9	11.3	4.3	1.6	0.9	0.3
1999	65.9	26.6	21.5	10.9	4.2	1.5	0.9	0.3
1998	65.6	26.4	21.4	10.8	4.2	1.5	0.9	0.3
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								
2001	66.3	26.4	22.0	11.2	4.2	1.4	0.8	0.3
2000	66.5	26.8	21.9	11.2	4.1	1.4	0.8	0.3
1999	65.1	26.4	21.6	10.8	4.0	1.4	0.8	0.2
1998	64.6	26.1	21.5	10.7	3.9	1.3	0.8	0.2
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								
2001	69.5	26.1	20.5	12.4	5.8	2.5	1.6	0.5
2000	71.7	26.9	21.3	12.8	5.9	2.6	1.7	0.6
1999	70.1	26.5	20.9	12.4	5.7	2.5	1.7	0.6
1998	71.0	27.0	21.1	12.3	5.7	2.6	1.7	0.6
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. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S. Census. As a result, rates for more recent years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; 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, 1989-2001

[Birth rates are live births per 1,000 population in specified group. Fertility rates are live births per 1,000 women aged 15-44 years in specified group]

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										
2001	4,025,933	851,851	611,000	57,568	14,017	121,365	47,901	3,149,572	2,326,578	589,917
2000	4,058,814	815,868	581,915	58,124	13,429	113,344	49,056	3,199,994	2,362,968	604,346
1999	3,959,417	764,339	540,674	57,138	13,088	103,307	50,132	3,147,580	2,346,450	588,981
1998	3,941,553	734,661	516,011	57,349	13,226	98,226	49,849	3,158,975	2,361,462	593,127
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										
2001	14.5	25.4	---	---	---	---		13.0	11.9	17.5
2000 [6]	14.7	25.1	27.1	20.2	10.4	23.9		13.4	12.2	18.1
1999 [6]	14.5	24.4	26.4	19.4	9.7	23.4		13.2	12.2	17.9
1998 [6]	14.6	24.3	26.4	19.0	10.0	23.2		13.4	12.3	18.2
1997 [6]	14.5	24.2	26.8	18.1	10.1	22.4		13.3	12.2	18.1
1996 [6]	14.7	24.8	27.4	17.9	10.7	23.4		13.5	12.4	18.3
1995 [6]	14.8	25.2	26.9	19.7	11.0	25.3		13.7	12.6	18.8
1994 [6]	15.2	25.5	27.0	21.4	10.8	25.7		14.0	12.8	20.0
1993 [6]	15.5	26.0	27.4	21.9	10.5	26.9		14.4	13.1	21.1
1992 [6, 7]	15.9	26.5	27.8	23.2	10.1	27.9		14.8	13.5	21.9
1991 [6, 7]	16.3	26.7	29.2	21.0	10.1	26.5		15.2	13.9	22.5
1990 [4, 6]	16.7	26.7	28.7	21.6	10.9	27.5		15.7	14.4	23.0
1989 [5, 6]	16.3	26.2	25.7	23.7	10.0	28.3		15.4	14.2	22.8
Fertility rate										
2001	66.9	107.6	---	---	---	---		60.8	57.6	71.6
2000 [6]	67.5	105.9	115.1	84.3	57.3	94.3		61.8	58.5	73.7
1999 [6]	65.9	102.0	111.6	77.7	51.2	92.6		60.7	57.8	72.2
1998 [6]	65.6	101.1	112.1	75.5	50.1	90.2		60.7	57.7	73.0
1997 [6]	65.0	102.8	116.6	71.7	57.4	87.6		60.1	57.0	72.4
1996 [6]	65.3	104.9	119.3	71.3	58.9	90.2		60.3	57.3	72.5
1995 [6]	65.6	105.0	117.0	75.7	55.1	94.5		60.8	57.6	74.5
1994 [6]	66.7	105.6	115.4	81.9	55.9	97.7		62.0	58.3	79.0
1993 [6]	67.6	106.9	114.8	82.5	55.5	105.0		63.1	59.0	82.7
1992 [6, 7]	68.9	108.6	116.0	89.9	50.3	107.0		64.4	60.2	85.5
1991 [6, 7]	69.6	108.1	121.6	80.9	49.1	99.3		65.4	61.0	87.6
1990 [4, 6]	71.0	107.7	118.9	82.9	52.6	102.7		67.1	62.8	89.0
1989 [5, 6]	69.2	104.9	106.6	86.6	49.8	95.8		65.7	60.5	84.8

--- Data not available.
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 Rates for the Central and South American population includes other and unknown Hispanic.
7 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.

NOTES: 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. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S.Census. As a result, rates for more recent years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; 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, 2001

[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	851,851	2,555	130,007	6,936	15,165	25,023	36,298	46,585	258,431	227,910	150,352	67,952	13,956	668	20
1st child	312,530	2,493	98,662	6,544	13,640	20,629	26,920	30,929	111,378	59,595	28,502	10,048	1,760	84	8
2d child	260,316	46	25,612	319	1,311	3,799	7,868	12,315	92,641	78,564	44,356	16,368	2,620	105	4
3d child	160,289	1	4,226	11	84	370	1,141	2,620	38,772	55,331	40,904	17,833	3,103	117	2
4th child	69,904	2	531	1	5	22	101	402	11,126	22,573	21,576	11,531	2,474	91	-
5th child	26,556	-	62	2	-	5	12	43	2,559	7,460	8,697	6,070	1,618	89	1
6th child	10,381	-	3	-	-	-	1	2	571	2,323	3,415	3,026	985	55	3
7th child	4,378	-	-	-	-	-	-	-	119	792	1,400	1,457	569	40	1
8th child and over	3,703	-	1	-	-	-	-	1	49	391	981	1,405	789	86	1
Not stated	3,794	13	910	59	125	198	255	273	1,216	881	521	214	38	1	-
Mexican	611,000	1,920	98,806	5,312	11,660	19,126	27,565	35,143	192,167	165,177	101,213	42,707	8,600	401	9
1st child	216,639	1,870	74,306	4,996	10,418	15,642	20,215	23,035	80,215	38,807	15,666	4,940	800	32	3
2d child	183,757	35	19,910	250	1,054	2,970	6,139	9,497	70,170	56,692	27,268	8,389	1,254	38	1
3d child	118,713	1	3,299	9	66	299	888	2,037	29,769	42,739	29,725	11,393	1,734	53	-
4th child	53,632	1	407	1	5	20	78	303	8,436	17,745	16,823	8,487	1,671	62	-
5th child	20,598	-	44	2	-	4	8	30	1,998	5,776	6,786	4,670	1,252	71	1
6th child	8,080	-	3	-	-	-	1	2	429	1,779	2,652	2,402	769	43	3
7th child	3,494	-	-	-	-	-	-	-	92	618	1,124	1,177	452	31	-
8th child and over	2,932	-	1	-	-	-	-	1	38	296	784	1,095	646	71	1
Not stated	3,155	13	836	54	117	191	236	238	1,020	725	385	154	22	-	-
Puerto Rican	57,568	257	10,799	598	1,262	2,161	3,006	3,772	18,669	13,426	9,275	4,254	850	37	1
1st child	22,391	253	8,279	571	1,160	1,830	2,262	2,456	7,278	3,477	2,139	811	145	8	1
2d child	17,916	4	2,064	25	94	305	629	1,011	6,747	4,506	3,104	1,263	219	9	-
3d child	10,026	-	381	-	5	25	102	249	3,187	3,116	2,131	1,023	182	6	-
4th child	4,184	-	45	-	-	-	4	41	1,067	1,379	973	570	143	7	-
5th child	1,690	-	8	-	-	-	3	5	255	572	510	281	62	2	-
6th child	704	-	-	-	-	-	-	-	75	235	215	135	44	-	-
7th child	259	-	-	-	-	-	-	-	11	76	97	58	17	-	-
8th child and over	268	-	-	-	-	-	-	-	7	43	82	100	32	4	-
Not stated	130	-	22	2	3	1	6	10	42	22	24	13	6	1	-
Cuban	14,017	18	1,031	53	109	201	315	353	2,408	4,047	3,821	2,253	409	23	7
1st child	6,269	18	850	51	99	179	253	268	1,405	1,948	1,337	594	109	6	2
2d child	5,123	-	162	2	10	20	55	75	743	1,504	1,654	918	131	8	3
3d child	1,867	-	16	-	-	2	7	7	192	447	598	511	97	5	1
4th child	498	-	2	-	-	-	-	2	51	94	166	140	43	2	-
5th child	151	-	-	-	-	-	-	-	13	29	44	51	14	-	-
6th child	52	-	-	-	-	-	-	-	3	18	12	16	2	1	-
7th child	21	-	-	-	-	-	-	-	1	2	4	8	5	-	1
8th child and over	28	-	-	-	-	-	-	-	-	2	3	14	8	1	-
Not stated	8	-	1	-	-	-	-	1	-	3	3	1	-	-	-
Central and South American	121,365	166	11,271	483	1,136	1,971	3,169	4,512	30,715	33,621	27,488	14,641	3,279	181	3
1st child	48,307	162	9,087	464	1,060	1,690	2,546	3,327	16,285	12,021	7,218	2,925	575	32	2
2d child	38,628	3	1,872	16	67	255	553	981	9,927	11,880	9,526	4,563	813	44	-
3d child	21,202	-	249	-	8	22	59	160	3,344	6,375	6,436	3,858	889	50	1
4th child	8,163	1	39	-	-	1	8	30	877	2,268	2,687	1,785	491	15	-
5th child	2,895	-	5	-	-	1	1	3	147	708	978	814	230	13	-
6th child	1,133	-	-	-	-	-	-	-	44	199	391	363	126	10	-
7th child	416	-	-	-	-	-	-	-	6	53	109	163	77	8	-
8th child and over	320	-	-	-	-	-	-	-	2	32	69	135	73	9	-
Not stated	301	-	19	3	1	2	2	11	83	85	74	35	5	-	-
Other and unknown Hispanic	47,901	194	8,100	490	998	1,564	2,243	2,805	14,472	11,639	8,555	4,097	818	26	-
1st child	18,924	190	6,140	462	903	1,288	1,644	1,843	6,195	3,342	2,142	778	131	6	-
2d child	14,892	4	1,604	26	86	249	492	751	5,054	3,982	2,804	1,235	203	6	-
3d child	8,481	-	281	2	5	22	85	167	2,280	2,654	2,014	1,048	201	3	-
4th child	3,427	-	38	-	-	1	11	26	695	1,087	927	549	126	5	-
5th child	1,222	-	5	-	-	-	-	5	146	375	379	254	60	3	-
6th child	412	-	-	-	-	-	-	-	20	92	145	110	44	1	-
7th child	188	-	-	-	-	-	-	-	9	43	66	51	18	1	-
8th child and over	155	-	-	-	-	-	-	-	2	18	43	61	30	1	-
Not stated	200	-	32	-	4	4	11	13	71	46	35	11	5	-	-

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, 2001 —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]	3,149,572	5,184	313,448	13,113	29,933	54,336	89,357	126,709	757,692	824,186	786,198	380,511	78,046	4,096	211
1st child	1,272,906	5,083	249,213	12,631	27,602	47,244	71,205	90,531	354,583	314,387	241,264	89,833	17,427	1,052	64
2d child	1,041,223	84	53,416	433	2,119	6,343	15,458	29,063	257,558	283,276	293,636	129,021	23,131	1,044	57
3d child	511,552	3	8,645	11	127	550	2,153	5,804	103,716	141,698	152,820	87,675	16,273	683	39
4th child	191,748	1	1,149	-	7	41	247	854	30,063	53,439	57,795	39,631	9,210	433	27
5th child	68,473	-	126	3	-	2	29	92	7,437	18,597	21,171	16,276	4,591	262	13
6th child	27,780	-	14	-	-	-	4	10	1,748	6,683	9,171	7,452	2,565	142	5
7th child	12,712	-	4	-	1	-	-	3	397	2,453	4,285	3,987	1,478	108	-
8th child and over	14,290	-	1	-	-	-	-	1	125	1,304	3,891	5,521	3,093	350	5
Not stated	8,888	13	880	35	77	156	261	351	2,065	2,349	2,165	1,115	278	22	1
White	2,326,578	1,581	190,161	5,765	15,538	31,409	55,409	82,040	523,027	622,361	625,435	300,007	60,614	3,224	168
1st child	947,986	1,546	156,628	5,615	14,717	28,281	46,156	61,859	259,434	247,834	195,157	72,390	14,077	869	51
2d child	791,301	30	28,965	135	747	2,845	8,191	17,047	180,270	221,033	239,197	102,629	18,257	872	48
3d child	375,808	2	3,667	1	35	187	822	2,622	63,605	102,998	122,053	70,288	12,645	521	29
4th child	131,309	1	340	-	-	10	68	262	14,871	34,417	43,486	30,921	6,936	316	21
5th child	42,452	-	30	1	-	1	10	18	2,810	10,111	14,237	11,743	3,312	197	12
6th child	16,209	-	7	-	-	-	3	4	556	3,017	5,541	5,146	1,836	102	4
7th child	7,106	-	1	-	-	-	-	1	99	912	2,359	2,593	1,067	75	-
8th child and over	8,289	-	1	-	-	-	-	1	48	408	1,809	3,489	2,278	254	2
Not stated	6,118	2	522	13	39	85	159	226	1,334	1,631	1,596	808	206	18	1
Black	589,917	3,401	108,252	6,735	12,879	20,293	29,794	38,551	194,391	133,491	91,710	47,494	10,691	473	14
1st child	220,101	3,341	80,779	6,426	11,499	16,687	21,805	24,362	73,628	32,159	19,764	8,581	1,762	85	2
2d child	173,273	48	21,815	275	1,254	3,187	6,510	10,589	65,374	41,663	28,157	13,451	2,671	91	3
3d child	105,184	1	4,520	10	87	329	1,214	2,880	35,450	30,861	21,021	10,998	2,250	80	3
4th child	49,105	-	744	-	5	29	167	543	13,722	15,918	10,773	6,297	1,575	73	3
5th child	21,540	-	89	2	-	1	18	68	4,247	7,213	5,497	3,489	958	47	-
6th child	9,500	-	6	-	-	-	1	5	1,091	3,108	2,918	1,793	557	26	1
7th child	4,549	-	3	-	1	-	-	2	268	1,333	1,511	1,113	300	21	-
8th child and over	4,696	-	-	-	-	-	-	-	69	762	1,685	1,561	570	47	2
Not stated	1,969	11	296	22	33	60	79	102	542	474	384	211	48	3	-

- 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, 2001

[Fertility rates are computed by relating total births, regardless of age of mother, to women aged 15-44 years. Birth 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 origin of mother	15-44 years	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						
Hispanic											
Total	107.6	1.7	92.5	57.0	143.5	186.0	174.9	113.8	51.5	11.9	0.7
1st child	39.7	1.7	70.7	49.7	100.8	80.5	45.9	21.6	7.6	1.5	0.1
2d child	33.0	0.0	18.4	6.6	35.2	67.0	60.5	33.7	12.4	2.2	0.1
3d child	20.3	*	3.0	0.6	6.6	28.0	42.6	31.1	13.5	2.6	0.1
4th child	8.9	*	0.4	0.0	0.9	8.0	17.4	16.4	8.8	2.1	0.1
5th child	3.4	*	0.0	*	0.1	1.9	5.7	6.6	4.6	1.4	0.1
6th and 7th child	1.9	*	*	*	*	0.5	2.4	3.7	3.4	1.3	0.1
8th child and over	0.5	*	*	*	*	0.0	0.3	0.7	1.1	0.7	0.1
Non-Hispanic [2]											
Total [3]	60.8	0.6	37.9	19.9	64.0	96.5	111.9	92.3	39.9	7.6	0.5
1st child	24.6	0.6	30.2	17.9	48.0	45.3	42.8	28.4	9.4	1.7	0.1
2d child	20.1	0.0	6.5	1.8	13.2	32.9	38.5	34.6	13.5	2.3	0.1
3d child	9.9	*	1.1	0.1	2.4	13.3	19.3	18.0	9.2	1.6	0.1
4th child	3.7	*	0.1	0.0	0.3	3.8	7.3	6.8	4.2	0.9	0.1
5th child	1.3	*	0.0	*	0.0	1.0	2.5	2.5	1.7	0.4	0.0
6th and 7th child	0.8	*	*	*	*	0.3	1.2	1.6	1.2	0.4	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.5	0.6	0.3	0.0
White	57.6	0.3	30.0	14.1	52.9	86.8	111.3	94.7	39.8	7.3	0.4
1st child	23.5	0.2	24.7	13.0	41.7	43.2	44.4	29.6	9.6	1.7	0.1
2d child	19.6	0.0	4.6	1.0	9.8	30.0	39.6	36.3	13.6	2.2	0.1
3d child	9.3	*	0.6	0.1	1.3	10.6	18.5	18.5	9.3	1.5	0.1
4th child	3.3	*	0.1	*	0.1	2.5	6.2	6.6	4.1	0.8	0.0
5th child	1.1	*	0.0	*	0.0	0.5	1.8	2.2	1.6	0.4	0.0
6th and 7th child	0.6	*	*	*	*	0.1	0.7	1.2	1.0	0.4	0.0
8th child and over	0.2	*	*	*	*	0.0	0.1	0.3	0.5	0.3	0.0
Black	71.6	2.3	75.6	47.2	116.8	142.9	107.3	69.0	33.1	7.5	0.4
1st child	26.8	2.2	56.6	41.0	79.1	54.3	26.0	15.0	6.0	1.2	0.1
2d child	21.1	0.0	15.3	5.6	29.3	48.2	33.6	21.3	9.4	1.9	0.1
3d child	12.8	*	3.2	0.5	7.0	26.1	24.9	15.9	7.7	1.6	0.1
4th child	6.0	*	0.5	0.0	1.2	10.1	12.8	8.1	4.4	1.1	0.1
5th child	2.6	*	0.1	*	0.1	3.1	5.8	4.2	2.4	0.7	0.0
6th and 7th child	1.7	*	*	*	*	1.0	3.6	3.3	2.0	0.6	0.0
8th child and over	0.6	*	*	*	*	0.1	0.6	1.3	1.1	0.4	0.0

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numeretor.
0.0 Quantity more than zero but less than 0.05.
1 Birth rates computed by relating births to women aged 45-54 years to women aged 45-49 years.
2 Includes origin not stated.
3 Includes races other than white and black.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table only non-Hispanic women are classified by race. Denominators for population-based rates are derived from the 1990 U.S.Census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; 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, 1989-2001

[Fertility rates are live births per 1,000 women aged 15-44 years in specified racial group and birth rates are live births per 1,000 women in specified age and racial group. Population enumerated as of April 1 for 1990, and estimated as of July 1 for all other years. Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5]

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												
2001	2,114.5	66.9	0.8	45.8	25.2	75.5	109.9	121.3	95.2	41.3	8.1	0.5
2000	2,130.0	67.5	0.9	48.5	27.4	79.2	112.3	121.4	94.1	40.4	7.9	0.5
1999	2,075.0	65.9	0.9	49.6	28.7	80.3	111.0	117.8	89.6	38.3	7.4	0.4
1998	2,058.5	65.6	1.0	51.1	30.4	82.0	111.2	115.9	87.4	37.4	7.3	0.4
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												
2001	3,165.0	107.6	1.7	92.5	57.0	143.5	186.0	174.9	113.8	51.5	11.9	0.7
2000	3,108.0	105.9	1.9	94.4	60.0	143.6	184.6	170.8	109.0	48.7	11.6	0.6
1999	2,985.0	102.0	2.0	93.4	61.3	139.4	178.7	163.1	102.2	46.3	10.7	0.6
1998	2,947.5	101.1	2.1	93.6	62.3	140.1	178.4	160.2	98.9	44.9	10.8	0.6
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												
2001	---	---	---	---	---	---	---	---	---	---	---	---
2000	3,265.5	115.1	2.1	101.7	65.0	154.5	197.9	175.4	112.4	50.7	12.2	0.7
1999	3,181.5	111.6	2.3	101.5	65.4	156.8	194.2	169.8	107.9	49.1	10.8	0.7
1998	3,198.0	112.1	2.2	102.7	67.0	159.1	197.6	173.5	103.7	48.4	10.9	0.6
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												
2001	---	---	---	---	---	---	---	---	---	---	---	---
2000	2,584.0	84.3	1.9	97.0	63.2	143.1	181.3	121.3	74.2	34.1	6.7	0.3
1999	2,378.0	77.7	1.7	79.7	53.2	117.1	166.0	127.9	64.3	28.4	7.3	0.3
1998	2,268.0	75.5	1.9	81.2	55.1	120.7	164.2	104.4	67.6	26.7	7.2	0.4
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												
2001	---	---	---	---	---	---	---	---	---	---	---	---
2000	1,871.0	57.3	*	25.8	16.5	42.2	74.2	138.9	84.1	42.0	8.5	*
1999	1,563.0	51.2	0.7	27.1	15.7	46.2	71.8	92.8	72.9	39.6	7.4	*
1998	1,560.0	50.1	0.8	24.2	15.6	38.8	85.6	95.2	64.5	34.2	7.1	*
1997	1,814.5	57.4	1.0	38.3	25.3	53.4	82.7	123.5	75.7	35.1	6.3	0.3
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

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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, 1989-2001 --Con.

[Fertility rates are live births per 1,000 women aged 15-44 years in specified racial group and birth rates are live births per 1,000 women in specified age and racial group. Population enumerated as of April 1 for 1990, and estimated as of July 1 for all other years. Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5]

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						
Other Hispanic [6]												
2001	---	---	---	---	---	---	---	---	---	---	---	---
2000	2,969.5	94.3	1.3	76.9	47.0	118.0	154.5	180.2	117.7	50.2	12.4	0.7
1999	2,836.5	92.6	1.6	81.3	57.1	108.2	148.0	166.2	108.8	48.3	12.4	0.7
1998	2,719.0	90.2	1.9	80.0	56.7	106.9	137.4	157.2	106.9	46.9	12.9	0.6
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]												
2001	1,936.0	60.8	0.6	37.9	19.9	64.0	96.5	111.9	92.3	39.9	7.6	0.5
2000	1,968.0	61.8	0.7	40.9	22.1	68.4	99.7	113.2	91.9	39.3	7.5	0.4
1999	1,929.5	60.7	0.8	42.5	23.5	70.6	99.4	110.6	87.8	37.3	7.1	0.4
1998	1,919.5	60.7	0.8	44.3	25.4	72.8	99.9	109.3	85.7	36.5	7.0	0.4
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												
2001	1,853.0	57.6	0.3	30.0	14.1	52.9	86.8	111.3	94.7	39.8	7.3	0.4
2000	1,879.0	58.5	0.3	32.5	15.8	56.8	89.6	112.8	94.0	39.0	7.2	0.4
1999	1,850.0	57.8	0.3	34.0	17.1	58.9	89.9	111.0	90.3	37.3	6.8	0.4
1998	1,837.0	57.7	0.3	35.2	18.4	60.6	90.7	109.7	88.0	36.4	6.7	0.4
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												
2001	2,190.5	71.6	2.3	75.6	47.2	116.8	142.9	107.3	69.0	33.1	7.5	0.4
2000	2,256.0	73.7	2.5	81.9	52.0	125.1	148.6	108.2	69.3	33.0	7.3	0.4
1999	2,212.5	72.2	2.7	83.7	53.7	126.8	146.3	104.9	66.3	31.5	6.7	0.4
1998	2,235.5	73.0	3.0	88.2	58.8	130.9	146.4	104.6	66.6	31.2	6.8	0.3
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

--- Data not available.
* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
0.0 Quantity more than zero but less that 0.05.
[1] Fertility 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.

NOTES: 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. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S.Census. As a result, rates for more recent years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin. Rates for 2001 for Hispanic subgroups are not shown because population data for these groups, based on the 1990 Census, are not reliable; 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, each State and territory, 2001

[By place of residence. Birth rates are live births per 1,000 estimated population in each area; fertility rates are live births 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]	4,025,933	14.5	66.9	2,114.5	45.8	25.2	75.5
Alabama	60,454	13.7	62.4	1,941.5	57.8	33.5	91.8
Alaska	10,003	16.0	75.5	2,462.5	37.7	18.5	64.8
Arizona	85,597	17.1	84.0	2,643.0	65.3	38.1	106.6
Arkansas	37,010	14.3	67.5	2,090.0	64.2	33.0	109.1
California	527,759	15.5	69.5	2,151.0	45.2	26.0	70.6
Colorado	67,007	15.9	74.6	2,398.0	45.7	25.1	75.5
Connecticut	42,648	12.9	61.0	1,942.0	29.4	15.4	52.4
Delaware	10,749	13.9	61.5	1,958.5	48.2	29.2	74.0
District of Columbia	7,625	14.8	63.9	1,983.0	74.9	52.2	98.1
Florida	205,793	13.2	67.0	2,165.5	49.3	26.9	83.7
Georgia	133,526	16.5	71.1	2,228.0	60.9	34.1	100.3
Hawaii	17,072	14.5	71.4	2,311.0	42.5	22.4	66.5
Idaho	20,688	16.0	75.4	2,303.5	40.6	19.3	69.4
Illinois	184,064	15.0	69.5	2,189.5	47.3	26.5	78.5
Indiana	86,459	14.4	66.1	2,089.5	47.2	23.8	81.7
Iowa	37,619	13.0	63.4	2,035.0	33.0	16.2	58.2
Kansas	38,869	14.5	68.1	2,167.5	43.0	22.4	72.5
Kentucky	54,658	13.6	62.3	1,949.0	51.4	26.0	87.2
Louisiana	65,352	14.9	67.2	2,065.5	57.8	33.4	90.8
Maine	13,759	10.9	50.0	1,629.5	27.1	11.7	51.3
Maryland	73,218	13.9	60.9	1,948.0	38.2	21.6	63.3
Massachusetts	81,077	13.0	59.1	1,814.5	25.0	13.8	41.3
Michigan	133,427	13.4	61.0	1,938.0	37.2	19.5	64.4
Minnesota	67,562	13.8	63.5	2,061.0	27.9	14.0	48.8
Mississippi	42,282	15.1	67.6	2,045.5	66.7	39.6	104.9
Missouri	75,464	13.6	63.2	2,022.0	46.1	23.3	80.2
Montana	10,970	12.3	61.8	2,003.5	35.6	18.0	61.8
Nebraska	24,820	14.8	69.7	2,229.0	36.0	19.6	59.1
Nevada	31,382	16.1	79.4	2,541.5	56.4	30.5	97.9
New Hampshire	14,656	11.9	52.0	1,660.5	21.0	9.8	38.9
New Jersey	115,795	14.0	66.3	2,115.5	29.9	16.1	52.0
New Mexico	27,128	15.4	72.8	2,311.0	64.5	39.3	102.1
New York	254,026	13.9	64.4	2,012.5	34.1	18.8	56.2
North Carolina	118,185	15.1	70.4	2,239.0	55.2	29.9	94.7
North Dakota	7,629	12.2	59.3	1,898.5	27.2	11.9	49.2
Ohio	151,570	13.4	61.9	1,958.5	42.2	21.9	72.2
Oklahoma	50,118	14.8	70.8	2,204.5	58.0	30.7	96.8
Oregon	45,322	13.5	65.3	2,055.0	40.9	20.9	70.8
Pennsylvania	143,495	12.0	57.7	1,857.0	33.6	18.0	57.1
Rhode Island	12,713	12.7	59.2	1,869.5	37.4	21.5	60.9
South Carolina	55,756	14.1	62.8	1,959.0	57.4	33.2	89.8
South Dakota	10,483	14.1	67.7	2,174.5	37.1	18.7	62.8
Tennessee	78,340	14.0	64.3	2,037.5	58.4	30.9	99.0
Texas	365,410	17.6	79.9	2,493.5	66.5	40.4	103.0
Utah	47,959	21.8	95.0	2,755.5	38.2	19.3	61.8
Vermont	6,366	10.6	47.9	1,547.0	23.9	10.3	44.3
Virginia	98,864	14.0	60.9	1,894.5	39.4	21.1	64.1
Washington	79,570	13.6	61.9	1,963.0	34.9	17.7	59.8
West Virginia	20,428	11.4	55.6	1,711.5	45.5	22.6	78.2
Wisconsin	69,072	12.9	60.2	1,940.0	33.4	17.8	56.7
Wyoming	6,115	12.7	62.0	1,926.5	38.6	18.2	68.8
Puerto Rico	55,866	14.2	61.2	1,761.5	68.0	46.1	100.2
Virgin Islands	1,669	13.7	63.4	1,922.0	51.5	31.8	82.5
Guam	3,564	22.6	113.7	3,472.5	70.5	39.8	118.6
American Samoa	1,655	24.7	113.9	3,497.0	38.9	10.7	83.7
Northern Marianas	1,449	19.4	57.5	1,653.0	56.8	34.1	86.0

[1] Excludes data for the territories.

NOTES: Denominators for population-based rates are derived from the 1990 U.S.Census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.

Table 11. Live births by race of mother: United States, each State and territory, 2001

[By place of residence]

State	Number				
	All races	White	Black	American Indian [1]	Asian or Pacific Islander
United States [2]	4,025,933	3,177,626	606,156	41,872	200,279
Alabama	60,454	40,604	19,199	182	469
Alaska	10,003	6,383	441	2,542	637
Arizona	85,597	75,219	2,762	5,498	2,118
Arkansas	37,010	28,836	7,435	244	495
California	527,759	428,238	33,774	2,926	62,821
Colorado	67,007	61,056	2,971	651	2,329
Connecticut	42,648	35,612	5,134	164	1,738
Delaware	10,749	7,668	2,710	26	345
District of Columbia	7,625	2,570	4,860	9	186
Florida	205,793	152,207	47,186	1,230	5,170
Georgia	133,526	85,648	43,727	275	3,876
Hawaii	17,072	3,815	527	183	12,547
Idaho	20,688	19,944	86	360	298
Illinois	184,064	142,474	33,203	261	8,126
Indiana	86,459	75,393	9,649	168	1,249
Iowa	37,619	35,324	1,266	232	797
Kansas	38,869	34,622	2,781	458	1,008
Kentucky	54,658	48,968	4,930	102	658
Louisiana	65,352	36,899	27,058	380	1,015
Maine	13,759	13,280	153	110	216
Maryland	73,218	45,068	24,252	212	3,686
Massachusetts	81,077	67,786	8,205	144	4,942
Michigan	133,427	105,235	23,613	641	3,938
Minnesota	67,562	57,982	4,767	1,312	3,501
Mississippi	42,282	22,808	18,817	265	392
Missouri	75,464	62,504	11,134	342	1,484
Montana	10,970	9,442	42	1,369	117
Nebraska	24,820	22,496	1,373	433	518
Nevada	31,382	26,284	2,518	482	2,098
New Hampshire	14,656	13,954	208	40	454
New Jersey	115,795	85,110	20,583	167	9,935
New Mexico	27,128	22,810	511	3,404	403
New York	254,026	182,191	52,190	710	18,935
North Carolina	118,185	85,315	28,393	1,689	2,788
North Dakota	7,629	6,625	102	806	96
Ohio	151,570	125,507	22,994	313	2,756
Oklahoma	50,118	39,218	4,612	5,258	1,030
Oregon	45,322	41,284	944	792	2,302
Pennsylvania	143,495	119,015	20,238	356	3,886
Rhode Island	12,713	10,960	1,112	127	514
South Carolina	55,756	35,866	18,927	153	810
South Dakota	10,483	8,475	101	1,776	131
Tennessee	78,340	60,216	16,603	181	1,340
Texas	365,410	311,979	40,750	854	11,827
Utah	47,959	45,440	342	742	1,435
Vermont	6,366	6,237	31	7	91
Virginia	98,884	70,946	22,272	120	5,546
Washington	79,570	67,437	3,334	1,897	6,902
West Virginia	20,428	19,576	704	19	129
Wisconsin	69,072	59,383	6,567	989	2,133
Wyoming	6,115	5,717	65	271	62
Puerto Rico	55,866	51,285	4,564	---	---
Virgin Islands	1,669	367	1,230	72	-
Guam	3,564	234	37	4	3,289
American Samoa	1,655	3	-	-	1,652
Northern Marianas	1,449	19	-	-	1,430

--- Data not available.
- Quantity zero.
1 Includes births to Aleuts and Eskimos.
2 Excludes data for the territories.

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, each State and territory, 2001

[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]	4,025,933	851,851	611,000	57,568	14,017	121,365	47,901	3,149,572	2,326,578	589,917	24,510
Alabama	60,454	2,254	1,741	72	19	137	285	58,157	38,342	19,183	43
Alaska	10,003	652	299	66	9	57	221	8,480	5,567	388	871
Arizona	85,597	36,183	34,451	260	59	699	714	48,317	38,878	2,560	1,097
Arkansas	37,010	2,649	2,229	49	10	332	29	34,229	26,082	7,422	132
California	527,759	261,071	228,648	2,051	769	25,134	4,469	263,321	167,025	32,551	3,367
Colorado	67,007	19,730	15,359	289	64	671	3,347	47,271	41,764	2,830	6
Connecticut	42,648	6,913	773	4,051	68	1,764	257	35,220	28,434	4,929	515
Delaware	10,749	1,083	566	297	5	207	8	9,650	6,598	2,684	16
District of Columbia	7,625	895	91	12	7	715	70	6,687	1,687	4,805	43
Florida	205,793	49,629	12,097	8,625	9,778	17,868	1,261	155,846	104,068	45,954	318
Georgia	133,526	15,699	12,280	568	162	2,596	93	116,254	69,306	43,076	1,573
Hawaii	17,072	2,237	421	678	17	82	1,039	14,812	3,119	495	23
Idaho	20,688	2,753	2,307	22	5	75	344	17,541	16,855	78	394
Illinois	184,064	40,973	34,909	2,695	186	1,542	1,641	143,005	101,660	32,995	86
Indiana	86,459	5,898	5,153	291	20	360	74	80,181	69,242	9,575	380
Iowa	37,619	2,232	1,782	44	6	299	101	35,292	33,068	1,237	95
Kansas	38,869	4,906	4,033	87	29	279	478	33,535	29,363	2,747	428
Kentucky	54,658	1,509	1,159	92	56	177	25	53,126	47,485	4,905	23
Louisiana	65,352	1,557	618	108	61	127	643	63,745	35,383	27,010	50
Maine	13,759	173	27	24	5	41	76	13,535	13,074	142	51
Maryland	73,218	5,301	999	347	56	3,022	877	67,617	39,798	24,046	300
Massachusetts	81,077	9,444	440	4,546	71	4,118	269	71,007	59,405	6,552	626
Michigan	133,427	7,335	5,960	423	68	498	386	124,166	96,346	23,399	1,926
Minnesota	67,562	4,543	3,522	111	29	549	332	62,541	53,141	4,685	478
Mississippi	42,282	719	401	15	9	60	234	41,531	22,073	18,809	32
Missouri	75,464	2,981	2,238	90	33	390	230	72,395	59,513	11,084	88
Montana	10,970	377	172	12	4	18	171	10,280	8,798	38	313
Nebraska	24,820	2,946	2,336	32	12	383	183	21,342	19,056	1,355	532
Nevada	31,382	10,855	8,943	229	192	976	515	20,181	15,323	2,414	346
New Hampshire	14,656	509	128	110	7	183	81	13,493	12,849	159	654
New Jersey	115,795	23,497	4,344	6,914	847	11,016	376	91,973	63,266	18,709	325
New Mexico	27,128	14,126	6,448	55	30	190	7,403	12,994	8,776	485	8
New York	254,026	54,544	8,645	13,257	464	24,042	8,136	196,773	130,637	46,709	2,709
North Carolina	118,185	14,539	11,167	685	119	2,465	103	103,554	70,863	28,250	92
North Dakota	7,629	140	90	6	1	7	36	7,295	6,299	101	194
Ohio	151,570	4,598	2,455	1,309	52	511	271	146,639	120,869	22,769	333
Oklahoma	50,118	4,942	4,352	117	16	235	222	45,090	34,360	4,574	86
Oregon	45,322	7,902	7,374	77	32	318	101	37,271	33,388	908	149
Pennsylvania	143,495	8,192	1,577	5,044	101	617	853	134,265	110,501	19,615	1,038
Rhode Island	12,713	2,196	149	641	9	1,305	92	9,261	7,676	994	1,256
South Carolina	55,756	2,988	2,072	196	27	455	238	52,698	32,932	18,878	70
South Dakota	10,483	257	169	15	1	47	25	10,215	8,254	97	11
Tennessee	78,340	3,905	2,946	206	38	558	157	74,407	56,363	16,568	28
Texas	365,410	172,354	152,757	1,105	290	9,235	8,967	191,808	139,104	40,221	1,248
Utah	47,959	6,543	5,147	98	21	638	639	41,146	38,682	325	270
Vermont	6,366	35	8	9	2	10	6	6,139	6,014	29	192
Virginia	98,884	9,143	2,337	613	76	5,477	640	89,494	61,871	22,082	247
Washington	79,570	12,140	10,330	253	38	632	887	66,050	54,468	3,219	1,380
West Virginia	20,428	83	42	12	-	9	20	20,291	19,446	698	54
Wisconsin	69,072	5,152	4,010	654	35	227	226	63,913	54,346	6,515	7
Wyoming	6,115	569	499	6	2	12	50	5,539	5,161	64	7
Puerto Rico	55,866	---	---	---	---	---	---	---	---	---	55,866
Virgin Islands	1,669	385	12	295	2	-	76	1,233	79	1,091	51
Guam	3,564	52	20	20	-	6	6	3,421	209	37	91
American Samoa	1,655	---	---	---	---	---	---	---	---	---	1,655
Northern Marianas	1,449	---	---	---	---	---	---	---	---	---	1,449

- Quantity zero.
--- Data not available.
1 Includes races other than white and black.
2 Excludes data for the territories.

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 (birth, fertility, and total fertility), and percent of births with selected demographic characteristics, by detailed race of mother and place of birth of mother: United States, 2001

[Birth rates are live births per 1,000 population. Fertility rates are computed by relating total births, regardless of age of mother, to women aged 15-44 years. Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5]

Characteristic	All races	White	Black	American Indian [1]	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
	Number									
Births	4,025,933	3,177,626	606,156	41,872	200,279	31,401	9,048	6,411	32,468	120,951
	Rate									
Birth rate	14.5	13.9	17.0	16.9	17.2	---	---	---	---	---
Fertility rate	66.9	66.3	69.5	70.8	69.4	---	---	---	---	---
Total fertility rate	2,114.5	2,109.5	2,123.5	2,074.5	2,035.5	---	---	---	---	---
Sex ratio [2]	1,046	1,047	1,032	1,024	1,067	1,092	1,041	1,000	1,077	1,064
	Percent									
All births										
Births to mothers under 20 years	11.3	10.2	18.9	19.3	4.3	1.0	1.7	16.2	5.1	4.6
4th- and higher-order births	10.8	10.1	15.1	18.8	6.8	2.2	4.2	15.4	7.5	7.6
Births to unmarried mothers	33.5	27.7	68.4	59.7	14.9	8.4	9.2	50.6	20.4	13.7
Mothers completing 12 years or more of school	78.3	78.3	75.1	69.0	89.2	88.1	98.2	84.6	94.0	87.8
Mothers born in the 50 States and DC	77.5	79.1	87.6	94.7	16.8	10.2	40.1	97.6	21.2	11.3
Mothers born in the 50 States and DC										
Births to mothers under 20 years	12.2	10.2	20.7	19.9	14.3	3.5	3.6	16.3	12.9	19.5
4th- and higher-order births	10.3	9.2	15.3	19.1	8.0	4.0	5.3	15.3	7.8	6.5
Births to unmarried mothers	34.5	26.2	72.0	61.1	32.9	11.7	16.0	50.8	35.3	33.0
Mothers completing 12 years or more of school	83.4	85.4	74.1	69.3	88.6	96.8	97.3	84.7	90.2	85.3
Mothers born outside the 50 States and DC										
Births to mothers under 20 years	8.2	9.9	5.9	9.2	2.3	0.7	0.4	*	3.0	2.7
4th- and higher-order births	12.3	13.7	13.4	12.4	6.6	2.0	3.5	18.2	7.4	7.7
Births to unmarried mothers	30.0	33.3	42.5	33.7	11.2	7.9	4.6	39.0	16.4	11.2
Mothers completing 12 years or more of school	60.7	51.0	82.4	65.0	89.4	87.2	98.8	80.0	95.0	88.1

--- Data not available.
* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
1 Includes births to Aleuts and Eskimos.
2 Male live births per 1,000 female live births.

NOTES: 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. Denominators for population-based rates are derived from the 1990 U.S.Census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.

Table 14. Total number of births, rates (birth, fertility, and total fertility), 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, 2001

[Birth rates are live births per 1,000 population. Fertility rates are computed by relating total births, regardless of age of mother, to women aged 15-44 years. Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5]

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	4,025,933	851,851	611,000	57,568	14,017	121,365	47,901	3,149,572	2,326,578	589,917
	Rate									
Birth rate	14.5	25.4	---	---	---	---	---	13.0	11.9	17.5
Fertility rate	66.9	107.6	---	---	---	---	---	60.8	57.6	71.6
Total fertility rate	2,114.5	3,165.0	---	---	---	---	---	1,936.0	1,853.0	2,190.5
Sex ratio [3]	1,046	1,038	1,037	1,052	1,032	1,037	1,042	1,048	1,051	1,032
	Percent									
All births										
Births to mothers under 20 years	11.3	15.6	16.5	19.2	7.5	9.4	17.3	10.1	8.2	18.9
4th- and higher-order births	10.8	13.6	14.6	12.4	5.4	10.7	11.3	10.0	8.9	15.2
Births to unmarried mothers	33.5	42.5	40.8	58.9	27.2	44.3	44.2	31.1	22.5	68.6
Mothers completing 12 years or more of school	78.3	51.2	45.0	67.7	88.2	63.5	69.6	85.5	88.0	75.2
Mothers born in the 50 States and DC	77.5	36.8	36.2	64.8	45.0	11.2	73.8	88.4	94.3	88.7
Mothers born in the 50 States and DC										
Births to mothers under 20 years	12.2	22.3	23.3	21.0	12.8	19.9	20.4	11.0	8.5	20.6
4th- and higher-order births	10.3	11.8	12.4	11.6	6.0	5.6	11.3	10.1	8.8	15.4
Births to unmarried mothers	34.5	47.9	46.6	61.3	27.5	46.0	46.4	33.0	23.2	72.1
Mothers completing 12 years or more of school	83.4	67.8	65.8	67.8	86.3	80.4	71.9	85.1	87.9	74.1
Mothers born outside the 50 States and DC										
Births to mothers under 20 years	8.2	11.6	12.6	15.9	3.1	8.1	8.5	3.2	3.1	5.4
4th- and higher-order births	12.3	14.6	15.8	13.7	4.9	11.3	11.3	9.0	9.7	13.7
Births to unmarried mothers	30.0	39.2	37.4	54.4	26.9	44.1	36.9	16.4	10.6	40.6
Mothers completing 12 years or more of school	60.7	41.5	32.9	67.4	89.7	61.3	63.4	88.9	90.7	84.2

--- Data not available.
[1] Includes origin not stated.
[2] Includes races other than white and black.
[3] Male live births per 1,000 female live births.

NOTES: 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. Denominators for population-based rates are derived from the 1990 U.S.Census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.Rates for Hispanic subgroups are not shown because population data for these groups, based on the 1990 Census, are not reliable; see Technical notes.

Table 15. Live births by race of mother and observed and seasonally adjusted birth and fertility rates, by month: United States, 2001

[Rates on an annual basis per 1,000 population for specified month. Birth rates are live births per 1,000 total population. Fertility rates are live births per 1,000 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	4,025,933	3,177,626	606,156	14.5	66.9	...	...
January	335,198	261,589	52,967	14.3	65.6	14.8	68.1
February	303,534	239,082	46,173	14.3	65.9	14.5	66.8
March	338,684	267,677	50,649	14.4	66.3	14.5	66.9
April	323,613	257,148	47,211	14.2	65.5	14.5	66.9
May	344,017	274,150	49,470	14.6	67.4	14.7	67.9
June	331,085	263,118	48,461	14.5	67.0	14.3	66.0
July	351,047	277,569	52,851	14.9	68.7	14.4	66.7
August	361,802	286,012	54,454	15.3	70.8	14.7	67.8
September	342,564	270,305	51,467	15.0	69.3	14.3	66.1
October	344,074	271,950	51,190	14.5	67.4	14.6	67.7
November	323,746	254,005	49,761	14.1	65.5	14.6	67.7
December	326,569	255,021	51,502	13.8	64.0	14.1	65.3

... 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, 2001

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]	11,030	100.0	100.0	100.0	100.0	100.0
Sunday	7,637	69.2	75.4	50.7	61.0	34.1
Monday	11,192	101.5	99.7	106.9	98.2	120.7
Tuesday	12,496	113.3	111.0	120.1	117.6	124.2
Wednesday	12,371	112.2	110.1	118.3	115.9	122.2
Thursday	12,466	113.0	111.1	118.8	115.6	124.0
Friday	12,315	111.7	107.7	123.5	117.0	133.9
Saturday	8,729	79.1	84.9	61.6	74.8	40.5
White	8,706	100.0	100.0	100.0	100.0	100.0
Sunday	5,878	67.5	73.8	48.5	59.0	32.1
Monday	8,893	102.1	100.3	107.8	98.8	121.9
Tuesday	9,928	114.0	111.8	120.9	118.6	124.5
Wednesday	9,810	112.7	110.6	118.9	116.6	122.3
Thursday	9,908	113.8	111.9	119.6	116.2	124.8
Friday	9,771	112.2	108.1	124.8	117.8	135.6
Saturday	6,750	77.5	83.4	59.5	73.1	38.4
Black	1,661	100.0	100.0	100.0	100.0	100.0
Sunday	1,250	75.2	81.2	58.6	68.4	42.2
Monday	1,638	98.7	97.0	103.2	95.6	115.9
Tuesday	1,844	111.0	108.7	117.6	113.9	123.8
Wednesday	1,834	110.4	108.1	117.0	113.8	122.2
Thursday	1,834	110.5	108.5	116.2	113.6	120.3
Friday	1,816	109.3	105.9	118.8	114.3	126.3
Saturday	1,410	84.9	90.7	68.6	80.4	49.0

[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, birth rate, and percent of births to unmarried women by age, race, and Hispanic origin of mother: United States, 2001

Measure and age of mother	All races [1]	White		Black		Hispanic [2]
		Total	Non-Hispanic	Total	Non-Hispanic	
Number						
All ages	1,349,249	879,848	524,371	414,533	404,503	361,689
Under 15 years	7,494	3,833	1,522	3,440	3,388	2,354
15-19 years	352,026	232,945	140,734	106,005	103,654	93,798
15 years	18,872	11,389	5,353	6,831	6,687	6,150
16 years	40,653	26,115	13,646	13,029	12,742	12,663
17 years	68,113	45,209	26,136	20,378	19,914	19,418
18 years	100,050	67,108	41,767	29,275	28,613	25,750
19 years	124,338	83,124	53,832	36,492	35,698	29,817
20-24 years	514,959	335,051	208,328	160,840	157,334	128,872
25-29 years	257,702	166,999	91,889	79,107	77,029	76,385
30-34 years	135,040	87,461	49,213	40,831	39,620	38,984
35-39 years	65,257	42,346	25,585	19,622	18,941	17,131
40 years and over	16,771	11,213	7,100	4,688	4,537	4,165
Rate per 1,000 unmarried women in specified group						
15-44 years [3]	45.0	39.2	27.7	70.1	---	98.0
15-19 years	37.4	31.5	22.9	71.4	---	71.8
15-17 years	22.5	18.5	12.2	45.5	---	47.6
18-19 years	60.1	51.3	39.0	109.4	---	110.4
20-24 years	73.8	63.1	46.3	127.5	---	150.5
25-29 years	63.7	58.1	38.4	88.2	---	150.3
30-34 years	41.9	38.4	25.5	52.9	---	106.5
35-39 years	20.8	18.8	13.2	25.9	---	53.2
40-44 years [4]	5.3	4.8	3.6	6.3	---	12.5
Percent of births to unmarried women						
All ages	33.5	27.7	22.5	68.4	68.6	42.5
Under 15 years	96.3	93.6	96.3	99.6	99.6	92.1
15-19 years	78.9	73.1	74.0	95.6	95.8	72.1
15 years	93.7	90.5	92.9	99.3	99.3	88.7
16 years	89.6	85.6	87.8	98.8	98.9	83.5
17 years	85.3	80.6	83.2	98.1	98.1	77.6
18 years	79.2	73.5	75.4	95.9	96.0	70.9
19 years	71.4	64.9	65.6	92.4	92.6	64.0
20-24 years	50.4	43.0	39.8	80.7	80.9	49.9
25-29 years	24.4	19.6	14.8	57.6	57.7	33.5
30-34 years	14.3	11.3	7.9	43.1	43.2	25.9
35-39 years	14.4	11.5	8.5	40.0	39.9	25.2
40 years and over	17.1	14.2	11.1	40.7	40.6	28.4

--- 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 Birth rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.
4 Birth 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. Denominators for population-based rates are derived from the 1990 U.S.Census. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.

Table 18. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980-2001, and by age, race, and Hispanic origin of mother: United States, 1980-2001

[Rates are live births to unmarried women per 1,000 unmarried women. Population 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]									
2001 [4]	45.0	37.4	22.5	60.1	73.8	63.7	41.9	20.8	5.3
2000 [4]	45.2	39.6	24.4	62.9	74.5	62.2	40.7	20.0	5.0
1999 [4]	44.4	40.4	25.5	63.3	72.9	60.2	39.3	19.3	4.6
1998 [4]	44.3	41.5	27.0	64.5	72.3	58.4	39.1	19.0	4.6
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									
2001 [4]	39.2	31.5	18.5	51.3	63.1	58.1	38.4	18.8	4.8
2000 [4]	38.9	33.1	20.0	53.2	62.9	55.9	37.0	18.0	4.5
1999 [4]	38.1	33.7	21.0	53.3	61.4	53.4	35.8	17.5	4.1
1998 [4]	37.5	34.0	21.8	53.5	60.5	50.9	34.9	17.0	4.0
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									
2001 [4]	27.7	22.9	12.2	39.0	46.3	38.4	25.5	13.2	3.6
2000 [4]	27.9	24.5	13.6	41.4	46.6	37.6	25.0	12.9	3.3
1999 [4]	27.9	25.5	14.6	42.3	46.0	37.0	25.0	13.0	3.1
1998 [4]	28.0	26.1	15.6	42.8	46.0	36.1	25.2	13.1	3.0
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 1980-2001, and by age, race, and Hispanic origin of mother: United States, 1980-2001 --Con.

[Rates are live births to unmarried women per 1,000 unmarried women. Population 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					
Black, total									
2001 [4]	70.1	71.4	45.5	109.4	127.5	88.2	52.9	25.9	6.3
2000 [4]	72.5	77.0	49.9	116.9	132.8	89.6	51.9	25.9	6.3
1999 [4]	71.5	78.4	51.5	117.9	130.3	89.6	50.3	24.7	5.9
1998 [4]	73.3	83.4	56.5	123.5	131.0	90.3	51.7	24.7	6.1
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]									
2001 [4]	98.0	71.8	47.6	110.4	150.5	150.3	106.5	53.2	12.5
2000 [4]	97.3	74.2	51.0	110.6	150.2	149.5	101.5	48.4	12.4
1999 [4]	93.4	73.8	52.4	107.6	143.3	143.6	93.3	44.1	11.3
1998 [4]	90.1	73.9	53.0	107.8	135.0	136.0	85.4	40.1	12.0
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, 8]	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.

NOTES: Rates cannot be computed for unmarried non-Hispanic black women because the necessary populations are not available.Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S.Census. As a result, rates for more recent years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; see Technical notes.

Table 19. Number and percent of births to unmarried women by race and Hispanic origin of mother: United States, each State and territory, 2001

[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]	1,349,249	879,848	524,371	414,533	404,503	361,689	33.5	27.7	22.5	68.4	68.6	42.5
Alabama	20,777	7,638	7,072	13,028	13,023	557	34.4	18.8	18.4	67.9	67.9	24.7
Alaska	3,281	1,422	1,205	196	167	225	32.8	22.3	21.6	44.4	43.0	34.5
Arizona	33,776	27,790	9,450	1,764	1,632	18,400	39.5	36.9	24.3	63.9	63.8	50.9
Arkansas	13,378	7,546	6,558	5,642	5,635	979	36.1	26.2	25.1	75.9	75.9	37.0
California	172,764	141,305	33,422	21,145	20,395	108,473	32.7	33.0	20.0	62.6	62.7	41.5
Colorado	16,732	14,625	7,201	1,525	1,447	7,613	25.0	24.0	17.2	51.3	51.1	38.6
Connecticut	12,433	8,814	4,538	3,391	3,259	4,271	29.2	24.8	16.0	66.0	66.1	61.8
Delaware	4,290	2,304	1,713	1,952	1,936	598	39.9	30.0	26.0	72.0	72.1	55.2
District of Columbia	4,376	617	131	3,727	3,693	491	57.4	24.0	7.8	76.7	76.9	54.9
Florida	80,221	47,056	28,635	31,784	31,111	19,315	39.0	30.9	27.5	67.4	67.7	38.9
Georgia	49,834	20,554	14,413	28,740	28,470	6,162	37.3	24.0	20.8	65.7	66.1	39.3
Hawaii	5,632	706	528	110	97	989	33.0	18.5	16.9	20.9	19.6	44.2
Idaho	4,557	4,281	3,260	35	32	942	22.0	21.5	19.3	40.7	41.0	34.2
Illinois	63,449	37,345	20,316	25,401	25,265	17,150	34.5	26.2	20.0	76.5	76.6	41.9
Indiana	30,676	23,146	20,237	7,312	7,260	2,820	35.5	30.7	29.2	75.8	75.8	47.8
Iowa	10,824	9,589	8,672	942	921	924	28.8	27.1	26.2	74.4	74.5	41.4
Kansas	11,628	9,306	7,202	1,947	1,927	2,063	29.9	26.9	24.5	70.0	70.1	42.1
Kentucky	17,317	13,639	13,038	3,540	3,529	608	31.7	27.9	27.5	71.8	71.9	40.3
Louisiana	30,267	9,664	9,153	20,218	20,196	532	46.3	26.2	25.9	74.7	74.8	34.2
Maine	4,369	4,196	4,123	61	56	65	31.8	31.6	31.5	39.9	39.4	37.6
Maryland	25,198	10,381	8,093	14,429	14,326	2,303	34.4	23.0	20.3	59.5	59.6	43.4
Massachusetts	21,641	15,961	11,064	4,835	3,830	5,756	26.7	23.5	18.6	58.9	58.5	60.9
Michigan	45,742	27,719	24,284	17,332	17,228	3,071	34.3	26.3	25.2	73.4	73.6	41.9
Minnesota	17,782	13,174	10,958	2,739	2,684	2,179	26.3	22.7	20.6	57.5	57.3	48.0
Mississippi	19,582	5,111	4,819	14,230	14,227	290	46.3	22.4	21.8	75.6	75.6	40.3
Missouri	26,235	17,345	16,101	8,504	8,471	1,261	34.8	27.8	27.1	76.4	76.4	42.3
Montana	3,440	2,437	2,188	26	24	153	31.4	25.8	24.9	61.9	63.2	40.6
Nebraska	6,870	5,542	4,211	939	925	1,212	27.7	24.6	22.1	68.4	68.3	41.1
Nevada	11,679	9,078	4,407	1,739	1,677	4,635	37.2	34.5	28.8	69.1	69.5	42.7
New Hampshire	3,542	3,416	3,035	85	65	190	24.2	24.5	23.6	40.9	40.9	37.3
New Jersey	33,807	19,831	8,425	13,357	12,298	12,380	29.2	23.3	13.3	64.9	65.7	52.7
New Mexico	12,552	9,714	2,404	297	277	7,375	46.3	42.6	27.4	58.1	57.1	52.2
New York	90,746	52,619	23,366	34,652	30,849	32,298	35.7	28.9	17.9	66.4	66.0	59.2
North Carolina	40,507	20,513	13,821	18,693	18,628	6,723	34.3	24.0	19.5	65.8	65.9	46.2
North Dakota	2,127	1,503	1,399	29	29	42	27.9	22.7	22.2	28.4	28.7	30.0
Ohio	53,239	35,425	33,184	17,363	17,230	2,271	35.1	28.2	27.5	75.5	75.7	49.4
Oklahoma	17,637	11,565	9,587	3,253	3,227	2,035	35.2	29.5	27.9	70.5	70.6	41.2
Oregon	13,764	12,315	9,086	609	586	3,256	30.4	29.8	27.2	64.5	64.5	41.2
Pennsylvania	48,536	32,400	27,318	15,480	15,009	4,980	33.8	27.2	24.7	76.5	76.5	60.8
Rhode Island	4,543	3,532	1,929	757	679	1,302	35.7	32.2	25.1	68.1	68.3	59.3
South Carolina	22,343	8,617	7,382	13,521	13,494	1,259	40.1	24.0	22.4	71.4	71.5	42.1
South Dakota	3,516	2,053	1,956	44	42	134	33.5	24.2	23.7	43.6	43.3	52.1
Tennessee	27,974	15,608	13,940	12,064	12,044	1,698	35.7	25.9	24.7	72.7	72.7	43.5
Texas	113,420	86,986	28,958	25,159	24,859	57,981	31.0	27.9	20.8	61.7	61.8	33.6
Utah	8,327	7,573	5,004	152	144	2,539	17.4	16.7	12.9	44.4	44.3	38.8
Vermont	1,972	1,939	1,863	14	13	11	31.0	31.1	31.0	*	*	*
Virginia	29,930	15,440	11,830	14,011	13,925	3,648	30.3	21.8	19.1	62.9	63.1	39.9
Washington	22,880	18,519	13,399	1,779	1,726	4,961	28.8	27.5	24.6	53.4	53.6	40.9
West Virginia	6,638	6,072	6,024	541	537	30	32.5	31.0	31.0	76.8	76.9	36.1
Wisconsin	20,686	14,325	12,105	5,411	5,371	2,303	29.9	24.1	22.3	82.4	82.4	44.7
Wyoming	1,813	1,592	1,364	29	28	236	29.6	27.8	26.4	44.6	43.8	41.5
Puerto Rico	28,529	25,495	---	3,024	---	---	51.1	49.7	---	66.3	---	---
Virgin Islands	1,115	215	29	890	794	255	66.8	58.6	36.7	72.4	72.8	66.2
Guam	1,985	32	27	5	5	17	55.7	13.7	12.9	*	*	*
American Samoa	469	1	---	-	---	---	28.3	*	---	*	---	---
Northern Marianas	826	4	---	-	---	---	57.5	*	---	*	---	---

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
- 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 the territories.

Table 20. Birth rates by age and race of father: United States, 1980-2001

[Rates are live births per 1,000 men in specified group. Population 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]										
2001	50.6	18.7	81.7	116.9	106.5	58.4	22.2	7.4	2.4	0.4
2000	51.6	20.2	84.5	117.4	105.8	57.4	22.0	7.4	2.5	0.3
1999	50.8	21.0	83.8	114.8	101.6	54.9	21.1	7.2	2.5	0.3
1998	51.0	21.6	84.8	112.6	99.2	53.9	20.9	7.2	2.5	0.3
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										
2001	48.3	15.6	75.5	116.7	107.2	57.0	20.6	6.6	2.1	0.3
2000	48.9	16.8	77.6	116.4	105.9	55.7	20.4	6.5	2.1	0.3
1999	48.2	17.5	76.8	113.4	101.7	53.4	19.6	6.4	2.1	0.3
1998	48.3	18.0	77.5	110.9	99.1	52.5	19.4	6.4	2.2	0.3
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										
2001	64.9	37.1	126.6	130.7	100.2	57.9	28.3	12.2	5.0	1.0
2000	67.6	40.1	133.8	135.6	99.6	57.9	28.3	12.0	5.3	1.0
1999	66.9	41.5	133.5	134.0	95.4	55.2	26.6	11.6	5.3	1.0
1998	68.1	43.3	136.8	134.4	94.3	54.9	26.7	11.9	5.3	1.0
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. Age of father was not stated for 13.5 percent of births in 2001. Denominators for population-based rates for 1991-2001 are derived from the 1990 U.S.Census. As a result, rates for more recent years are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin; 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, 2001

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	4,025,933	239,637	621,917	1,253,033	856,770	998,495	56,081	78.3	25.2
Under 15 years	7,781	5,896	1,586	-	-	-	299	*	*
15-19 years	445,944	38,690	225,325	151,982	22,409	-	7,538	39.8	*
15 years	20,150	6,067	13,483	-	-	-	600	*	*
16 years	45,367	6,000	37,121	1,267	-	-	979	2.9	*
17 years	79,807	6,872	58,783	12,535	249	-	1,368	16.3	*
18 years	126,361	8,951	58,662	52,894	3,805	-	2,049	45.6	*
19 years	174,259	10,800	57,276	85,286	18,355	-	2,542	60.4	*
20-24 years	1,021,627	66,283	211,265	446,403	227,492	56,135	14,049	72.5	5.6
25-29 years	1,058,265	61,013	103,669	318,213	273,991	287,570	13,809	84.2	27.5
30-34 years	942,697	40,208	53,120	213,384	212,460	411,527	11,998	90.0	44.2
35-39 years	451,723	21,306	22,294	101,229	99,468	200,933	6,493	90.2	45.1
40 years and over	97,896	6,241	4,658	21,822	20,950	42,330	1,895	88.6	44.1
White, total									
All ages	3,177,626	216,272	463,173	951,942	669,254	836,595	40,390	78.3	26.7
Under 15 years	4,095	3,113	822	-	-	-	160	*	*
15-19 years	318,563	33,396	157,826	107,026	15,103	-	5,212	39.0	*
15 years	12,584	4,143	8,052	-	-	-	389	*	*
16 years	30,510	4,821	24,124	915	-	-	650	3.1	*
17 years	56,098	6,117	40,218	8,647	169	-	947	16.0	*
18 years	91,284	8,279	42,486	36,528	2,550	-	1,441	43.5	*
19 years	128,087	10,036	42,946	60,936	12,384	-	1,785	58.1	*
20-24 years	779,529	62,222	160,950	333,324	169,312	43,588	10,133	71.0	5.7
25-29 years	850,343	56,895	81,843	247,880	216,633	237,000	10,092	83.5	28.2
30-34 years	777,294	36,266	41,921	168,060	172,054	350,281	8,712	89.8	45.6
35-39 years	368,816	18,954	16,536	79,046	79,621	169,935	4,724	90.3	46.7
40 years and over	78,986	5,426	3,275	16,606	16,531	35,791	1,357	88.8	46.1
White, non-Hispanic									
All ages	2,326,578	37,908	238,210	704,407	559,162	768,503	18,388	88.0	33.3
Under 15 years	1,581	1,241	286	-	-	-	54	*	*
15-19 years	190,161	9,827	92,276	74,998	11,131	-	1,929	45.8	*
15 years	5,765	1,819	3,811	-	-	-	135	*	*
16 years	15,538	1,792	12,988	524	-	-	234	3.4	*
17 years	31,409	1,831	23,718	5,431	116	-	313	17.8	*
18 years	55,409	2,120	25,732	25,252	1,774	-	531	49.2	*
19 years	82,040	2,265	26,027	43,791	9,241	-	716	65.2	*
20-24 years	523,027	11,225	88,927	245,088	135,883	37,739	4,165	80.7	7.3
25-29 years	622,361	7,542	33,123	181,362	180,883	214,996	4,455	93.4	34.8
30-34 years	625,435	4,745	15,467	127,603	147,864	325,224	4,532	96.7	52.4
35-39 years	300,007	2,564	6,614	62,020	68,958	157,281	2,570	96.9	52.9
40 years and over	64,006	764	1,517	13,336	14,443	33,263	683	96.4	52.5
Black, total									
All ages	606,156	14,593	133,649	237,428	137,536	72,315	10,635	75.1	12.1
Under 15 years	3,455	2,630	699	-	-	-	126	*	*
15-19 years	110,843	4,484	59,375	38,855	6,209	-	1,920	41.4	*
15 years	6,881	1,768	4,923	-	-	-	190	*	*
16 years	13,183	1,016	11,599	294	-	-	274	2.3	*
17 years	20,778	604	16,399	3,368	65	-	342	16.8	*
18 years	30,516	522	14,154	14,279	1,066	-	495	51.1	*
19 years	39,485	574	12,300	20,914	5,078	-	619	66.9	*
20-24 years	199,221	2,518	43,340	94,981	47,051	8,331	3,000	76.6	4.2
25-29 years	137,400	1,967	17,054	52,546	40,601	22,928	2,304	85.9	17.0
30-34 years	94,660	1,591	7,983	31,711	27,087	24,392	1,896	89.7	26.3
35-39 years	49,065	1,027	4,209	15,689	13,585	13,465	1,090	89.1	28.1
40 years and over	11,512	376	989	3,646	3,003	3,199	299	87.8	28.5

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 and Hispanic origin of mother: United States, 2001--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	589,917	13,568	130,177	231,405	134,231	70,655	9,881	75.2	12.2
Under 15 years	3,401	2,589	689	-	-	-	123	*	*
15-19 years	108,252	4,338	57,987	38,044	6,053	-	1,830	41.4	*
15 years	6,735	1,744	4,808	-	-	-	183	*	*
16 years	12,879	993	11,337	287	-	-	262	2.3	*
17 years	20,293	587	16,054	3,261	61	-	330	16.6	*
18 years	29,794	492	13,799	13,991	1,038	-	474	51.3	*
19 years	38,551	522	11,989	20,505	4,954	-	581	67.1	*
20-24 years	194,391	2,253	42,324	92,933	45,933	8,137	2,811	76.7	4.2
25-29 years	133,491	1,736	16,486	51,117	39,603	22,407	2,142	86.1	17.1
30-34 years	91,710	1,402	7,684	30,597	26,439	23,853	1,735	89.9	26.5
35-39 years	47,494	904	4,048	15,172	13,260	13,144	966	89.4	28.2
40 years and over	11,178	346	959	3,542	2,943	3,114	274	88.0	28.6
Hispanic [2]									
All ages	851,851	179,473	227,530	250,707	111,090	65,828	17,223	51.2	7.9
Under 15 years	2,555	1,911	542	-	-	-	102	*	*
15-19 years	130,007	23,699	66,666	32,658	4,105	-	2,879	28.9	*
15 years	6,936	2,347	4,356	-	-	-	233	*	*
16 years	15,165	3,047	11,360	394	-	-	364	2.7	*
17 years	25,023	4,306	16,780	3,315	59	-	563	13.8	*
18 years	36,298	6,175	17,025	11,517	804	-	777	34.7	*
19 years	46,585	7,824	17,145	17,432	3,242	-	942	45.3	*
20-24 years	258,431	51,318	72,628	89,383	34,099	5,895	5,108	51.1	2.3
25-29 years	227,910	49,618	49,149	67,132	36,004	21,512	4,495	55.8	9.6
30-34 years	150,352	31,730	26,679	40,986	24,180	23,869	2,908	60.4	16.2
35-39 years	67,952	16,506	10,084	17,225	10,618	12,141	1,378	60.1	18.2
40 years and over	14,644	4,691	1,782	3,323	2,084	2,411	353	54.7	16.9

- Quantity zero.
* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
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, 2001

Period of gestation [1] and race and Hispanic origin of mother	All births	Weight gain during pregnancy									Median weight gain in pounds
		Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated	
	Number										
All gestation periods [2]											
All races [3]	3,498,174	393,209	358,483	449,047	579,607	445,101	406,092	218,886	403,635	244,114	...
White, total	2,749,388	285,272	270,633	355,449	464,430	365,000	329,790	179,328	321,721	177,765	...
White, non-Hispanic	2,159,553	208,444	198,846	278,463	370,894	299,595	271,635	150,450	270,858	110,368	...
Black, total	572,382	90,251	67,592	68,374	84,442	57,326	56,957	30,203	67,208	50,029	...
Black, non-Hispanic	557,366	88,619	66,020	66,472	82,141	55,474	55,282	29,258	65,208	48,892	...
Hispanic [4]	590,780	77,006	72,247	77,406	93,720	65,584	58,239	28,979	51,450	66,149	...
Under 37 weeks											
All races [3]	425,764	69,898	53,027	55,116	62,892	42,636	38,753	20,889	43,322	39,231	...
White, total	305,462	45,048	36,284	40,535	46,697	32,768	29,356	16,304	32,776	25,694	...
White, non-Hispanic	235,431	32,420	26,889	31,521	36,756	26,404	23,890	13,665	27,768	16,118	...
Black, total	100,579	21,843	14,030	11,755	13,208	7,938	7,740	3,771	9,050	11,244	...
Black, non-Hispanic	98,645	21,558	13,791	11,489	12,940	7,747	7,571	3,680	8,844	11,025	...
Hispanic [4]	70,376	12,667	9,471	9,094	10,060	6,403	5,503	2,662	5,055	9,461	...
37-39 weeks											
All races [3]	1,757,398	192,115	182,261	233,262	299,976	229,154	205,196	108,521	192,651	114,262	...
White, total	1,386,901	141,260	138,932	185,022	240,998	187,916	166,645	88,789	153,623	83,716	...
White, non-Hispanic	1,097,362	104,370	102,804	146,163	193,925	155,283	137,818	74,797	129,791	52,411	...
Black, total	279,477	41,961	32,708	34,685	42,686	29,208	28,630	15,084	32,021	22,494	...
Black, non-Hispanic	272,359	41,198	31,964	33,736	41,555	28,307	27,836	14,648	31,100	22,015	...
Hispanic [4]	290,059	36,991	36,339	39,088	47,132	32,736	28,804	14,009	24,130	30,830	...
40 weeks and over											
All races [3]	1,306,249	130,271	122,654	160,080	215,984	172,814	161,643	89,234	167,149	86,420	...
White, total	1,050,641	98,336	95,057	129,456	176,143	143,928	133,402	74,050	134,951	65,318	...
White, non-Hispanic	823,118	71,331	68,941	100,533	139,857	117,670	109,674	61,884	113,067	40,161	...
Black, total	190,517	26,195	20,709	21,820	28,428	20,101	20,505	11,300	26,023	15,436	...
Black, non-Hispanic	184,647	25,615	20,123	21,137	27,529	19,345	19,795	10,883	25,153	15,067	...
Hispanic [4]	227,948	27,058	26,297	29,045	36,292	26,299	23,800	12,228	22,134	24,795	...
	Percent distribution										
All gestation periods [2]											
All races [3]	100.0	12.1	11.0	13.8	17.8	13.7	12.5	6.7	12.4	...	30.5
White, total	100.0	11.1	10.5	13.8	18.1	14.2	12.8	7.0	12.5	...	30.6
White, non-Hispanic	100.0	10.2	9.7	13.6	18.1	14.6	13.3	7.3	13.2	...	30.8
Black, total	100.0	17.3	12.9	13.1	16.2	11.0	10.9	5.8	12.9	...	30.0
Black, non-Hispanic	100.0	17.4	13.0	13.1	16.2	10.9	10.9	5.8	12.8	...	30.0
Hispanic [4]	100.0	14.7	13.8	14.8	17.9	12.5	11.1	5.5	9.8	...	29.0
Under 37 weeks											
All races [3]	100.0	18.1	13.7	14.3	16.3	11.0	10.0	5.4	11.2	...	27.8
White, total	100.0	16.1	13.0	14.5	16.7	11.7	10.5	5.8	11.7	...	28.8
White, non-Hispanic	100.0	14.8	12.3	14.4	16.8	12.0	10.9	6.2	12.7	...	30.1
Black, total	100.0	24.5	15.7	13.2	14.8	8.9	8.7	4.2	10.1	...	25.5
Black, non-Hispanic	100.0	24.6	15.7	13.1	14.8	8.8	8.6	4.2	10.1	...	25.5
Hispanic [4]	100.0	20.8	15.5	14.9	16.5	10.5	9.0	4.4	8.3	...	25.8
37-39 weeks											
All races [3]	100.0	11.7	11.1	14.2	18.3	13.9	12.5	6.6	11.7	...	30.4
White, total	100.0	10.8	10.7	14.2	18.5	14.4	12.8	6.8	11.8	...	30.5
White, non-Hispanic	100.0	10.0	9.8	14.0	18.6	14.9	13.2	7.2	12.4	...	30.8
Black, total	100.0	16.3	12.7	13.5	16.6	11.4	11.1	5.9	12.5	...	30.1
Black, non-Hispanic	100.0	16.5	12.8	13.5	16.6	11.3	11.1	5.9	12.4	...	30.1
Hispanic [4]	100.0	14.3	14.0	15.1	18.2	12.6	11.1	5.4	9.3	...	28.8
40 weeks and over											
All races [3]	100.0	10.7	10.1	13.1	17.7	14.2	13.3	7.3	13.7	...	30.8
White, total	100.0	10.0	9.6	13.1	17.9	14.6	13.5	7.5	13.7	...	30.9
White, non-Hispanic	100.0	9.1	8.8	12.8	17.9	15.0	14.0	7.9	14.4	...	31.8
Black, total	100.0	15.0	11.8	12.5	16.2	11.5	11.7	6.5	14.9	...	30.4
Black, non-Hispanic	100.0	15.1	11.9	12.5	16.2	11.4	11.7	6.4	14.8	...	30.4
Hispanic [4]	100.0	13.3	12.9	14.3	17.9	12.9	11.7	6.0	10.9	...	30.1

... 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, 2001

[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]	7.9	13.7	10.5	8.1	6.6	5.5	5.3	5.4	5.8	11.9
White, total	6.8	11.5	9.1	7.2	5.8	4.9	4.8	5.0	5.3	10.1
White, non-Hispanic	6.8	11.8	9.6	7.3	5.8	4.9	4.8	5.0	5.5	10.7
Black, total	13.0	20.6	16.2	13.0	10.8	9.2	8.6	7.8	8.0	18.5
Black, non-Hispanic	13.1	20.7	16.3	13.1	10.9	9.3	8.7	7.8	8.0	18.5
Hispanic, total [4]	6.8	10.9	8.0	6.7	5.7	5.0	4.6	4.7	4.5	9.2
Mexican	6.4	10.1	7.2	6.0	5.2	4.6	4.2	4.6	4.1	8.5
Puerto Rican	9.4	15.6	12.9	10.3	8.5	6.5	6.5	5.6	5.5	14.9
Cuban	6.5	12.8	8.3	7.2	5.1	5.5	4.6	4.3	5.1	14.8
Central and South American	6.5	10.9	8.0	6.6	5.7	5.2	4.2	3.9	4.3	9.6
Other and unknown Hispanic	8.1	13.7	10.4	8.4	6.6	5.7	5.6	5.5	5.6	10.7
Under 37 weeks										
All races [3]	43.3	55.4	47.9	42.4	38.4	35.8	35.1	35.7	36.0	53.5
White, total	41.3	52.4	46.1	40.7	37.0	34.8	34.1	35.5	35.7	51.0
White, non-Hispanic	42.6	54.7	48.9	42.3	38.3	35.9	35.3	36.3	36.9	54.8
Black, total	50.1	62.0	53.1	48.7	43.9	41.0	39.4	37.2	37.5	60.2
Black, non-Hispanic	50.2	62.0	53.2	48.8	44.1	41.0	39.5	37.2	37.5	60.2
Hispanic [4]	36.7	46.7	37.8	34.9	32.0	30.1	28.7	31.5	28.9	44.0
37-39 weeks										
All races [3]	4.0	5.9	5.2	4.3	3.6	3.2	3.0	3.1	3.1	4.9
White, total	3.4	5.0	4.4	3.7	3.1	2.7	2.7	2.8	2.8	4.1
White, non-Hispanic	3.4	5.1	4.4	3.7	3.0	2.7	2.6	2.8	2.8	4.1
Black, total	6.6	9.0	8.0	7.1	6.0	5.4	4.9	4.8	4.7	7.9
Black, non-Hispanic	6.6	9.0	8.1	7.2	6.0	5.5	5.0	4.8	4.7	8.0
Hispanic [4]	3.7	5.0	4.5	3.9	3.5	3.1	2.9	2.8	2.5	4.1
40 weeks and over										
All races [3]	1.6	2.8	2.3	1.8	1.4	1.2	1.0	1.0	1.0	2.0
White, total	1.3	2.2	2.0	1.5	1.2	1.0	0.9	0.9	0.9	1.8
White, non-Hispanic	1.2	2.2	1.9	1.5	1.2	1.0	0.9	0.8	0.8	1.7
Black, total	2.9	4.7	4.0	3.2	2.7	2.2	2.0	1.9	1.8	3.3
Black, non-Hispanic	3.0	4.8	4.1	3.2	2.8	2.3	2.0	2.0	1.8	3.3
Hispanic [4]	1.5	2.4	2.0	1.5	1.3	1.1	1.1	0.9	1.1	2.0

[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 detailed race of mother, by place of birth of mother: United States, 2001

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	83.4	85.2	74.5	69.3	84.0	87.0	90.1	79.1	85.0	82.7
Late or no prenatal care	3.7	3.2	6.5	8.2	3.4	2.4	2.0	4.8	3.0	3.8
Smoker [2]	12.0	13.0	9.0	19.9	2.8	0.7	3.8	14.8	3.2	2.3
Drinker [3]	0.9	0.8	1.0	2.8	0.3	0.2	0.8	1.0	0.4	0.3
Weight gain of less than 16 lbs [4]	12.1	11.1	17.3	16.9	9.4	6.9	11.6	8.9	8.1	10.0
Median weight gain [4]	30.5	30.6	30.0	29.8	30.1	30.3	26.3	32.7	30.6	30.0
Cesarean delivery rate	24.4	24.3	25.9	21.6	23.3	22.9	20.1	20.2	26.6	23.0
Infant										
Preterm births [5]	11.9	11.0	17.5	13.2	10.3	7.7	8.8	14.2	12.5	10.3
Birthweight										
Very low birthweight [6]	1.4	1.2	3.0	1.3	1.0	0.7	0.7	1.5	1.2	1.1
Low birthweight [7]	7.7	6.7	13.0	7.3	7.5	5.3	7.3	7.9	8.7	7.8
4,000 grams or more [8]	9.4	10.4	5.2	11.6	5.5	6.4	4.7	8.8	5.6	5.2
5-minute Apgar score of less than 7 [9]	1.4	1.2	2.3	1.4	1.0	0.7	0.9	1.3	1.1	1.0
Births to mothers born in the 50 States and DC										
Mother										
Prenatal care beginning in the first trimester	85.1	87.6	74.4	69.3	83.0	92.2	92.1	79.3	84.9	79.2
Late or no prenatal care	3.2	2.4	6.4	8.0	3.7	1.4	1.6	4.7	3.1	4.5
Smoker [2]	14.3	15.2	10.1	20.8	9.3	3.5	5.5	14.9	7.9	8.6
Drinker [3]	1.0	0.9	1.1	2.9	0.8	*	*	1.0	0.7	0.8
Weight gain of less than 16 lbs [4]	11.8	10.5	17.6	17.0	8.8	6.5	10.1	8.7	8.9	8.8
Median weight gain [4]	30.7	30.8	30.0	30.0	30.8	30.5	27.8	32.8	30.9	30.9
Cesarean delivery rate	24.6	24.5	25.6	21.4	20.7	21.0	24.9	20.2	21.0	19.5
Infant										
Preterm births [5]	12.3	11.1	18.0	13.3	12.2	10.2	11.2	14.2	12.7	11.8
Birthweight										
Very low birthweight [6]	1.5	1.2	3.1	1.3	1.3	1.0	0.9	1.5	1.2	1.3
Low birthweight [7]	8.0	6.9	13.4	7.3	8.3	7.6	8.2	8.0	9.3	8.0
4,000 grams or more [8]	9.7	10.7	4.7	11.9	7.0	6.0	6.0	8.8	6.0	7.3
5-minute Apgar score of less than 7 [9]	1.4	1.2	2.3	1.4	1.1	*	1.4	1.3	1.1	1.1
Births to mothers born outside the 50 States and DC										
Mother										
Prenatal care beginning in the first trimester	77.5	76.2	75.2	69.8	84.2	86.5	88.8	72.1	85.0	83.2
Late or no prenatal care	5.6	6.0	7.1	10.6	3.3	2.5	2.2	*	3.0	3.7
Smoker [2]	2.0	2.2	1.3	4.9	1.5	0.4	2.8	*	2.0	1.5
Drinker [3]	0.4	0.4	0.3	*	0.2	0.1	1.1	*	0.3	0.2
Weight gain of less than 16 lbs [4]	13.3	14.0	14.7	16.1	9.5	7.0	12.6	17.7	7.9	10.2
Median weight gain [4]	29.0	28.8	29.5	27.9	30.0	30.3	25.7	28.5	30.6	29.4
Cesarean delivery rate	23.8	23.3	28.0	24.4	23.9	23.1	16.9	19.1	28.0	23.5
Infant										
Preterm births [5]	10.7	10.6	13.8	12.2	9.9	7.4	7.3	*	12.4	10.1
Birthweight										
Very low birthweight [6]	1.1	1.0	2.4	1.4	1.0	0.7	0.6	*	1.2	1.0
Low birthweight [7]	6.5	5.9	9.4	8.5	7.3	5.1	6.7	*	8.5	7.7
4,000 grams or more [8]	8.6	9.5	8.1	6.6	5.2	6.4	3.8	*	5.5	5.0
5-minute Apgar score of less than 7 [9]	1.1	1.0	1.8	1.4	0.9	0.7	0.6	*	1.1	1.0

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
1 Includes births to Aleuts and Eskimos.
2 Excludes data for California which did not report tobacco use on the birth certificate.
3 Excludes data for California 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, 2001

Characteristic	Origin of mother									
		Hispanic						Non-Hispanic		
	All origins [1]	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	83.4	75.7	74.6	79.1	91.8	77.4	77.3	85.4	88.5	74.5
Late or no prenatal care	3.7	5.9	6.2	4.6	1.3	5.7	5.4	3.2	2.2	6.5
Smoker [3]	12.0	3.2	2.4	9.7	3.0	1.3	6.8	13.8	15.5	9.1
Drinker [4]	0.9	0.5	0.4	0.7	0.2	0.2	1.1	0.9	0.9	1.0
Weight gain of less than 16 lbs [5]	12.1	14.7	16.1	12.8	8.0	12.2	12.6	11.6	10.2	17.4
Median weight gain [5]	30.5	29.0	27.7	30.6	32.1	30.2	30.3	30.6	30.8	30.0
Cesarean delivery rate	24.4	23.6	22.9	24.4	34.6	25.3	23.4	24.7	24.5	25.9
Infant										
Preterm births [6]	11.9	11.4	11.2	13.7	10.6	11.2	12.4	12.1	10.8	17.6
Birthweight										
Very low birthweight [7]	1.4	1.1	1.0	1.8	1.3	1.2	1.3	1.5	1.2	3.1
Low birthweight [8]	7.7	6.5	6.1	9.3	6.5	6.5	8.0	8.0	6.8	13.1
4,000 grams or more [9]	9.4	8.7	9.0	6.9	9.5	8.6	7.2	9.6	11.1	5.1
5-minute Apgar score of less than 7 [10]	1.4	1.1	1.1	1.4	0.7	0.9	1.0	1.4	1.2	2.3
Births to mothers born in the 50 States and DC										
Mother										
Prenatal care beginning in the first trimester	85.1	79.0	78.7	78.7	91.0	83.0	77.8	85.7	88.7	74.4
Late or no prenatal care	3.2	4.5	4.6	4.7	1.7	3.5	5.0	3.0	2.2	6.4
Smoker [3]	14.3	6.6	5.3	11.0	4.1	4.6	8.7	15.0	16.1	10.1
Drinker [4]	1.0	0.9	0.8	0.8	*	0.4	1.3	1.0	0.9	1.1
Weight gain of less than 16 lbs [5]	11.8	13.2	14.2	12.1	8.4	9.3	12.5	11.7	10.2	17.7
Median weight gain [5]	30.6	29.0	27.7	30.6	32.1	30.2	30.3	30.6	30.8	30.0
Cesarean delivery rate	24.6	23.8	23.7	24.1	31.6	23.4	22.6	24.7	24.6	25.6
Infant										
Preterm births [6]	12.3	12.4	12.2	13.8	10.7	11.6	12.8	12.3	10.9	18.1
Birthweight										
Very low birthweight [7]	1.5	1.3	1.2	1.9	1.2	1.5	1.3	1.5	1.2	3.1
Low birthweight [8]	8.0	7.4	6.9	9.5	6.6	7.5	8.3	8.1	6.8	13.5
4,000 grams or more [9]	9.7	7.9	8.2	6.9	8.4	8.2	6.9	9.9	11.1	4.7
5-minute Apgar score of less than 7 [10]	1.4	1.2	1.1	1.4	0.7	0.9	1.1	1.4	1.2	2.3
Births to mothers born outside the 50 States and D C										
Mother										
Prenatal care beginning in the first trimester	77.5	73.8	72.3	79.9	92.4	76.7	76.3	83.0	85.5	75.3
Late or no prenatal care	5.6	6.6	7.1	4.2	1.0	6.0	6.2	4.1	3.5	7.1
Smoker [3]	2.0	1.2	0.7	7.5	2.1	0.9	1.8	3.0	5.5	1.3
Drinker [4]	0.4	0.3	0.2	0.7	*	0.2	0.5	0.5	0.9	0.3
Weight gain of less than 16 lbs [5]	13.3	15.6	17.3	14.0	7.6	12.5	12.6	10.6	9.1	15.3
Median weight gain [5]	29.0	27.6	26.1	30.3	32.0	30.0	30.1	30.2	30.6	29.0
Cesarean delivery rate	23.8	23.4	22.4	24.9	37.1	25.5	25.6	24.3	23.0	28.0
Infant										
Preterm births [6]	10.7	10.9	10.7	13.4	10.6	11.2	11.1	10.5	9.4	14.0
Birthweight										
Very low birthweight [7]	1.1	1.0	1.0	1.8	1.3	1.2	1.0	1.3	1.0	2.5
Low birthweight [8]	6.5	5.9	5.6	9.0	6.4	6.4	6.5	7.3	6.0	9.7
4,000 grams or more [9]	8.6	9.2	9.5	6.9	10.4	8.7	8.1	7.8	10.8	8.0
5-minute Apgar score of less than 7 [10]	1.1	1.0	1.1	1.2	0.7	0.9	0.7	1.1	0.9	1.8

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
1 Includes origin not stated.
2 Includes races other than white and black.
3 Excludes data for California which did not report tobacco use on the birth certificate.
4 Excludes data for California, 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.

ace 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 f 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, 2001

[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 [2]
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races [3]										
Anemia	4,025,933	99,558	25.0	36.0	30.2	22.9	19.6	19.0	19.8	37,388
Cardiac disease	4,025,933	20,698	5.2	2.7	3.6	4.9	6.6	8.2	9.5	37,388
Acute or chronic lung disease	4,025,933	48,246	12.1	14.7	13.2	11.5	10.7	11.3	11.9	37,388
Diabetes	4,025,933	124,242	31.1	9.2	17.8	30.3	41.3	55.6	71.7	37,388
Genital herpes [4]	3,660,523	33,560	9.3	6.2	8.1	8.8	10.6	12.4	12.3	35,734
Hydramnios/Oligohydramnios	4,025,933	54,694	13.7	14.9	13.9	13.2	13.2	14.1	16.1	37,388
Hemoglobinopathy	4,025,933	3,141	0.8	1.0	0.9	0.7	0.7	0.7	0.8	37,388
Hypertension, chronic	4,025,933	32,232	8.1	2.9	4.7	7.3	10.0	15.1	25.0	37,388
Hypertension, pregnancy-associated	4,025,933	150,329	37.7	42.3	37.2	37.3	35.4	37.6	47.7	37,388
Eclampsia	4,025,933	12,627	3.2	4.3	3.2	2.9	2.7	3.2	4.2	37,388
Incompetent cervix	4,025,933	11,251	2.8	1.4	2.1	2.7	3.5	4.3	4.6	37,388
Previous infant 4000+ grams	4,025,933	41,313	10.4	1.3	5.8	10.8	14.7	17.5	20.2	37,388
Previous preterm or small-for-gestational-age infant	4,025,933	48,318	12.1	4.6	11.7	13.1	13.0	15.3	16.2	37,388
Renal disease	4,025,933	12,045	3.0	3.0	3.4	3.1	2.8	2.5	2.3	37,388
Rh sensitization [5]	3,987,064	26,933	6.8	5.7	6.4	6.9	7.5	7.4	7.3	39,545
Uterine bleeding [4]	3,660,523	21,324	5.9	4.1	5.2	5.9	6.7	7.0	8.3	35,734
White										
Anemia	3,177,626	69,462	22.1	32.0	26.5	20.4	18.0	17.3	18.1	29,977
Cardiac disease	3,177,626	17,330	5.5	2.7	3.7	5.1	7.0	8.7	10.0	29,977
Acute or chronic lung disease	3,177,626	36,476	11.6	13.3	12.3	11.2	10.7	11.2	11.9	29,977
Diabetes	3,177,626	94,541	30.0	9.4	17.6	28.8	38.6	51.4	67.2	29,977
Genital herpes [4]	2,865,647	26,236	9.2	5.6	7.3	8.5	11.0	13.3	13.6	28,520
Hydramnios/Oligohydramnios	3,177,626	41,625	13.2	14.5	13.5	12.7	12.6	13.6	15.2	29,977
Hemoglobinopathy	3,177,626	1,122	0.4	0.3	0.3	0.3	0.4	0.5	0.4	29,977
Hypertension, chronic	3,177,626	22,078	7.0	2.5	4.1	6.5	8.5	12.4	19.6	29,977
Hypertension, pregnancy-associated	3,177,626	119,710	38.0	41.4	38.0	38.3	35.8	37.2	47.2	29,977
Eclampsia	3,177,626	9,250	2.9	3.8	2.9	2.8	2.6	3.0	4.0	29,977
Incompetent cervix	3,177,626	7,718	2.5	1.2	1.7	2.2	3.1	3.9	4.2	29,977
Previous infant 4000+ grams	3,177,626	36,813	11.7	1.4	6.5	12.0	16.1	19.3	22.6	29,977
Previous preterm or small-for-gestational-age infant	3,177,626	37,228	11.8	4.2	11.2	12.6	12.8	15.1	16.0	29,977
Renal disease	3,177,626	10,328	3.3	3.4	3.8	3.4	3.0	2.7	2.5	29,977
Rh sensitization [5]	3,143,004	24,456	7.9	6.7	7.3	7.9	8.5	8.4	8.6	31,842
Uterine bleeding [4]	2,865,647	17,834	6.3	4.6	5.7	6.2	6.9	7.2	8.5	28,520
Black										
Anemia	606,156	23,947	39.8	44.7	43.6	37.8	33.7	31.8	32.2	4,214
Cardiac disease	606,156	2,472	4.1	2.7	3.5	4.4	5.2	6.2	8.8	4,214
Acute or chronic lung disease	606,156	9,844	16.4	18.9	17.1	15.5	14.2	14.1	14.2	4,214
Diabetes	606,156	17,232	28.6	7.8	16.9	31.7	48.3	66.1	82.2	4,214
Genital herpes [4]	565,406	6,243	11.1	8.0	11.3	13.0	12.4	10.4	8.6	4,073
Hydramnios/Oligohydramnios	606,156	9,653	16.0	16.1	15.0	15.4	17.2	17.8	22.4	4,214
Hemoglobinopathy	606,156	1,864	3.1	3.0	3.1	3.2	3.0	3.0	3.6	4,214
Hypertension, chronic	606,156	8,810	14.6	4.1	7.4	14.1	25.0	38.4	64.5	4,214
Hypertension, pregnancy-associated	606,156	24,433	40.6	45.4	35.6	38.5	42.4	48.1	56.5	4,214
Eclampsia	606,156	2,813	4.7	5.8	4.3	4.1	4.5	4.9	6.6	4,214
Incompetent cervix	606,156	3,036	5.0	1.9	3.6	6.3	7.9	8.6	8.0	4,214
Previous infant 4000+ grams	606,156	2,765	4.6	0.8	3.0	5.9	7.9	8.7	8.8	4,214
Previous preterm or small-for-gestational-age infant	606,156	8,741	14.5	5.4	14.1	18.4	17.9	19.3	17.5	4,214
Renal disease	606,156	1,223	2.0	2.0	2.1	2.1	1.9	1.7	*	4,214
Rh sensitization [5]	603,375	1,966	3.3	3.3	3.3	3.4	3.1	3.7	2.6	4,463
Uterine bleeding [4]	565,406	2,299	4.1	3.1	3.6	4.4	5.3	4.8	6.4	4,073

[1] Total number of births to residents of areas reporting specified medical risk factor.
[2] No response reported for the medical risk factor item.
[3] Includes races other than white and black.
[4] Texas 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 detailed race of mother: United States, 2001

[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	99,558	69,462	23,947	2,282	3,867	348	147	295	533	2,544
Diabetes	124,242	94,541	17,232	2,235	10,234	1,635	340	321	1,750	6,188
Hypertension, pregnancy-associated	150,329	119,710	24,433	1,963	4,223	412	199	290	1,028	2,294
Uterine bleeding [2]	21,324	17,834	2,299	252	939	120	61	41	159	558
Complications of labor and/or delivery										
Meconium,moderate/heavy	206,123	151,345	41,937	2,115	10,726	1,616	432	421	1,885	6,372
Premature rupture of membrane	95,129	72,234	16,773	1,337	4,785	656	269	189	850	2,821
Dysfunctional labor	112,268	88,782	15,283	1,551	6,652	1,394	323	252	1,017	3,666
Breech/Malpresentation	153,141	125,809	18,533	1,656	7,143	1,149	369	289	1,148	4,188
Cephalopelvic disproportion	66,060	53,436	7,653	659	4,312	725	159	99	769	2,560
Fetal distress [3]	140,617	104,731	27,180	1,431	7,275	978	374	288	1,083	4,552
Obstetric procedures										
Amniocentesis	87,927	71,930	8,701	538	6,758	1,824	765	232	1,040	2,897
Electronic fetal monitoring	3,397,544	2,685,098	517,061	34,488	160,897	25,092	6,892	4,733	25,478	98,702
Induction of labor	819,924	680,846	102,847	8,400	27,831	3,912	1,363	1,000	3,918	17,638
Ultrasound	2,696,063	2,162,694	372,493	25,965	134,911	22,313	6,527	4,238	21,689	80,144
Stimulation of labor	702,660	561,467	97,216	6,772	37,205	6,159	1,772	1,054	5,362	22,858
	Rate									
Medical risk factors										
Anemia	25.0	22.1	39.8	55.4	19.6	11.2	16.4	46.6	16.6	21.3
Diabetes	31.1	30.0	28.6	54.3	51.7	52.5	37.9	50.7	54.5	51.9
Hypertension, pregnancy-associated	37.7	38.0	40.6	47.7	21.4	13.2	22.2	45.8	32.0	19.2
Uterine bleeding [2]	5.9	6.3	4.1	6.2	5.0	4.0	7.0	6.6	5.1	5.1
Complications of labor and/or delivery										
Meconium,moderate/heavy	51.5	47.9	69.5	51.3	54.0	51.7	48.1	66.2	58.5	53.3
Premature rupture of membrane	23.8	22.9	27.8	32.4	24.1	21.0	29.9	29.7	26.4	23.6
Dysfunctional labor	28.1	28.1	25.3	37.6	33.5	44.6	36.0	39.6	31.6	30.6
Breech/Malpresentation	38.3	39.8	30.7	40.2	36.0	36.7	41.1	45.5	35.6	35.0
Cephalopelvic disproportion	16.5	16.9	12.7	16.0	21.7	23.2	17.7	15.6	23.9	21.4
Fetal distress [3]	38.7	36.8	48.3	35.5	39.0	32.7	42.9	45.9	34.9	41.1
Obstetric procedures										
Amniocentesis	21.9	22.7	14.4	13.0	34.0	58.2	84.9	36.4	32.2	24.2
Electronic fetal monitoring	847.9	849.0	855.6	834.9	808.9	800.9	764.8	743.2	789.6	823.0
Induction of labor	204.6	215.3	170.2	203.3	139.9	124.9	151.3	157.0	121.4	147.1
Ultrasound	672.8	683.8	616.4	628.5	678.3	712.2	724.3	665.5	672.2	668.3
Stimulation of labor	175.4	177.5	160.9	163.9	187.1	196.6	196.6	165.5	166.2	190.6

[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, 2001

[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	99,558	22,163	15,084	2,234	317	2,337	2,191	76,598	47,388	23,362
Diabetes	124,242	25,711	17,953	2,153	301	3,623	1,681	97,839	69,014	16,721
Hypertension, pregnancy-associated	150,329	22,154	14,974	1,803	370	3,327	1,680	127,277	97,457	23,933
Uterine bleeding[3]	21,324	2,680	1,610	405	34	391	240	18,447	15,096	2,223
Complications of labor and/or delivery										
Meconium,moderate/heavy	206,123	48,696	34,687	3,089	508	7,746	2,666	156,225	103,026	40,882
Premature rupture of membrane	95,129	15,550	10,380	1,490	201	2,424	1,055	78,340	56,057	16,374
Dysfunctional labor	112,268	20,345	12,622	1,913	525	3,473	1,812	91,251	68,529	14,766
Breech/Malpresentation	153,141	25,082	16,942	2,070	422	3,947	1,701	127,034	100,577	18,006
Cephalopelvic disproportion	66,060	10,682	7,673	771	181	1,506	551	55,012	42,716	7,468
Fetal distress[4]	140,617	19,968	12,338	2,257	347	3,593	1,433	119,830	84,850	26,572
Obstetric procedures										
Amniocentesis	87,927	8,802	4,373	1,069	321	2,204	835	78,383	62,859	8,407
Electronic fetal monitoring	3,397,544	692,362	491,422	49,647	11,989	99,042	40,262	2,686,869	1,994,791	503,516
Induction of labor	819,924	114,801	77,889	9,582	2,542	16,040	8,748	700,459	565,014	100,536
Ultrasound	2,696,063	502,183	347,031	39,432	8,233	75,568	31,919	2,178,698	1,661,703	361,800
Stimulation of labor	702,660	135,006	93,064	11,868	1,989	20,539	7,546	563,876	426,905	94,295
	Rate									
Medical risk factors										
Anemia	25.0	26.2	24.9	39.1	22.7	19.5	46.2	24.6	20.6	39.9
Diabetes	31.1	30.4	29.6	37.7	21.5	30.2	35.4	31.4	30.0	28.5
Hypertension, pregnancy-associated	37.7	26.2	24.7	31.6	26.5	27.7	35.4	40.8	42.3	40.9
Uterine bleeding[3]	5.9	4.0	3.5	7.2	2.5	3.5	6.2	6.3	7.0	4.1
Complications of labor and/or delivery										
Meconium,moderate/heavy	51.5	57.3	56.9	54.0	36.3	64.1	56.0	49.9	44.6	69.6
Premature rupture of membrane	23.8	18.3	17.0	26.0	14.4	20.1	22.2	25.0	24.3	27.9
Dysfunctional labor	28.1	24.0	20.7	33.4	37.5	28.7	38.0	29.2	29.7	25.1
Breech/Malpresentation	38.3	29.5	27.8	36.2	30.2	32.7	35.7	40.6	43.5	30.7
Cephalopelvic disproportion	16.5	12.6	12.6	13.5	12.9	12.5	11.6	17.6	18.5	12.7
Fetal distress[4]	38.7	29.5	27.1	40.2	25.3	32.2	37.1	40.8	39.1	48.6
Obstetric procedures										
Amniocentesis	21.9	10.4	7.2	18.7	22.9	18.2	17.5	25.0	27.2	14.3
Electronic fetal monitoring	847.9	814.8	805.8	866.9	855.9	818.7	844.1	857.5	862.0	856.1
Induction of labor	204.6	135.1	127.7	167.3	181.5	132.6	183.4	223.5	244.2	170.9
Ultrasound	672.8	591.0	569.1	688.6	587.8	624.7	669.2	695.3	718.1	615.1
Stimulation of labor	175.4	158.9	152.6	207.2	142.0	169.8	158.2	180.0	184.5	160.3

[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 49 reporting States and the District of Columbia, 2001

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	3,498,174	6,972	392,937	128,010	264,927	898,300	921,714	814,648	382,826	80,777
Smoker	416,476	417	68,343	18,295	50,048	151,828	94,571	61,293	32,565	7,459
Nonsmoker	3,056,512	6,505	321,958	108,795	213,163	740,641	820,775	747,090	347,023	72,520
Not stated	25,186	50	2,636	920	1,716	5,831	6,368	6,265	3,238	798
White										
Total	2,749,388	3,441	273,364	84,382	188,982	674,889	740,024	677,274	314,932	65,464
Smoker	353,635	315	58,577	15,530	43,047	129,233	80,678	52,161	26,765	5,906
Nonsmoker	2,375,662	3,091	212,931	68,231	144,700	541,233	654,217	619,868	285,450	58,872
Not stated	20,091	35	1,856	621	1,235	4,423	5,129	5,245	2,717	686
Black										
Total	572,382	3,329	105,943	39,244	66,699	189,244	129,541	88,306	45,429	10,590
Smoker	51,395	85	7,549	2,099	5,450	18,562	11,284	7,574	4,977	1,364
Nonsmoker	517,606	3,232	97,821	36,919	60,902	169,633	117,494	80,148	40,128	9,150
Not stated	3,381	12	573	226	347	1,049	763	584	324	76
	Percent smokers									
Total[1]	12.0	6.0	17.5	14.4	19.0	17.0	10.3	7.6	8.6	9.3
White	13.0	9.2	21.6	18.5	22.9	19.3	11.0	7.8	8.6	9.1
Black	9.0	2.6	7.2	5.4	8.2	9.9	8.8	8.6	11.0	13.0
	Percent distribution[2]									
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	31.3	56.5	39.4	43.8	37.9	32.3	28.3	27.3	26.7	26.2
6-10 cigarettes	41.5	32.6	41.7	40.5	42.1	42.8	41.7	40.2	38.5	36.2
11-15 cigarettes	5.8	*	4.2	3.7	4.4	5.1	6.4	7.2	7.4	7.4
16-20 cigarettes	18.5	8.6	13.1	10.6	13.9	17.4	20.4	21.6	22.7	24.5
21-30 cigarettes	2.1	*	1.2	1.0	1.2	1.7	2.4	2.7	3.3	3.8
31-40 cigarettes	0.7	*	0.3	0.3	0.4	0.6	0.8	1.0	1.3	1.5
41 cigarettes or more	0.1	*	0.1	*	0.1	0.1	0.1	0.2	0.2	*
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	28.0	51.5	35.9	40.0	34.4	28.6	25.2	24.6	23.7	22.9
6-10 cigarettes	42.5	36.5	43.6	42.9	43.9	44.3	42.3	40.3	38.3	35.8
11-15 cigarettes	6.3	*	4.6	4.0	4.8	5.6	6.9	7.8	8.1	8.1
16-20 cigarettes	20.0	9.5	14.2	11.6	15.2	19.0	22.0	23.2	24.5	26.8
21-30 cigarettes	2.3	*	1.3	1.1	1.3	1.9	2.6	3.0	3.7	4.3
31-40 cigarettes	0.8	*	0.4	0.3	0.4	0.6	0.8	1.0	1.4	1.8
41 cigarettes or more	0.1	*	0.1	*	0.1	0.1	0.1	0.2	0.2	*
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	50.6	73.6	63.3	68.1	61.5	54.5	46.9	42.9	40.0	39.5
6-10 cigarettes	35.6	*	28.4	24.9	29.8	34.2	37.9	39.5	39.6	37.7
11-15 cigarettes	2.7	*	1.8	1.7	1.8	2.1	2.9	3.4	3.8	4.5
16-20 cigarettes	9.8	*	5.5	4.8	5.8	8.2	10.6	12.5	14.4	15.7
21-30 cigarettes	0.9	*	0.7	*	0.8	0.6	1.1	1.0	1.2	2.0
31-40 cigarettes	0.4	*	*	*	*	0.4	0.4	0.5	0.8	*
41 cigarettes or more	0.1	*	*	*	*	*	*	*	*	*

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
1 Includes races other than white and black.
2 Excludes data for Indiana, New York State (but includes New York City), and South Dakota, which did not report average number of cigarettes smoked per day in standard categories.

NOTE: Excludes data for California, which did not require reporting of tobacco use during pregnancy. 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 49 reporting States, and the District of Columbia, 2001

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					
					Percent smokers									
All origins [1]	3,498,174	416,476	3,056,512	25,186	12.0	6.0	17.5	14.4	19.0	17.0	10.3	7.6	8.6	9.3
Hispanic	590,780	18,900	568,225	3,655	3.2	2.0	4.0	3.5	4.2	3.8	2.6	2.5	3.0	3.6
Mexican	382,352	8,975	370,663	2,714	2.4	1.6	2.9	2.6	3.0	2.7	1.9	1.8	2.5	3.1
Puerto Rican	55,517	5,382	49,901	234	9.7	*	9.7	7.9	10.8	11.5	9.0	8.0	8.7	9.7
Cuban	13,248	391	12,833	24	3.0	*	6.3	8.7	5.0	3.1	2.4	2.2	3.6	*
Central and South American	96,231	1,240	94,603	388	1.3	*	1.8	1.7	1.9	1.5	1.0	1.0	1.4	1.8
Other and unknown Hispanic	43,432	2,912	40,225	295	6.8	*	7.6	6.6	8.3	8.0	6.2	5.5	5.1	6.4
Non-Hispanic [2]	2,886,251	394,660	2,471,513	20,078	13.8	7.6	21.8	18.4	23.3	20.4	11.9	8.3	9.3	10.1
White	2,159,553	333,368	1,810,861	15,324	15.5	18.5	30.5	28.6	31.2	24.9	13.2	8.7	9.5	10.0
Black	557,366	50,602	503,573	3,191	9.1	2.5	7.2	5.4	8.2	9.9	8.9	8.8	11.2	13.2

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
1 Includes origin not stated.
2 Includes races other than white and black.

NOTES: Excludes data for California, 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 49 reporting States, and the District of Columbia, 2001

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]	3,498,174	177,652	529,715	1,104,535	755,441	883,453	47,378
White, total	2,749,388	156,721	380,470	831,330	593,031	754,399	33,437
White, non-Hispanic	2,159,553	36,744	226,984	659,717	516,605	702,521	16,982
Black, total	572,382	14,251	128,480	224,048	128,090	67,610	9,903
Black, non-Hispanic	557,366	13,248	125,237	218,440	125,113	66,058	9,270
Hispanic[2]	590,780	121,078	155,638	174,010	76,826	49,485	13,743
	Percent smokers						
Total	12.0	8.9	24.8	16.4	9.2	1.9	11.0
White, total	13.0	8.8	27.9	18.8	10.3	2.0	11.5
White, non- Hispanic	15.5	31.9	43.2	22.7	11.3	2.1	17.7
Black, total	9.0	10.4	16.9	8.8	5.2	1.5	11.7
Black, non-Hispanic	9.1	10.8	17.1	8.9	5.2	1.5	11.6
Hispanic[2]	3.2	1.7	5.0	3.4	2.9	1.0	3.3
	Percent distribution[3]						
All races[1]							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	72.8	68.0	72.7	72.3	74.1	77.9	74.2
11-20 cigarettes	24.3	27.2	24.1	24.9	23.5	20.2	22.6
21 cigarettes or more	2.9	4.8	3.2	2.8	2.4	1.9	3.2
White, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	70.5	65.9	69.6	70.1	72.5	77.0	72.2
11-20 cigarettes	26.3	28.9	26.8	26.8	24.9	21.1	24.1
21 cigarettes or more	3.1	5.2	3.5	3.0	2.6	1.9	3.6
White, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	69.7	62.7	68.4	69.6	72.0	76.8	69.6
11-20 cigarettes	27.1	31.7	28.0	27.3	25.3	21.3	26.5
21 cigarettes or more	3.2	5.6	3.7	3.1	2.7	2.0	4.0
Black, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	86.2	83.7	86.0	86.7	86.4	87.6	79.2
11-20 cigarettes	12.4	13.9	12.4	12.1	12.6	11.5	18.3
21 cigarettes or more	1.4	2.4	1.6	1.3	1.0	*	2.5
Black, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	86.2	83.7	86.0	86.7	86.4	87.9	79.6
11-20 cigarettes	12.4	13.9	12.4	12.1	12.6	11.3	17.8
21 cigarettes or more	1.4	2.4	1.6	1.3	1.0	*	2.5
Hispanic[2]							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	85.6	84.3	86.5	85.2	84.8	83.7	87.2
11-20 cigarettes	13.0	13.5	12.0	13.6	14.1	15.3	11.6
21 cigarettes or more	1.4	2.2	1.5	1.2	1.1	*	*

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
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 Indiana, New York State (but includes New York City), and South Dakota, which did not report average number of cigarettes smoked per day in standard categories.

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

Table 32. Percent low birthweight by smoking status, age, and race and Hispanic origin of mother: Total of 49 reporting States, and the District of Columbia, 2001

[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	7.9	13.3	9.8	10.6	9.4	8.0	7.0	7.2	8.6	10.8
Smoker	11.9	14.0	11.3	11.8	11.1	10.6	11.3	13.2	16.7	19.7
Nonsmoker	7.3	13.2	9.4	10.3	8.9	7.4	6.5	6.7	7.8	9.9
Not stated	10.1	*	14.1	14.5	13.9	9.4	9.2	9.2	11.4	12.2
White, total										
Total	6.8	10.8	8.3	9.1	7.9	6.8	6.1	6.4	7.7	9.8
Smoker	10.8	11.8	10.7	11.3	10.4	9.8	10.3	11.7	14.6	16.7
Nonsmoker	6.2	10.7	7.6	8.5	7.2	6.0	5.6	5.9	7.0	9.1
Not stated	8.8	*	12.1	13.4	11.5	7.8	8.0	7.9	10.2	11.6
White, non-Hispanic										
Total	6.8	11.6	8.5	9.3	8.1	6.9	6.1	6.4	7.6	9.7
Smoker	10.7	12.3	10.6	11.2	10.3	9.8	10.2	11.5	14.5	16.2
Nonsmoker	6.1	11.5	7.5	8.5	7.1	5.9	5.5	5.9	6.8	8.9
Not stated	8.7	*	11.4	11.8	11.3	8.1	8.0	7.9	10.4	10.8
Black, total										
Total	13.0	16.0	13.7	14.0	13.5	12.5	12.0	13.0	15.4	17.4
Smoker	19.9	*	16.6	16.6	16.5	16.7	19.0	24.3	28.4	32.6
Nonsmoker	12.3	15.9	13.4	13.8	13.2	12.0	11.3	11.9	13.7	15.1
Not stated	18.2	*	21.4	19.6	22.5	15.3	17.8	20.6	19.8	*
Black, non-Hispanic										
Total	13.1	16.0	13.7	14.1	13.6	12.6	12.1	13.2	15.6	17.6
Smoker	19.9	*	16.6	16.8	16.6	16.7	19.0	24.3	28.7	32.8
Nonsmoker	12.4	15.9	13.5	13.9	13.2	12.1	11.4	12.1	13.9	15.4
Not stated	17.9	*	21.5	19.6	22.8	14.9	16.8	20.9	19.8	*
Hispanic [2]										
Total	6.8	10.2	8.0	8.7	7.6	6.5	6.0	6.6	8.3	10.5
Smoker	11.9	*	11.9	11.4	12.1	10.5	10.7	14.4	15.6	22.4
Nonsmoker	6.6	10.1	7.8	8.6	7.4	6.3	5.8	6.4	8.1	10.0
Not stated	8.8	*	13.5	15.7	12.0	7.5	7.2	7.6	9.1	*

* Figure does not meet standards of reliability or precision; based on fewer then 20 births in the numerator.
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, 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, 2001

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began								Percent	
		1st trimester			2d trimester	Late or no care			Not stated		
		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]	4,025,933	3,276,902	2,534,944	741,958	506,668	147,380	105,662	41,718	94,983	83.4	3.7
Under 15 years	7,781	3,543	2,189	1,354	2,651	1,247	904	343	340	47.6	16.8
15-19 years	445,944	300,892	205,917	94,975	102,285	30,067	21,797	8,270	12,700	69.5	6.9
15 years	20,150	11,074	6,992	4,082	6,236	2,111	1,534	577	729	57.0	10.9
16 years	45,367	27,566	18,038	9,528	12,483	3,838	2,812	1,026	1,480	62.8	8.7
17 years	79,807	52,061	34,790	17,271	19,529	5,909	4,248	1,663	2,308	67.2	7.6
18 years	126,361	86,451	59,486	26,965	28,444	7,931	5,686	2,245	3,535	70.4	6.5
19 years	174,259	123,740	86,611	37,129	35,593	10,278	7,519	2,759	4,648	73.0	6.1
20-24 years	1,021,627	778,394	574,767	203,627	168,349	48,565	35,216	13,349	26,319	78.2	4.9
25-29 years	1,058,265	891,451	702,633	188,818	111,616	31,791	22,993	8,798	23,407	86.1	3.1
30-34 years	942,697	827,871	669,956	157,915	73,992	21,191	14,965	6,226	19,643	89.7	2.3
35-39 years	451,723	392,799	315,096	77,703	37,653	11,282	7,627	3,655	9,989	88.9	2.6
40 years and over	97,896	81,952	64,386	17,566	10,122	3,237	2,160	1,077	2,585	86.0	3.4
White, total	3,177,626	2,648,763	2,064,013	584,750	361,527	99,215	72,661	26,554	68,121	85.2	3.2
Under 15 years	4,095	2,069	1,289	780	1,270	594	417	177	162	52.6	15.1
15-19 years	318,563	222,483	153,040	69,443	68,177	19,429	14,369	5,060	8,474	71.7	6.3
15 years	12,584	7,363	4,701	2,662	3,585	1,209	889	320	427	60.6	9.9
16 years	30,510	19,470	12,894	6,576	7,767	2,359	1,742	617	914	65.8	8.0
17 years	56,098	38,000	25,571	12,429	12,706	3,860	2,837	1,023	1,532	69.6	7.1
18 years	91,284	64,425	44,478	19,947	19,302	5,190	3,809	1,381	2,367	72.5	5.8
19 years	128,087	93,225	65,396	27,829	24,817	6,811	5,092	1,719	3,234	74.7	5.5
20-24 years	779,529	608,175	450,925	157,250	119,775	32,889	24,359	8,530	18,690	79.9	4.3
25-29 years	850,343	728,874	577,540	151,334	82,298	22,150	16,328	5,822	17,021	87.5	2.7
30-34 years	777,294	693,396	564,369	129,027	54,921	14,448	10,384	4,084	14,529	90.9	1.9
35-39 years	368,816	326,299	263,455	62,844	27,683	7,497	5,289	2,208	7,337	90.3	2.1
40 years and over	78,986	67,467	53,395	14,072	7,403	2,208	1,515	693	1,908	87.5	2.9
White, non-Hispanic	2,326,578	2,022,737	1,605,473	417,264	210,946	51,221	37,808	13,413	41,674	88.5	2.2
Under 15 years	1,581	804	500	304	500	222	148	74	55	52.7	14.5
15-19 years	190,161	140,213	97,220	42,993	36,857	8,905	6,767	2,138	4,186	75.4	4.8
15 years	5,765	3,552	2,295	1,257	1,581	466	366	100	166	63.4	8.3
16 years	15,538	10,461	6,933	3,528	3,721	981	757	224	375	69.0	6.5
17 years	31,409	22,464	15,161	7,303	6,533	1,684	1,252	432	728	73.2	5.5
18 years	55,409	41,276	28,764	12,512	10,528	2,450	1,840	610	1,155	76.1	4.5
19 years	82,040	62,460	44,067	18,393	14,494	3,324	2,552	772	1,762	77.8	4.1
20-24 years	523,027	426,610	320,657	105,953	69,351	16,627	12,519	4,108	10,439	83.2	3.2
25-29 years	622,361	554,911	448,049	106,862	46,082	11,107	8,231	2,876	10,261	90.7	1.8
30-34 years	625,435	572,676	472,522	100,154	34,483	8,201	5,882	2,319	10,075	93.1	1.3
35-39 years	300,007	271,536	221,737	49,799	18,545	4,675	3,260	1,415	5,251	92.1	1.6
40 years and over	64,006	55,987	44,788	11,199	5,128	1,484	1,001	483	1,407	89.4	2.4
Black, total	606,156	436,504	325,221	111,283	111,414	38,243	24,927	13,316	19,995	74.5	6.5
Under 15 years	3,455	1,378	849	529	1,300	610	448	162	167	41.9	18.6
15-19 years	110,843	68,742	46,714	22,028	29,275	9,148	6,257	2,891	3,678	64.1	8.5
15 years	6,881	3,408	2,109	1,299	2,388	798	559	239	287	51.7	12.1
16 years	13,183	7,226	4,637	2,589	4,172	1,288	922	366	497	57.0	10.2
17 years	20,778	12,466	8,225	4,241	5,860	1,769	1,185	584	683	62.0	8.8
18 years	30,516	19,303	13,277	6,026	7,856	2,341	1,578	763	1,016	65.4	7.9
19 years	39,485	26,339	18,466	7,873	8,999	2,952	2,013	939	1,195	68.8	7.7
20-24 years	199,221	140,158	102,679	37,479	39,839	12,943	8,686	4,257	6,281	72.6	6.7
25-29 years	137,400	105,444	81,255	24,189	20,485	7,112	4,559	2,553	4,359	79.3	5.3
30-34 years	94,660	74,516	58,311	16,205	12,092	4,803	2,970	1,833	3,249	81.5	5.3
35-39 years	49,065	37,824	29,119	8,705	6,604	2,839	1,558	1,281	1,798	80.0	6.0
40 years and over	11,512	8,442	6,294	2,148	1,819	788	449	339	463	76.4	7.1

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, 2001 --Con.

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began								Percent	
		1st trimester			2d trimester	Late or no care			Not stated		
		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	589,917	425,083	316,867	108,216	108,638	37,199	24,120	13,079	18,997	74.5	6.5
Under 15 years	3,401	1,355	841	514	1,282	601	441	160	163	41.8	18.6
15-19 years	108,252	67,179	45,651	21,528	28,636	8,914	6,093	2,821	3,523	64.1	8.5
15 years	6,735	3,332	2,068	1,264	2,341	781	548	233	281	51.6	12.1
16 years	12,879	7,056	4,523	2,533	4,095	1,254	899	355	474	56.9	10.1
17 years	20,293	12,187	8,040	4,147	5,717	1,732	1,161	571	657	62.1	8.8
18 years	29,794	18,861	12,974	5,887	7,686	2,282	1,537	745	965	65.4	7.9
19 years	38,551	25,743	18,046	7,697	8,797	2,865	1,948	917	1,146	68.8	7.7
20-24 years	194,391	136,879	100,328	36,551	38,909	12,608	8,425	4,183	5,995	72.7	6.7
25-29 years	133,491	102,555	79,081	23,474	19,926	6,892	4,383	2,509	4,118	79.3	5.3
30-34 years	91,710	72,244	56,593	15,651	11,727	4,663	2,852	1,811	3,076	81.5	5.3
35-39 years	47,494	36,654	28,247	8,407	6,397	2,755	1,493	1,262	1,688	80.0	6.0
40 years and over	11,178	8,217	6,126	2,091	1,761	766	433	333	434	76.5	7.1
Hispanic [2]	851,851	625,816	457,753	168,063	152,170	48,501	35,400	13,101	25,364	75.7	5.9
Under 15 years	2,555	1,277	789	488	789	380	275	105	109	52.2	15.5
15-19 years	130,007	63,273	56,531	26,742	31,792	10,706	7,736	2,970	4,236	66.2	8.5
15 years	6,936	3,865	2,437	1,428	2,050	762	541	221	259	57.9	11.4
16 years	15,165	9,131	6,037	3,094	4,115	1,399	999	400	520	62.3	9.6
17 years	25,023	15,732	10,553	5,179	6,282	2,204	1,600	604	805	65.0	9.1
18 years	36,298	23,420	15,918	7,502	8,886	2,804	2,014	790	1,188	66.7	8.0
19 years	46,585	31,125	21,586	9,539	10,459	3,537	2,582	955	1,464	69.0	7.8
20-24 years	258,431	182,794	131,116	51,678	51,080	16,460	12,040	4,420	8,097	73.0	6.6
25-29 years	227,910	173,824	129,246	44,578	36,490	11,119	8,193	2,926	6,477	78.5	5.0
30-34 years	150,352	119,389	90,659	28,730	20,539	6,276	4,579	1,697	4,148	81.7	4.3
35-39 years	67,952	54,037	41,029	13,008	9,202	2,846	2,060	786	1,867	81.8	4.3
40 years and over	14,644	11,222	8,383	2,839	2,278	714	517	197	430	79.0	5.0

[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, each State and territory, 2001

[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]	83.4	85.2	88.5	74.5	74.5	75.7	3.7	3.2	2.2	6.5	6.5	5.9
Alabama	82.4	87.4	89.5	71.7	71.7	52.3	3.9	2.9	1.9	6.2	6.2	19.4
Alaska	80.5	84.2	84.3	82.3	83.2	82.2	4.5	3.3	3.3	*	*	3.8
Arizona	76.7	77.4	87.3	75.8	75.7	66.7	6.3	6.2	2.5	5.9	5.8	10.1
Arkansas	79.8	82.4	83.9	69.9	70.0	67.4	4.6	3.9	3.4	7.4	7.4	8.5
California	85.4	85.4	90.0	82.5	82.5	82.4	2.9	3.0	2.0	3.6	3.6	3.6
Colorado	79.8	80.2	87.3	72.7	72.5	65.1	4.7	4.6	2.5	7.0	7.0	8.8
Connecticut	88.7	89.7	92.4	81.9	82.1	78.5	1.9	1.7	1.2	3.3	3.1	3.8
Delaware	87.2	88.9	91.5	81.5	81.6	73.0	3.3	2.7	2.2	5.3	5.3	5.7
District of Columbia	74.4	84.2	90.8	68.7	68.7	70.9	7.9	3.7	2.7	10.1	10.2	5.9
Florida	84.1	87.0	89.3	75.1	75.0	81.7	3.4	2.6	1.9	5.7	5.7	4.3
Georgia	86.2	88.9	91.4	80.6	80.5	76.5	3.0	2.4	1.6	4.2	4.2	6.2
Hawaii	84.2	88.5	89.2	92.0	92.3	83.3	3.8	2.7	2.6	*	*	3.2
Idaho	81.8	82.0	84.0	81.0	80.6	69.5	3.7	3.7	3.1	*	*	7.1
Illinois	84.0	86.5	90.3	72.9	72.9	76.8	3.3	2.4	1.7	7.4	7.4	4.1
Indiana	80.6	82.1	83.7	68.9	68.8	63.2	3.7	3.3	2.9	7.3	7.2	7.9
Iowa	88.4	88.9	89.8	79.0	79.1	74.7	2.3	2.1	2.0	5.8	5.7	4.7
Kansas	86.9	87.6	90.2	79.5	79.6	71.0	2.7	2.5	1.7	5.2	5.2	7.2
Kentucky	86.7	87.5	88.1	79.3	79.3	67.4	2.7	2.5	2.2	4.8	4.8	9.4
Louisiana	83.2	90.4	90.6	73.4	73.4	84.0	3.6	1.7	1.7	6.2	6.2	3.0
Maine	88.2	88.3	88.4	79.7	81.0	77.5	2.0	2.0	1.9	*	*	*
Maryland	83.7	87.7	89.6	76.5	76.5	72.6	3.7	2.5	2.0	6.2	6.1	5.8
Massachusetts	89.7	91.3	92.6	79.5	78.5	81.6	2.1	1.7	1.4	5.3	5.6	3.9
Michigan	84.5	87.8	89.1	69.3	69.2	71.2	3.6	2.5	2.3	8.9	9.0	5.5
Minnesota	84.5	87.1	89.1	66.5	66.5	62.8	2.7	2.0	1.6	7.2	7.2	7.3
Mississippi	82.7	89.3	89.8	74.9	74.9	71.2	3.3	1.8	1.6	5.1	5.1	7.2
Missouri	87.7	89.2	89.8	78.7	78.7	78.0	2.6	2.1	2.0	5.7	5.7	4.8
Montana	82.6	85.3	85.6	82.9	84.2	79.8	3.1	2.1	2.0	*	*	5.9
Nebraska	83.2	84.5	87.0	68.0	68.0	68.3	3.1	2.7	2.2	7.6	7.6	5.9
Nevada	75.7	76.3	85.9	67.6	67.6	62.8	7.4	7.3	3.6	10.2	10.1	12.4
New Hampshire	90.6	91.0	91.5	79.5	78.3	81.2	1.7	1.5	1.4	*	*	4.0
New Jersey	79.8	83.3	88.8	63.4	63.1	67.4	5.3	3.9	2.6	11.6	11.9	8.0
New Mexico	69.0	70.3	76.7	65.8	65.9	66.3	7.7	7.1	5.0	9.4	9.7	8.5
New York	80.5	83.9	87.8	70.3	70.2	73.2	5.2	4.0	2.9	9.0	9.0	7.1
North Carolina	84.4	87.3	90.9	75.9	75.9	69.9	3.1	2.4	1.5	5.2	5.2	6.7
North Dakota	85.8	88.4	88.7	78.4	79.2	78.1	2.4	1.6	1.5	*	*	*
Ohio	87.3	89.1	89.5	77.2	77.2	77.3	3.4	2.6	2.4	8.0	8.0	6.3
Oklahoma	77.4	79.5	81.5	69.2	69.3	65.4	5.4	4.7	4.1	8.2	8.2	9.5
Oregon	81.5	81.8	84.6	76.6	77.0	69.9	3.7	3.6	2.9	3.8	3.9	6.2
Pennsylvania	85.2	87.4	88.4	72.9	73.0	73.2	3.3	2.6	2.3	7.3	7.3	5.6
Rhode Island	91.4	92.4	93.7	84.5	84.9	87.5	1.1	0.9	0.8	2.8	2.7	1.4
South Carolina	79.2	84.3	86.1	69.5	69.5	63.9	4.4	3.2	2.7	6.8	6.8	9.1
South Dakota	78.3	82.2	82.5	59.0	59.4	66.5	4.1	2.6	2.5	*	*	*
Tennessee	82.8	85.7	87.6	72.2	72.2	57.1	4.1	3.0	2.3	7.9	7.9	14.7
Texas	80.3	80.5	88.0	77.0	76.9	74.2	4.9	4.9	2.5	5.7	5.7	6.9
Utah	79.3	80.3	83.5	61.7	61.6	60.8	4.7	4.3	3.4	15.0	15.2	9.6
Vermont	89.3	89.3	89.5	77.4	75.9	81.8	1.8	1.8	1.7	*	*	*
Virginia	85.1	87.8	90.5	76.5	76.5	69.8	3.6	2.8	2.0	5.8	5.7	7.9
Washington	83.2	83.8	86.2	77.0	76.9	73.1	3.0	2.8	2.2	4.7	4.6	5.3
West Virginia	86.3	86.8	86.9	76.2	76.6	63.4	2.2	2.1	2.1	4.1	4.0	*
Wisconsin	83.8	86.2	87.7	69.6	69.5	69.8	3.4	2.7	2.4	8.1	8.1	6.3
Wyoming	82.9	83.4	84.6	83.1	84.4	71.6	4.0	3.8	3.7	*	*	5.5
Puerto Rico	79.4	80.1	---	71.1	---	---	3.3	3.0	---	5.8	---	---
Virgin Islands	65.6	65.1	81.0	65.3	66.4	59.5	8.6	8.7	*	8.9	8.1	10.6
Guam	64.0	88.8	89.4	86.5	86.5	72.0	12.2	*	*	*	*	*
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	30.1	*	---	*	---	---	25.8	*	---	*	---	---

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
--- Data not available.
1 Care beginning in 3rd 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 the territories.

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, 2001

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 [1]	4,025,933	3,276,902	2,534,944	741,958	506,668	147,390	105,662	41,728	94,973
No visits	41,728	...	...	...	...	41,728	...	41,728	...
1-2 visits	41,755	10,928	7,248	3,680	9,764	19,121	19,121	...	1,942
3-4 visits	86,035	25,606	15,090	10,516	30,653	27,216	27,216	...	2,560
5-6 visits	183,463	80,249	47,074	33,175	73,582	26,044	26,044	...	3,588
7-8 visits	342,823	213,002	132,086	80,916	109,984	15,206	15,206	...	4,631
9-10 visits	776,133	620,324	424,571	195,753	138,479	8,618	8,618	...	8,712
11-12 visits	1,044,952	957,024	744,129	212,895	78,747	3,518	3,518	...	5,663
13-14 visits	660,605	627,192	520,940	106,252	28,642	1,428	1,428	...	3,343
15-16 visits	473,523	451,622	393,547	58,075	18,652	1,146	1,146	...	2,103
17-18 visits	104,020	99,838	85,564	14,274	3,437	217	217	...	528
19 visits or more	146,295	139,215	123,755	15,460	5,727	454	454	...	899
Not stated	124,601	51,902	40,940	10,962	9,001	2,694	2,694	...	61,004
Median number of visits	12.3	12.6	12.8	11.5	9.5	5.4	5.4	...	10.3
White, total	3,177,626	2,648,763	2,064,013	584,750	361,527	99,225	72,661	26,564	68,111
No visits	26,564	...	...	...	...	26,564	...	26,564	...
1-2 visits	26,940	7,398	4,990	2,408	5,870	12,569	12,569	...	1,103
3-4 visits	56,945	17,231	10,226	7,005	19,670	18,281	18,281	...	1,763
5-6 visits	128,656	57,560	33,685	23,875	50,516	18,116	18,116	...	2,464
7-8 visits	257,473	164,803	102,839	61,964	78,383	10,802	10,802	...	3,485
9-10 visits	603,605	491,348	338,275	153,073	100,340	6,068	6,068	...	5,849
11-12 visits	852,565	786,864	615,133	171,731	58,593	2,636	2,636	...	4,472
13-14 visits	545,362	520,022	433,464	86,558	21,661	1,065	1,065	...	2,614
15-16 visits	384,337	368,121	321,325	46,796	13,734	848	848	...	1,634
17-18 visits	85,531	82,342	71,100	11,242	2,586	176	176	...	427
19 visits or more	18,191	113,150	101,275	11,875	4,036	332	332	...	673
Not stated	91,457	39,924	31,701	8,223	6,138	1,768	1,768	...	43,627
Median number of visits	12.3	12.6	12.8	11.6	9.6	5.5	5.5	...	10.4
White, non-Hispanic	2,326,578	2,022,737	1,605,473	417,264	210,946	51,230	37,808	13,422	41,665
No visits	13,422	...	...	...	...	13,422	...	13,422	...
1-2 visits	13,621	3,937	2,700	1,237	2,885	6,231	6,231	...	568
3-4 visits	30,489	10,202	6,295	3,907	10,287	8,976	8,976	...	1,024
5-6 visits	76,071	38,210	23,267	14,943	27,158	9,169	9,169	...	1,534
7-8 visits	169,987	117,474	75,664	41,810	44,537	5,738	5,738	...	2,238
9-10 visits	423,441	357,166	252,298	104,868	58,635	3,455	3,455	...	4,185
11-12 visits	663,143	620,242	491,932	128,310	37,915	1,635	1,635	...	3,351
13-14 visits	431,669	414,269	347,287	66,982	14,643	716	716	...	2,041
15-16 visits	290,194	280,689	247,227	33,462	7,699	570	570	...	1,236
17-18 visits	67,748	65,534	56,992	8,542	1,750	113	113	...	351
19 visits or more	93,670	90,299	81,521	8,778	2,615	236	236	...	520
Not stated	53,123	24,715	20,290	4,425	2,822	969	969	...	24,617
Median number of visits	12.5	12.7	12.8	11.9	9.9	5.7	5.7	...	10.7
Black, total	606,156	436,504	325,221	111,283	111,414	38,243	24,927	13,316	19,995
No visits	13,316	...	...	...	...	13,316	...	13,316	...
1-2 visits	11,900	2,836	1,794	1,042	3,250	5,118	5,118	...	696
3-4 visits	22,808	6,669	3,895	2,774	8,737	6,779	6,779	...	623
5-6 visits	41,484	17,052	10,177	6,875	17,620	5,945	5,945	...	867
7-8 visits	60,903	33,110	20,102	13,008	23,719	3,233	3,233	...	841
9-10 visits	123,264	89,979	59,999	29,980	29,029	1,920	1,920	...	2,336
11-12 visits	128,746	112,098	83,938	28,160	15,201	626	626	...	821
13-14 visits	78,888	72,845	59,157	13,688	5,288	262	262	...	493
15-16 visits	64,000	59,428	51,214	8,214	4,029	232	232	...	311
17-18 visits	13,499	12,722	10,361	2,361	679	27	27	...	71
19 visits or more	21,900	20,167	17,220	2,947	1,465	94	94	...	174
Not stated	25,448	9,598	7,364	2,234	2,397	691	691	...	12,762
Median number of visits	11.6	12.4	12.7	11.1	9.1	5.1	5.1	...	9.9

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, 2001 --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	589,917	425,083	316,867	108,216	108,638	37,199	24,120	13,079	18,997
No visits	13,079	...	...	...	...	13,079	...	13,079	...
1-2 visits	11,652	2,776	1,758	1,018	3,190	4,995	4,995	...	691
3-4 visits	22,278	6,549	3,820	2,729	8,548	6,572	6,572	...	609
5-6 visits	40,423	16,645	9,939	6,706	17,215	5,744	5,744	...	819
7-8 visits	59,162	32,152	19,535	12,617	23,104	3,106	3,106	...	800
9-10 visits	118,966	86,936	57,876	29,060	28,261	1,830	1,830	...	1,939
11-12 visits	125,193	109,045	81,673	27,372	14,754	600	600	...	794
13-14 visits	76,993	71,112	57,798	13,314	5,158	254	254	...	469
15-16 visits	62,799	58,304	50,283	8,021	3,960	227	227	...	308
17-18 visits	13,228	12,472	10,166	2,306	661	25	25	...	70
19 visits or more	21,492	19,787	16,895	2,892	1,442	92	92	...	171
Not stated	24,652	9,305	7,124	2,181	2,345	675	675	...	12,327
Median number of visits	11.7	12.4	12.7	11.1	9.1	5.1	5.1	...	9.8
Hispanic [2]	851,851	625,816	457,753	168,063	152,170	48,502	35,400	13,102	25,363
No visits	13,102	...	...	...	...	13,102	...	13,102	...
1-2 visits	13,422	3,476	2,292	1,184	3,013	6,411	6,411	...	522
3-4 visits	26,730	7,042	3,942	3,100	9,498	9,460	9,460	...	730
5-6 visits	53,066	19,483	10,492	8,991	23,556	9,105	9,105	...	922
7-8 visits	88,196	47,567	27,298	20,269	34,253	5,143	5,143	...	1,233
9-10 visits	182,178	135,258	86,690	48,568	42,246	2,701	2,701	...	1,973
11-12 visits	189,403	166,368	122,829	43,539	20,917	1,027	1,027	...	1,091
13-14 visits	113,511	105,519	85,923	19,596	7,060	348	348	...	584
15-16 visits	93,595	86,865	73,566	13,299	6,071	278	278	...	381
17-18 visits	17,728	16,744	14,041	2,703	844	66	66	...	74
19 visits or more	24,315	22,644	19,572	3,072	1,424	94	94	...	153
Not stated	36,605	14,850	11,108	3,742	3,288	767	767	...	17,700
Median number of visits	11.7	12.4	12.7	11.0	9.3	5.3	5.3	...	9.7

... Category not applicable.
1 Includes races other than white and black and origin not stated.
2 Includes all persons of Hispanic origin 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, 2001

[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 [1]	Obstetric procedure reported	Age of mother							Not stated [2]
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races [3]										
Amniocentesis	4,025,933	87,927	21.9	5.9	7.4	9.8	17.5	86.2	126.8	18,830
Electronic fetal monitoring	4,025,933	3,397,544	847.9	860.9	855.9	850.0	842.3	829.9	817.1	18,830
Induction of labor	4,025,933	819,924	204.6	195.6	205.2	212.6	205.6	195.1	188.8	18,830
Stimulation of labor	4,025,933	702,660	175.4	191.8	183.4	177.2	169.2	155.6	145.6	18,830
Tocolysis	4,025,933	84,602	21.1	22.9	22.7	21.1	19.9	18.8	19.5	18,830
Ultrasound	4,025,933	2,696,063	672.8	640.1	659.5	677.5	689.3	688.9	680.4	18,830
White										
Amniocentesis	3,177,626	71,930	22.7	5.7	7.2	9.6	17.5	88.3	133.3	15,052
Electronic fetal monitoring	3,177,626	2,685,098	849.0	860.5	856.2	852.1	844.9	832.0	817.8	15,052
Induction of labor	3,177,626	680,846	215.3	206.5	216.7	223.8	215.3	204.3	196.4	15,052
Stimulation of labor	3,177,626	561,467	177.5	197.0	187.5	178.9	170.5	157.1	148.2	15,052
Tocolysis	3,177,626	67,022	21.2	23.3	22.9	21.3	20.0	18.5	19.2	15,052
Ultrasound	3,177,626	2,162,694	683.8	655.3	672.4	686.5	697.6	696.8	688.7	15,052
Black										
Amniocentesis	606,156	8,701	14.4	6.5	8.0	10.5	15.5	53.2	76.2	1,837
Electronic fetal monitoring	606,156	517,061	855.6	867.2	862.6	852.9	843.9	835.2	834.6	1,837
Induction of labor	606,156	102,847	170.2	170.4	170.2	172.5	170.6	163.3	166.2	1,837
Stimulation of labor	606,156	97,216	160.9	178.0	167.3	158.8	147.3	135.3	125.1	1,837
Tocolysis	606,156	12,683	21.0	20.7	21.4	20.7	21.0	21.0	20.6	1,837
Ultrasound	606,156	372,493	616.4	598.2	610.6	624.5	630.0	630.0	630.1	1,837

[1] Total number of births to residents of areas reporting specified obstetric procedures.
[2] No response reported for the obstetric procedures item.
[3] Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. In this table all women (including Hispanic women) are classified only according to their 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, 2001

[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 [2]
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races [3]										
Febrile	4,025,933	61,431	15.4	19.4	15.9	15.7	14.4	12.2	11.1	25,152
Meconium, moderate/heavy	4,025,933	206,123	51.5	58.6	53.0	49.8	49.1	49.9	52.6	25,152
Premature rupture of membrane	4,025,933	95,129	23.8	24.7	22.8	23.0	24.1	25.3	27.8	25,152
Abruptio placenta	4,025,933	21,765	5.4	5.2	5.3	5.1	5.4	6.5	8.6	25,152
Placenta previa	4,025,933	13,198	3.3	1.0	1.8	2.9	4.4	6.5	8.8	25,152
Other excessive bleeding	4,025,933	26,231	6.6	6.4	6.2	6.4	6.6	7.4	8.2	25,152
Seizures during labor	4,025,933	1,282	0.3	0.7	0.3	0.3	0.2	0.2	0.3	25,152
Precipitous labor	4,025,933	75,745	18.9	13.6	17.8	19.1	20.6	22.4	21.8	25,152
Prolonged labor	4,025,933	29,192	7.3	8.4	7.5	7.2	7.0	6.6	7.4	25,152
Dysfunctional labor	4,025,933	112,268	28.1	28.5	26.8	28.0	28.5	28.8	31.4	25,152
Breech/Malpresentation	4,025,933	153,141	38.3	28.6	31.2	37.3	44.5	49.4	56.3	25,152
Cephalopelvic disproportion	4,025,933	66,060	16.5	16.8	15.2	16.8	17.4	16.5	17.1	25,152
Cord prolapse	4,025,933	7,267	1.8	1.3	1.6	1.8	2.0	2.4	2.6	25,152
Anesthetic complication [4]	3,660,523	2,414	0.7	0.5	0.5	0.7	0.8	0.8	0.8	27,726
Fetal distress [4]	3,660,523	140,617	38.7	43.4	38.2	36.8	37.4	40.9	46.0	27,726
White										
Febrile	3,177,626	46,631	14.8	18.9	15.7	15.2	13.7	11.5	10.8	20,118
Meconium, moderate/heavy	3,177,626	151,345	47.9	53.2	49.4	46.5	46.1	46.9	49.5	20,118
Premature rupture of membrane	3,177,626	72,234	22.9	22.9	21.8	22.2	23.4	24.5	27.4	20,118
Abruptio placenta	3,177,626	16,571	5.2	5.0	5.0	5.0	5.2	6.3	8.2	20,118
Placenta previa	3,177,626	10,204	3.2	1.0	1.8	2.8	4.2	6.2	8.1	20,118
Other excessive bleeding	3,177,626	20,939	6.6	6.7	6.4	6.5	6.5	7.3	7.8	20,118
Seizures during labor	3,177,626	917	0.3	0.7	0.3	0.3	0.2	0.2	0.3	20,118
Precipitous labor	3,177,626	58,664	18.6	12.5	17.0	18.6	20.4	22.7	21.9	20,118
Prolonged labor	3,177,626	23,794	7.5	8.8	7.9	7.3	7.1	6.9	7.8	20,118
Dysfunctional labor	3,177,626	88,782	28.1	28.6	27.1	28.2	28.3	28.5	31.6	20,118
Breech/Malpresentation	3,177,626	125,809	39.8	30.8	32.7	38.4	45.7	50.2	56.8	20,118
Cephalopelvic disproportion	3,177,626	53,436	16.9	17.6	16.0	17.4	17.2	16.5	17.4	20,118
Cord prolapse	3,177,626	5,722	1.8	1.2	1.6	1.8	2.0	2.4	2.6	20,118
Anesthetic complication [4]	2,865,647	1,962	0.7	0.5	0.6	0.7	0.8	0.8	0.9	22,313
Fetal distress [4]	2,865,647	104,731	36.8	41.2	36.5	35.1	35.6	38.9	44.0	22,313
Black										
Febrile	606,156	9,194	15.2	20.4	15.5	13.3	13.5	12.3	9.3	2,562
Meconium, moderate/heavy	606,156	41,937	69.5	73.5	66.7	67.5	71.4	72.0	73.2	2,562
Premature rupture of membrane	606,156	16,773	27.8	28.5	26.2	26.4	29.4	32.2	31.9	2,562
Abruptio placenta	606,156	4,005	6.6	5.6	6.6	6.4	7.1	8.2	11.1	2,562
Placenta previa	606,156	1,832	3.0	0.9	2.1	3.3	4.7	6.6	8.6	2,562
Other excessive bleeding	606,156	2,985	4.9	4.5	4.5	4.6	5.6	6.5	8.6	2,562
Seizures during labor	606,156	292	0.5	0.8	0.5	0.4	0.3	*	*	2,562
Precipitous labor	606,156	12,192	20.2	15.7	19.8	22.1	22.5	21.9	21.8	2,562
Prolonged labor	606,156	3,342	5.5	6.8	5.6	5.2	4.8	4.9	4.7	2,562
Dysfunctional labor	606,156	15,283	25.3	27.0	24.3	24.3	26.6	26.0	25.7	2,562
Breech/Malpresentation	606,156	18,533	30.7	22.8	25.6	31.6	39.1	46.2	53.3	2,562
Cephalopelvic disproportion	606,156	7,653	12.7	14.6	12.2	11.6	13.6	11.9	11.0	2,562
Cord prolapse	606,156	1,139	1.9	1.3	1.8	1.9	2.3	2.7	3.3	2,562
Anesthetic complication [4]	565,406	315	0.6	0.4	0.5	0.6	0.8	0.7	*	2,902
Fetal distress [4]	565,406	27,180	48.3	49.6	45.0	45.8	51.3	56.8	61.3	2,902

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
1 Total number of births to residents of areas reporting specified complication.
2 No response reported for the complications item.
3 Includes races other than white and black.
4 Texas does not report this complication.

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

Table 38. Live births by attendant, place of delivery, and race and Hispanic origin of mother: United States, 2001

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	4,025,933	3,681,029	3,509,203	171,826	322,398	305,606	16,792	21,338	1,168
In hospital[2]	3,989,662	3,676,520	3,505,396	171,124	300,647	296,620	4,027	11,816	679
Not in hospital	35,944	4,311	3,623	688	21,687	8,932	12,755	9,489	457
Freestanding birthing center	9,978	1,318	888	430	8,390	5,607	2,783	259	11
Clinic or doctor's office	494	223	207	16	229	120	109	41	1
Residence	23,245	2,130	1,910	220	12,655	3,004	9,651	8,122	338
Other	2,227	640	618	22	413	201	212	1,067	107
Not specified	327	198	184	14	64	54	10	33	32
White, total									
Total	3,177,626	2,903,305	2,756,334	146,971	256,663	240,989	15,674	16,750	908
In hospital[2]	3,145,622	2,899,989	2,753,669	146,320	236,050	232,684	3,366	9,009	574
Not in hospital	31,744	3,152	2,514	638	20,554	8,256	12,298	7,726	312
Freestanding birthing center	9,251	1,204	776	428	7,803	5,161	2,642	234	10
Clinic or doctor's office	432	177	163	14	223	116	107	31	1
Residence	20,546	1,415	1,233	182	12,162	2,814	9,348	6,723	246
Other	1,515	356	342	14	366	165	201	738	55
Not specified	260	164	151	13	59	49	10	15	22
White, non-Hispanic									
Total	2,326,578	2,138,732	2,020,787	117,945	175,097	161,679	13,418	12,262	487
In hospital[2]	2,299,043	2,135,865	2,018,544	117,321	157,198	154,465	2,733	5,700	280
Not in hospital	27,332	2,735	2,122	613	17,843	7,168	10,675	6,552	202
Freestanding birthing center	7,556	1,143	721	422	6,191	4,372	1,819	213	9
Clinic or doctor's office	392	160	147	13	205	104	101	26	1
Residence	18,312	1,174	1,009	165	11,155	2,573	8,582	5,816	167
Other	1,072	258	245	13	292	119	173	497	25
Not specified	203	132	121	11	56	46	10	10	5
Black, total									
Total	606,156	557,375	538,888	18,487	45,284	44,712	572	3,335	162
In hospital[2]	603,084	556,395	537,951	18,444	44,626	44,257	369	2,002	61
Not in hospital	3,034	967	925	42	655	452	203	1,321	91
Freestanding birthing center	463	69	68	1	378	292	86	16	-
Clinic or doctor's office	29	23	23	-	3	3	-	3	-
Residence	2,032	632	597	35	249	135	114	1,097	54
Other	510	243	237	6	25	22	3	205	37
Not specified	38	13	12	1	3	3	-	12	10
Black, non-Hispanic									
Total	589,917	543,117	525,219	17,898	43,400	42,858	542	3,250	150
In hospital[2]	586,966	542,172	524,315	17,857	42,781	42,423	358	1,954	59
Not in hospital	2,920	934	894	40	616	432	184	1,286	84
Freestanding birthing center	443	69	68	1	358	281	77	16	-
Clinic or doctor's office	28	22	22	-	3	3	-	3	-
Residence	1,957	606	573	33	231	126	105	1,069	51
Other	492	237	231	6	24	22	2	198	33
Not specified	31	11	10	1	3	3	-	10	7
Hispanic [3]									
Total	851,851	765,437	736,549	28,888	81,724	79,698	2,026	4,325	365
In hospital[2]	847,859	765,007	736,144	28,863	79,275	78,685	590	3,308	269
Not in hospital	3,974	417	393	24	2,446	1,010	1,436	1,015	96
Freestanding birthing center	1,676	54	50	4	1,601	773	828	20	1
Clinic or doctor's office	37	16	15	1	16	10	6	5	-
Residence	1,824	243	225	18	758	183	575	759	64
Other	437	104	103	1	71	44	27	231	31
Not specified	18	13	12	1	3	3	-	2	-

- 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, 1989-2001

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]										
2001	4,025,933	3,027,993	74,048	978,411	601,383	377,028	19,529	24.4	16.9	16.4
2000	4,058,814	3,108,188	89,978	923,991	577,638	346,353	26,635	22.9	16.1	20.6
1999	3,959,417	3,063,870	97,680	862,086	542,080	320,006	33,461	22.0	15.5	23.4
1998	3,941,553	3,078,537	108,903	825,870	519,975	305,895	37,146	21.2	14.9	26.3
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										
2001	3,177,626	2,394,930	58,053	766,771	467,285	299,486	15,925	24.3	16.7	16.2
2000	3,194,005	2,449,264	70,414	723,209	449,161	274,048	21,532	22.8	15.9	20.4
1999	3,132,501	2,426,092	77,158	678,952	424,148	254,804	27,457	21.9	15.3	23.2
1998	3,118,727	2,440,113	86,495	649,987	406,439	243,548	28,627	21.0	14.7	26.2
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										
2001	2,326,578	1,746,551	43,215	567,488	353,977	213,511	12,539	24.5	17.2	16.8
2000	2,362,968	1,804,550	52,912	540,794	342,732	198,062	17,624	23.1	16.4	21.1
1999	2,346,450	1,810,682	59,480	514,051	327,106	186,945	21,717	22.1	15.7	24.1
1998	2,361,462	1,842,420	67,787	495,550	315,138	180,412	23,492	21.2	15.1	27.3
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										
2001	606,156	447,458	11,747	156,071	97,429	58,642	2,627	25.9	18.3	16.7
2000	622,598	468,497	14,382	150,401	94,767	55,634	3,700	24.3	17.3	20.5
1999	605,970	462,401	15,438	139,471	88,269	51,202	4,098	23.2	16.5	23.2
1998	609,902	470,088	17,062	135,727	86,438	49,289	4,087	22.4	16.0	25.7
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	452,921	11,104	127,907	82,695	45,212	30,319	22.0	15.8	19.7

See footnotes at end of table.

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, 1989-2001 --Con.

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				
Black, non-Hispanic										
2001	589,917	435,455	11,417	151,908	94,912	56,996	2,554	25.9	18.3	16.7
2000	604,346	454,736	13,910	146,042	92,044	53,998	3,568	24.3	17.3	20.5
1999	588,981	449,580	14,999	135,508	85,898	49,610	3,893	23.2	16.5	23.2
1998	593,127	457,186	16,510	131,999	84,169	47,830	3,942	22.4	16.0	25.7
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]										
2001	851,851	648,821	14,846	199,874	113,529	86,345	3,156	23.6	15.2	14.7
2000	815,868	633,220	17,062	179,583	104,597	74,986	3,065	22.1	14.5	18.5
1999	764,339	599,118	16,915	161,035	94,433	66,602	4,186	21.2	14.0	20.3
1998	734,661	580,143	17,803	150,317	88,763	61,554	4,201	20.6	13.6	22.4
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 all 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, 2001

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]	4,025,933	3,027,993	74,048	978,411	601,383	377,028	19,529	24.4	16.9	16.4
Under 20 years	453,725	376,020	2,066	75,999	66,757	9,242	1,706	16.8	15.1	18.3
20-24 years	1,021,627	813,287	13,996	203,942	137,501	66,441	4,398	20.0	14.7	17.4
25-29 years	1,058,265	802,455	20,391	250,697	152,218	98,479	5,113	23.8	16.3	17.2
30-34 years	942,697	674,460	22,503	263,193	146,742	116,451	5,044	28.1	18.4	16.2
35-39 years	451,723	301,497	12,514	147,590	77,443	70,147	2,636	32.9	21.1	15.1
40-54 years	97,896	60,274	2,578	36,990	20,722	16,268	632	38.0	26.4	13.7
White, total	3,177,626	2,394,930	58,053	766,771	467,285	299,486	15,925	24.3	16.7	16.2
Under 20 years	322,658	268,809	1,343	52,599	46,420	6,179	1,250	16.4	14.8	17.9
20-24 years	779,529	623,306	10,010	152,775	103,704	49,071	3,448	19.7	14.5	16.9
25-29 years	850,343	646,670	15,835	199,448	120,779	78,669	4,225	23.6	16.1	16.8
30-34 years	777,294	558,749	18,419	214,281	118,590	95,691	4,264	27.7	18.0	16.1
35-39 years	368,816	248,161	10,317	118,433	61,544	56,889	2,222	32.3	20.6	15.4
40-54 years	78,986	49,235	2,129	29,235	16,248	12,987	516	37.3	25.6	14.1
White, non-Hispanic	2,326,578	1,746,551	43,215	567,488	353,977	213,511	12,539	24.5	17.2	16.8
Under 20 years	191,742	158,740	697	32,172	28,914	3,258	830	16.9	15.5	17.6
20-24 years	523,027	417,250	6,328	103,216	72,028	31,188	2,561	19.8	14.9	16.9
25-29 years	622,361	474,282	10,996	144,770	92,115	52,655	3,309	23.4	16.6	17.3
30-34 years	625,435	452,285	14,743	169,613	97,261	72,352	3,537	27.3	18.2	16.9
35-39 years	300,007	203,762	8,613	94,376	50,403	43,973	1,869	31.7	20.5	16.4
40-54 years	64,006	40,232	1,838	23,341	13,256	10,085	433	36.7	25.7	15.4
Black, total	606,156	447,458	11,747	156,071	97,429	58,642	2,627	25.9	18.3	16.7
Under 20 years	114,298	92,725	653	21,187	18,362	2,825	386	18.6	16.6	18.8
20-24 years	199,221	154,358	3,443	44,078	28,640	15,438	785	22.2	16.0	18.2
25-29 years	137,400	100,218	3,446	36,544	20,844	15,700	638	26.7	17.7	18.0
30-34 years	94,660	63,432	2,611	30,731	16,788	13,943	497	32.6	21.6	15.8
35-39 years	49,065	30,163	1,317	18,651	10,003	8,648	251	38.2	25.7	13.2
40-54 years	11,512	6,562	277	4,880	2,792	2,088	70	42.6	30.8	11.7
Black, non-Hispanic	589,917	435,455	11,417	151,908	94,912	56,996	2,554	25.9	18.3	16.7
Under 20 years	111,653	90,524	640	20,750	17,972	2,778	379	18.6	16.7	18.7
20-24 years	194,391	150,495	3,365	43,127	27,973	15,154	769	22.3	16.0	18.2
25-29 years	133,491	97,362	3,347	35,506	20,272	15,234	623	26.7	17.7	18.0
30-34 years	91,710	61,473	2,534	29,758	16,271	13,487	479	32.6	21.6	15.8
35-39 years	47,494	29,228	1,263	18,028	9,703	8,325	238	38.1	25.8	13.2
40-54 years	11,178	6,373	268	4,739	2,721	2,018	66	42.6	30.8	11.7
Hispanic [5]	851,851	648,821	14,846	199,874	113,529	86,345	3,156	23.6	15.2	14.7
Under 20 years	132,562	111,457	652	20,700	17,757	2,943	405	15.7	13.8	18.1
20-24 years	258,431	207,579	3,709	50,000	32,008	17,992	852	19.4	13.6	17.1
25-29 years	227,910	172,130	4,859	54,900	28,663	26,237	880	24.2	14.6	15.6
30-34 years	150,352	105,241	3,649	44,451	21,129	23,322	660	29.7	17.2	13.5
35-39 years	67,952	43,643	1,689	24,007	11,045	12,962	302	35.5	20.8	11.5
40-54 years	14,644	8,771	288	5,816	2,927	2,889	57	39.9	25.7	9.1

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, each State and territory, 2001

[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]	24.4	24.3	24.5	25.9	25.9	23.6	16.4	16.2	16.8	16.7	16.7	14.7
Alabama	27.6	28.1	28.5	26.8	26.8	21.5	11.8	11.0	11.0	13.5	13.5	12.3
Alaska	18.9	21.4	21.3	22.3	22.5	21.7	24.5	18.5	19.5	*	*	*
Arizona	20.0	20.1	21.7	22.2	22.2	18.3	16.7	15.8	16.5	12.4	12.1	15.0
Arkansas	27.6	27.0	27.5	30.3	30.4	22.9	12.7	13.6	12.5	9.6	9.6	23.2
California	25.1	25.0	25.9	28.2	28.3	24.4	10.9	10.8	11.6	10.7	10.8	10.4
Colorado	19.6	19.5	20.1	20.1	20.1	18.3	23.5	23.4	21.4	25.1	24.8	26.8
Connecticut	24.3	24.2	24.7	24.3	24.3	22.4	18.8	18.9	18.8	17.0	17.6	18.3
Delaware	25.5	25.0	25.5	26.5	26.3	23.2	17.0	17.3	15.3	16.8	17.1	26.7
District of Columbia	25.0	24.4	28.3	25.3	25.4	17.2	14.0	12.2	*	15.0	15.1	*
Florida	26.4	26.7	25.9	26.0	25.9	28.3	11.1	10.8	12.2	11.9	12.1	8.2
Georgia	24.3	24.1	25.3	24.8	24.8	18.9	14.7	14.6	14.4	14.4	14.3	15.2
Hawaii	20.1	19.9	19.8	19.4	19.0	20.4	19.3	16.2	16.3	*	*	16.4
Idaho	18.7	18.5	18.3	*	*	19.5	26.3	26.4	25.8	*	*	30.4
Illinois	22.3	22.2	23.2	22.4	22.4	19.8	21.4	21.9	21.1	18.6	18.6	24.1
Indiana	23.3	23.1	23.2	24.3	24.3	22.0	16.6	16.6	16.5	16.6	16.5	18.4
Iowa	23.1	23.0	23.1	24.5	24.6	21.5	17.7	17.6	17.2	20.9	21.3	21.6
Kansas	23.8	23.8	24.3	24.9	24.9	21.2	15.8	15.4	15.2	16.7	16.6	15.5
Kentucky	26.2	26.3	26.3	25.2	25.2	25.9	12.4	12.1	11.9	14.6	14.7	18.9
Louisiana	29.9	31.0	31.1	28.7	28.7	29.7	8.2	6.7	6.6	10.3	10.3	*
Maine	24.1	24.1	24.1	22.9	23.2	26.0	13.9	13.7	13.8	*	*	*
Maryland	25.4	24.4	24.9	27.5	27.6	20.7	20.3	21.0	20.8	18.5	18.6	22.7
Massachusetts	25.4	25.5	26.1	26.7	27.0	21.9	19.5	19.2	18.8	19.9	20.4	21.2
Michigan	23.4	23.6	23.7	22.4	22.4	22.1	16.7	15.8	15.5	20.4	20.4	18.9
Minnesota	21.1	21.5	21.5	21.5	21.6	20.7	20.5	19.0	17.9	32.4	32.4	29.8
Mississippi	29.7	30.6	30.8	28.7	28.7	23.8	8.6	7.4	7.3	9.8	9.8	*
Missouri	23.9	24.1	24.2	22.8	22.8	22.7	19.1	18.6	18.6	21.4	21.4	18.5
Montana	21.6	21.2	21.0	*	*	25.0	18.9	19.7	20.3	*	*	*
Nebraska	24.1	24.3	24.8	22.0	22.0	20.9	15.5	15.2	14.5	15.0	15.0	19.9
Nevada	23.7	23.1	25.2	27.8	27.6	20.3	15.4	15.7	13.4	15.7	16.0	18.4
New Hampshire	23.0	22.9	22.9	32.4	32.9	22.3	22.2	22.6	22.8	*	*	*
New Jersey	28.9	28.9	29.3	29.7	29.4	28.0	21.3	20.6	20.6	24.4	25.3	20.2
New Mexico	18.6	19.1	19.8	23.8	24.9	18.6	24.7	22.5	25.5	*	*	20.9
New York	25.9	26.0	26.3	26.5	26.7	25.1	22.1	22.0	22.6	22.4	22.8	20.0
North Carolina	24.9	24.5	25.5	26.5	26.6	19.5	16.9	16.5	15.2	17.6	17.6	23.0
North Dakota	21.1	21.2	21.2	22.5	22.8	26.3	23.7	24.1	24.4	*	*	*
Ohio	21.7	21.7	21.7	22.0	22.0	20.3	24.5	24.0	24.0	27.1	27.2	23.5
Oklahoma	25.9	25.8	26.3	26.5	26.5	22.2	11.1	11.2	10.6	11.5	11.4	15.7
Oregon	21.0	20.7	21.1	26.3	26.1	19.2	21.0	21.1	19.8	*	*	25.7
Pennsylvania	23.0	23.0	23.1	23.1	23.2	21.3	23.3	22.4	22.2	28.4	28.4	25.0
Rhode Island	24.1	24.4	25.2	23.3	23.6	22.4	18.7	19.1	17.7	*	*	20.2
South Carolina	26.4	26.2	26.6	27.1	27.1	21.7	13.6	13.5	13.0	13.6	13.6	18.7
South Dakota	23.0	23.0	23.0	25.0	25.0	20.1	18.8	19.9	19.3	*	*	*
Tennessee	26.2	26.4	26.7	25.7	25.7	22.4	14.4	13.5	13.1	17.5	17.6	18.0
Texas	26.3	26.0	26.7	28.7	28.7	25.4	10.6	10.7	9.6	9.3	9.2	11.5
Utah	17.2	17.2	16.6	19.9	20.3	20.6	29.1	29.0	28.9	*	*	29.7
Vermont	17.8	17.7	17.8	*	*	*	40.0	39.6	39.6	*	*	*
Virginia	24.6	24.2	24.5	25.3	25.3	22.1	16.4	15.8	15.9	17.2	17.1	16.1
Washington	22.6	22.5	22.6	26.0	26.0	22.0	18.6	18.6	17.7	18.8	18.4	21.8
West Virginia	26.6	26.5	26.5	30.1	30.1	*	13.4	13.3	13.3	*	*	*
Wisconsin	19.1	19.6	19.7	16.9	16.9	18.4	23.0	22.3	22.3	28.9	28.8	22.9
Wyoming	20.1	19.8	19.6	*	*	22.3	21.2	21.6	22.2	*	*	*
Puerto Rico	42.0	42.2	---	40.6	---	---	4.7	4.6	---	5.4	---	---
Virgin Islands	25.2	27.9	26.0	23.9	23.5	26.7	15.8	*	*	*	*	*
Guam	21.8	16.4	17.9	*	*	*	15.7	*	*	*	*	*
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	23.7	*	---	*	---	---	16.8	*	---	*	---	---

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
--- 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 the territories.

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, 2001

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	99,558	24.5	17.0	21.4
Cardiac disease	20,698	28.7	20.6	18.2
Acute or chronic lung disease	48,246	27.9	20.0	20.0
Diabetes	124,242	39.7	28.3	11.9
Genital herpes [4]	33,560	35.2	28.4	20.4
Hydramnios/Oligohydramnios	54,694	38.5	32.6	15.3
Hemoglobinopathy	3,141	27.9	19.5	19.6
Hypertension, chronic	32,232	44.7	34.1	10.6
Hypertension, pregnancy-associated	150,329	39.7	34.1	11.8
Eclampsia	12,627	51.6	46.5	9.7
Incompetent cervix	11,251	37.5	29.7	18.3
Renal disease	12,045	27.7	20.1	19.1
Rh sensitization [5]	26,933	24.6	17.1	19.3
Uterine bleeding [4]	21,324	35.0	27.4	17.4
Complications of labor and/or delivery				
Febrile	61,431	31.1	29.7	43.4
Meconium, moderate/heavy	206,123	21.8	18.9	38.9
Premature rupture of membrane	95,129	27.8	24.3	31.0
Abruptio placenta	21,765	61.2	56.7	12.8
Placenta previa	13,198	80.9	77.0	3.6
Other excessive bleeding	26,231	34.1	26.8	19.5
Seizures during labor	1,282	57.0	54.2	*
Precipitous labor (less than 3 hours)	75,745	3.0	2.0	73.0
Prolonged labor (more than 20 hours)	29,192	36.6	35.7	44.4
Dysfunctional labor	112,268	68.8	67.4	14.0
Breech/Malpresentation	153,141	86.2	84.6	3.8
Cephalopelvic disproportion	66,060	96.5	96.3	1.8
Cord prolapse	7,267	67.6	65.7	12.8
Anesthetic complication [4]	2,414	42.0	33.5	12.7
Fetal distress [4]	140,617	59.4	57.3	18.0

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in numerator.
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 or complication.
5 Kansas does not report this risk factor.

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, 2001

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]	4,025,933	476,250	29,085	48,548	222,640	175,977	3,235,785	2,002,809	824,306	408,670	274,067	39,831
Less than 500 grams	5,956	5,770	5,511	231	27	1	15	12	-	3	2	169
500-999 grams	22,648	22,059	16,261	5,201	568	29	176	112	41	23	21	392
1,000-1,499 grams	29,250	27,110	3,960	15,634	6,964	552	1,523	1,114	267	142	210	407
1,500-1,999 grams	60,804	50,386	909	11,783	32,693	5,001	8,879	7,357	986	536	808	731
2,000-2,499 grams	190,089	98,205	718	4,152	63,537	29,798	84,648	69,917	10,019	4,712	5,194	2,042
2,500-2,999 grams	680,580	126,078	965	4,157	57,056	63,900	513,882	388,299	87,313	38,270	34,040	6,580
3,000-3,499 grams	1,515,171	96,936	-	4,830	39,726	52,380	1,300,596	839,590	316,473	144,533	103,460	14,179
3,500-3,999 grams	1,139,280	39,293	-	2,473	17,399	19,421	996,084	542,346	299,921	153,817	93,537	10,366
4,000-4,499 grams	322,346	7,870	-	-	3,838	4,032	280,745	131,848	93,362	55,535	30,644	3,087
4,500-4,999 grams	51,132	1,314	-	-	610	704	43,845	19,464	14,385	9,996	5,452	521
5,000 grams or more	5,498	185	-	-	89	96	4,613	2,287	1,329	997	617	83
Not stated	3,179	1,044	761	87	133	63	779	463	210	106	82	1,274
	Percent											
Very low birthweight [4]	1.4	11.6	90.8	43.5	3.4	0.3	0.1	0.1	0.0	0.0	0.1	2.5
Low birthweight [5]	7.7	42.8	96.6	76.4	46.6	20.1	2.9	3.9	1.4	1.3	2.3	9.7
	Number											
White, total	3,177,626	345,106	17,290	32,608	162,421	132,787	2,581,838	1,583,913	665,350	332,575	218,957	31,725
Less than 500 grams	3,422	3,305	3,150	139	16	-	11	8	-	3	1	105
500-999 grams	13,773	13,369	9,619	3,338	392	20	120	74	26	20	11	273
1,000-1,499 grams	19,647	18,226	2,536	10,487	4,829	374	1,014	720	185	109	127	280
1,500-1,999 grams	42,168	35,142	499	8,237	22,926	3,480	5,965	4,932	677	356	534	527
2,000-2,499 grams	133,218	70,420	449	2,706	46,184	21,081	57,734	47,781	6,751	3,202	3,604	1,460
2,500-2,999 grams	487,739	92,366	569	2,536	41,799	47,462	366,525	277,915	61,502	27,108	24,039	4,809
3,000-3,499 grams	1,184,917	73,113	-	3,241	29,127	40,745	1,020,027	659,643	247,047	113,337	80,502	11,275
3,500-3,999 grams	958,631	30,827	-	1,862	13,393	15,572	840,827	458,086	252,931	129,810	78,153	8,824
4,000-4,499 grams	282,026	6,453	-	-	3,088	3,365	246,315	115,407	82,175	48,733	26,572	2,686
4,500-4,999 grams	45,081	1,052	-	-	496	556	38,762	17,080	12,753	8,929	4,812	455
5,000 grams or more	4,674	148	-	-	70	78	3,925	1,908	1,139	878	534	67
Not stated	2,330	685	468	62	101	54	613	359	164	90	68	964
	Percent											
Very low birthweight [4]	1.2	10.1	91.0	42.9	3.2	0.3	0.0	0.1	0.0	0.0	0.1	2.1
Low birthweight [5]	6.7	40.8	96.6	76.5	45.8	18.8	2.5	3.4	1.1	1.1	2.0	8.6
	Number											
White, non-Hispanic	2,326,578	250,141	12,467	23,406	116,268	98,000	1,908,847	1,174,579	490,371	243,897	155,423	12,167
Less than 500 grams	2,444	2,400	2,296	92	12	-	10	8	-	2	-	34
500-999 grams	10,026	9,841	6,987	2,568	272	14	83	47	20	16	3	99
1,000-1,499 grams	14,651	13,782	1,846	8,004	3,653	279	666	476	114	76	84	119
1,500-1,999 grams	31,573	26,717	318	6,226	17,585	2,588	4,284	3,603	438	243	366	206
2,000-2,499 grams	98,542	53,462	304	1,796	35,375	15,987	41,934	34,975	4,700	2,259	2,519	627
2,500-2,999 grams	345,514	68,171	373	1,518	30,385	35,895	259,272	198,616	42,152	18,504	16,379	1,692
3,000-3,499 grams	847,001	49,976	-	1,975	18,457	29,544	737,652	482,008	175,954	79,690	55,447	3,926
3,500-3,999 grams	717,844	20,212	-	1,177	8,147	10,888	637,671	349,311	191,141	97,219	56,507	3,454
4,000-4,499 grams	218,568	4,260	-	-	1,931	2,329	193,227	90,485	64,718	38,024	19,978	1,103
4,500-4,999 grams	35,170	705	-	-	322	383	30,563	13,342	10,133	7,088	3,687	215
5,000 grams or more	3,470	93	-	-	44	49	2,960	1,402	857	701	402	15
Not stated	1,775	522	343	50	85	44	525	306	144	75	51	677
	Percent											
Very low birthweight [4]	1.2	10.4	91.8	45.7	3.4	0.3	0.0	0.0	0.0	0.0	0.1	2.2
Low birthweight [5]	6.8	42.5	96.9	80.0	49.0	19.3	2.5	3.3	1.1	1.1	1.9	9.4

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, 2001 --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	606,156	105,325	10,623	13,544	48,061	33,097	456,535	294,113	109,165	53,257	39,786	4,510
Less than 500 grams	2,317	2,257	2,166	81	9	1	4	4	-	-	1	55
500-999 grams	7,893	7,752	5,964	1,637	145	6	41	27	11	3	10	90
1,000-1,499 grams	8,223	7,644	1,280	4,414	1,801	149	415	322	66	27	72	92
1,500-1,999 grams	15,394	12,647	363	3,017	8,041	1,226	2,358	1,957	258	143	241	148
2,000-2,499 grams	44,596	22,169	240	1,234	13,904	6,791	20,756	16,985	2,545	1,226	1,292	379
2,500-2,999 grams	142,270	26,480	343	1,357	12,180	12,600	107,062	80,111	18,706	8,245	7,700	1,028
3,000-3,499 grams	231,012	18,413	-	1,293	8,303	8,817	194,442	124,686	47,707	22,049	16,653	1,504
3,500-3,999 grams	122,521	6,388	-	491	3,003	2,894	104,752	57,105	31,331	16,316	10,641	740
4,000-4,499 grams	26,695	1,028	-	-	542	486	22,752	10,939	7,305	4,508	2,715	200
4,500-4,999 grams	3,995	193	-	-	85	108	3,376	1,638	1,079	659	397	29
5,000 grams or more	544	31	-	-	18	13	449	256	123	70	53	11
Not stated	696	323	267	20	30	6	128	83	34	11	11	234
	Percent											
Very low birthweight [4]	3.0	16.8	90.9	45.3	4.1	0.5	0.1	0.1	0.1	0.1	0.2	5.5
Low birthweight [5]	13.0	50.0	96.7	76.8	49.8	24.7	5.2	6.6	2.6	2.6	4.1	17.9
	Number											
Black, non-Hispanic	589,917	103,237	10,448	13,271	47,147	32,371	443,805	286,476	105,748	51,581	38,586	4,289
Less than 500 grams	2,271	2,214	2,124	80	9	1	4	4	-	-	1	52
500-999 grams	7,775	7,639	5,870	1,621	142	6	41	27	11	3	10	85
1,000-1,499 grams	8,075	7,512	1,261	4,327	1,776	148	403	316	61	26	70	90
1,500-1,999 grams	15,104	12,412	357	2,941	7,911	1,203	2,312	1,922	254	136	237	143
2,000-2,499 grams	43,772	21,771	236	1,211	13,657	6,667	20,376	16,670	2,499	1,207	1,266	359
2,500-2,999 grams	139,276	25,985	336	1,326	11,976	12,347	104,782	78,468	18,268	8,046	7,523	986
3,000-3,499 grams	224,616	17,967	-	1,263	8,109	8,595	189,047	121,402	46,243	21,402	16,173	1,429
3,500-3,999 grams	118,393	6,208	-	482	2,918	2,808	101,201	55,250	30,226	15,725	10,269	715
4,000-4,499 grams	25,612	989	-	-	519	470	21,837	10,514	7,001	4,322	2,598	188
4,500-4,999 grams	3,843	192	-	-	85	107	3,249	1,580	1,034	635	378	24
5,000 grams or more	522	30	-	-	17	13	431	243	119	69	50	11
Not stated	658	318	264	20	28	6	122	80	32	10	11	207
	Percent											
Very low birthweight [4]	3.1	16.9	90.9	45.5	4.1	0.5	0.1	0.1	0.1	0.1	0.2	5.6
Low birthweight [5]	13.1	50.1	96.7	76.8	49.9	24.8	5.2	6.6	2.7	2.7	4.1	17.9
	Number											
Hispanic [6]	851,851	95,373	4,787	9,295	46,341	34,950	674,019	410,111	175,245	88,663	63,839	18,620
Less than 500 grams	925	859	807	49	3	-	-	-	-	-	1	65
500-999 grams	3,748	3,534	2,641	767	120	6	37	27	6	4	8	169
1,000-1,499 grams	5,006	4,450	691	2,497	1,168	94	356	247	76	33	44	156
1,500-1,999 grams	10,621	8,439	184	2,032	5,334	889	1,706	1,348	241	117	173	303
2,000-2,499 grams	34,792	16,974	143	918	10,822	5,091	15,934	12,921	2,062	951	1,093	791
2,500-2,999 grams	143,068	24,300	197	1,044	11,452	11,607	108,023	79,801	19,518	8,704	7,756	2,989
3,000-3,499 grams	338,951	23,334	-	1,284	10,762	11,288	283,310	178,133	71,443	33,734	25,228	7,079
3,500-3,999 grams	240,284	10,697	-	692	5,285	4,720	202,748	108,572	61,648	32,528	21,674	5,165
4,000-4,499 grams	63,091	2,222	-	-	1,178	1,044	52,771	24,799	17,363	10,609	6,585	1,513
4,500-4,999 grams	9,792	348	-	-	174	174	8,088	3,706	2,589	1,793	1,129	227
5,000 grams or more	1,197	54	-	-	26	28	959	503	280	176	132	52
Not stated	376	162	124	12	17	9	87	54	19	14	16	111
	Percent											
Very low birthweight [4]	1.1	9.3	88.8	35.7	2.8	0.3	0.1	0.1	0.0	0.0	0.1	2.1
Low birthweight [5]	6.5	36.0	95.8	67.5	37.7	17.4	2.7	3.5	1.4	1.2	2.1	8.0

- 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 (3 lb 4 oz).
5 Birthweight of less than 2,500 grams (5 lb 8 oz).
6 Includes all persons of Hispanic origin 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, 1981-2001

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]
2001	1.95	1.59	1.55	4.02	4.05	1.69	11.9	11.0	10.8	17.5	17.6	11.4
2000	1.93	1.55	1.51	4.04	4.09	1.69	11.6	10.6	10.4	17.3	17.4	11.2
1999	1.96	1.57	1.54	4.13	4.18	1.68	11.8	10.7	10.5	17.5	17.6	11.4
1998	1.96	1.57	1.52	4.11	4.15	1.72	11.6	10.5	10.2	17.5	17.6	11.4
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	---	---

Year	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]
2001	1.44	1.16	1.17	3.04	3.08	1.14	7.7	6.7	6.8	13.0	13.1	6.5
2000	1.43	1.14	1.14	3.07	3.10	1.14	7.6	6.5	6.6	13.0	13.1	6.4
1999	1.45	1.15	1.15	3.14	3.18	1.14	7.6	6.6	6.6	13.1	13.2	6.4
1998	1.45	1.15	1.15	3.08	3.11	1.15	7.6	6.5	6.6	13.0	13.2	6.4
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, 2001

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	308,747	7.7	4,025,933	5,956	22,648	29,250	60,804	190,089	680,580	1,515,171	1,139,280	322,346	51,132	5,498	3,179
Under 15 years	994	12.8	7,781	23	107	106	194	564	2,001	3,135	1,425	197	13	1	15
15-19 years	42,006	9.4	445,944	820	3,266	3,797	7,851	26,272	97,504	180,759	101,564	21,122	2,427	205	357
15 years	2,265	11.2	20,150	39	199	218	455	1,354	4,810	8,223	4,039	712	79	6	16
16 years	4,770	10.5	45,367	94	390	461	872	2,953	10,502	18,526	9,595	1,745	181	17	31
17 years	7,799	9.8	79,807	154	587	711	1,481	4,866	18,064	32,401	17,605	3,461	385	31	61
18 years	11,968	9.5	126,361	240	918	1,043	2,275	7,492	27,557	51,233	28,859	5,932	662	49	101
19 years	15,204	8.7	174,259	293	1,172	1,364	2,768	9,607	36,571	70,376	41,466	9,272	1,120	102	148
20-24 years	79,148	7.8	1,021,627	1,551	5,599	7,012	14,797	50,189	192,780	403,068	269,204	66,597	9,192	893	745
25-29 years	71,837	6.8	1,058,265	1,470	5,249	6,821	13,785	44,512	167,273	399,296	313,419	89,842	14,229	1,554	815
30-34 years	66,297	7.0	942,697	1,237	4,957	6,436	13,765	39,902	137,050	339,220	291,228	91,064	15,498	1,657	683
35-39 years	38,053	8.4	451,723	707	2,735	3,968	8,143	22,500	67,798	156,812	135,228	44,402	8,013	967	450
40-44 years	9,373	10.1	92,813	139	681	975	1,998	5,580	15,194	31,417	26,064	8,749	1,699	211	106
45-54 years	1,039	20.5	5,083	9	54	135	271	570	980	1,464	1,148	373	61	10	8
White, total															
All ages	212,228	6.7	3,177,626	3,422	13,773	19,647	42,168	133,218	487,739	1,184,917	958,631	282,026	45,081	4,674	2,330
Under 15 years	428	10.5	4,095	11	51	45	87	234	965	1,660	883	142	9	-	8
15-19 years	25,560	8.0	318,563	447	1,828	2,224	4,731	16,330	63,291	130,427	79,646	17,295	1,979	150	215
15 years	1,221	9.7	12,584	18	93	123	248	739	2,708	5,242	2,829	511	58	3	12
16 years	2,762	9.1	30,510	49	225	260	489	1,739	6,358	12,652	7,181	1,388	145	8	16
17 years	4,711	8.4	56,098	87	312	411	891	3,010	11,630	23,053	13,568	2,767	311	19	39
18 years	7,358	8.1	91,284	132	528	621	1,382	4,695	18,135	37,366	22,893	4,879	553	36	64
19 years	9,508	7.4	128,087	161	670	809	1,721	6,147	24,460	52,114	33,175	7,750	912	84	84
20-24 years	51,180	6.6	779,529	795	3,185	4,332	9,509	33,359	134,596	307,664	220,205	56,725	7,905	755	499
25-29 years	50,543	5.9	850,343	857	3,212	4,768	9,820	31,886	122,414	317,321	266,557	78,976	12,579	1,335	618
30-34 years	48,973	6.3	777,294	780	3,191	4,881	10,373	29,948	103,427	275,392	252,074	81,522	13,942	1,435	529
35-39 years	27,920	7.6	368,816	436	1,803	2,828	5,966	16,887	50,950	126,248	116,068	39,343	7,107	821	359
40-44 years	6,766	9.1	74,856	91	454	664	1,455	4,102	11,331	25,051	22,235	7,700	1,508	171	94
45-54 years	858	20.8	4,130	5	49	105	227	472	765	1,154	963	323	52	7	8
White, non-Hispanic															
All ages	157,236	6.8	2,326,578	2,444	10,026	14,651	31,573	98,542	345,514	847,001	717,844	218,568	35,170	3,470	1,775
Under 15 years	179	11.3	1,581	5	24	19	38	93	334	597	396	68	4	-	3
15-19 years	15,903	8.4	190,161	287	1,205	1,416	2,975	10,020	36,443	75,342	49,343	11,552	1,349	97	132
15 years	568	9.9	5,765	13	44	52	123	336	1,160	2,283	1,422	287	36	2	7
16 years	1,490	9.6	15,538	24	128	155	259	924	3,061	6,201	3,843	846	82	7	8
17 years	2,809	8.9	31,409	56	197	248	533	1,775	6,269	12,374	7,970	1,758	200	10	19
18 years	4,660	8.4	55,409	88	357	397	899	2,919	10,800	21,896	14,283	3,307	394	24	45
19 years	6,376	7.8	82,040	106	479	564	1,161	4,066	15,153	32,588	21,825	5,354	637	54	53
20-24 years	35,374	6.8	523,027	553	2,222	3,006	6,528	23,065	88,603	201,510	150,353	40,557	5,744	525	361
25-29 years	37,738	6.1	622,361	623	2,342	3,574	7,380	23,819	88,029	227,970	197,780	59,827	9,578	963	476
30-34 years	39,362	6.3	625,435	581	2,474	3,742	8,417	24,148	81,648	218,975	205,351	67,182	11,393	1,101	423
35-39 years	22,534	7.5	300,007	333	1,358	2,291	4,864	13,888	40,748	101,536	95,641	32,764	5,848	635	301
40-44 years	5,419	9.0	60,614	57	360	518	1,176	3,308	9,070	20,146	18,194	6,353	1,218	142	72
45-54 years	727	21.5	3,392	5	41	85	195	401	639	925	786	265	36	7	7

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, 2001–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	78,423	13.0	606,156	2,317	7,893	8,223	15,394	44,596	142,270	231,012	122,521	26,695	3,995	544	696
Under 15 years	541	15.7	3,455	12	54	58	102	315	974	1,382	499	48	4	1	6
15-19 years	14,984	13.5	110,843	351	1,336	1,455	2,842	9,000	30,536	43,648	18,211	2,961	336	41	126
15 years	974	14.2	6,881	21	97	91	195	570	1,963	2,699	1,066	156	17	2	4
16 years	1,841	14.0	13,183	43	147	185	348	1,118	3,749	5,250	2,006	288	29	8	12
17 years	2,849	13.7	20,778	65	261	290	533	1,700	5,798	8,108	3,404	535	56	8	20
18 years	4,214	13.8	30,516	102	360	393	823	2,536	8,370	12,018	4,974	821	79	8	32
19 years	5,106	13.0	39,485	120	471	496	943	3,076	10,656	15,573	6,761	1,161	155	15	58
20-24 years	24,694	12.4	199,221	718	2,227	2,448	4,738	14,563	49,110	77,932	38,774	7,460	940	100	211
25-29 years	16,436	12.0	137,400	562	1,820	1,735	3,119	9,200	29,589	52,558	30,285	7,145	1,086	144	157
30-34 years	12,272	13.0	94,660	395	1,479	1,361	2,490	6,547	19,326	34,619	21,679	5,555	954	141	114
35-39 years	7,503	15.3	49,065	239	797	906	1,658	3,903	10,214	16,986	10,739	2,906	549	91	75
40-44 years	1,881	17.1	11,001	36	176	241	413	1,015	2,410	3,721	2,238	599	121	24	7
45-54 years	112	21.9	511	4	4	19	32	53	111	164	96	21	5	2	-
Black, non-Hispanic															
All ages	76,997	13.1	589,917	2,271	7,775	8,075	15,104	43,772	139,276	224,616	118,393	25,612	3,843	522	658
Under 15 years	535	15.8	3,401	12	54	58	100	311	965	1,358	486	46	4	1	6
15-19 years	14,712	13.6	108,252	346	1,312	1,425	2,801	8,828	29,907	42,591	17,707	2,850	326	39	120
15 years	961	14.3	6,735	20	95	89	194	563	1,927	2,642	1,037	147	15	2	4
16 years	1,801	14.0	12,879	43	142	182	346	1,088	3,667	5,131	1,955	279	28	7	11
17 years	2,795	13.8	20,293	64	258	283	524	1,666	5,675	7,904	3,324	512	56	8	19
18 years	4,141	13.9	29,794	101	351	385	810	2,494	8,195	11,725	4,825	794	76	7	31
19 years	5,014	13.0	38,551	118	466	486	927	3,017	10,443	15,189	6,566	1,118	151	15	55
20-24 years	24,313	12.5	194,391	701	2,200	2,410	4,664	14,338	48,226	75,943	37,549	7,156	903	96	205
25-29 years	16,109	12.1	133,491	548	1,794	1,704	3,053	9,010	28,952	51,031	29,212	6,853	1,048	140	146
30-34 years	12,016	13.1	91,710	390	1,457	1,335	2,427	6,407	18,829	33,522	20,860	5,335	912	132	104
35-39 years	7,348	15.5	47,494	234	779	888	1,618	3,829	9,950	16,413	10,316	2,778	530	89	70
40-44 years	1,855	17.4	10,691	36	175	237	409	998	2,344	3,600	2,173	574	115	23	7
45-54 years	109	22.4	487	4	4	18	32	51	103	158	90	20	5	2	-
Hispanic [4]															
All ages	55,092	6.5	851,851	925	3,748	5,006	10,621	34,792	143,068	338,951	240,284	63,091	9,792	1,197	376
Under 15 years	252	9.9	2,555	6	27	26	51	142	641	1,080	498	75	5	-	4
15-19 years	9,821	7.6	130,007	154	633	817	1,788	6,429	27,321	55,739	30,570	5,802	632	54	68
15 years	659	9.5	6,936	5	51	72	125	406	1,576	3,010	1,435	227	24	1	4
16 years	1,294	8.5	15,165	24	99	102	232	837	3,359	6,516	3,378	549	62	2	5
17 years	1,930	7.7	25,023	29	114	164	370	1,253	5,466	10,822	5,632	1,035	110	9	19
18 years	2,741	7.6	36,298	42	176	229	487	1,807	7,470	15,628	8,690	1,580	161	13	15
19 years	3,197	6.9	46,585	54	193	250	574	2,126	9,450	19,763	11,435	2,411	275	29	25
20-24 years	15,933	6.2	258,431	243	971	1,340	3,002	10,377	46,415	107,086	70,238	16,278	2,151	226	104
25-29 years	12,805	5.8	227,910	225	866	1,191	2,435	8,088	34,469	89,477	68,649	19,063	2,974	371	102
30-34 years	9,512	6.3	150,352	182	709	930	1,941	5,750	21,721	56,028	46,125	14,067	2,505	333	61
35-39 years	5,337	7.9	67,952	89	446	546	1,097	3,159	10,161	24,461	20,119	6,436	1,229	183	26
40-44 years	1,317	9.4	13,956	26	89	140	276	786	2,215	4,862	3,922	1,317	282	30	11
45-54 years	115	16.7	688	-	7	16	31	61	125	218	163	53	14	-	-

- Quantity zero.
[1] Less than 2,500 grams (5 lb 8 oz).
[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, each State and territory, 2001

[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]	308,747	212,228	157,236	78,423	76,997	55,092	7.7	6.7	6.8	13.0	13.1	6.5
Alabama	5,812	3,070	2,914	2,687	2,687	155	9.6	7.6	7.6	14.0	14.0	6.9
Alaska	566	333	277	48	42	41	5.7	5.2	5.0	10.9	10.8	6.3
Arizona	5,957	5,010	2,603	378	368	2,399	7.0	6.7	6.7	13.7	14.4	6.6
Arkansas	3,250	2,148	1,988	1,044	1,044	157	8.8	7.5	7.6	14.1	14.1	5.9
California	33,228	24,661	9,838	3,907	3,795	14,784	6.3	5.8	5.9	11.6	11.7	5.7
Colorado	5,720	5,007	3,391	415	400	1,657	8.5	8.2	8.1	14.0	14.1	8.4
Connecticut	3,143	2,370	1,786	621	603	565	7.4	6.7	6.3	12.1	12.2	8.2
Delaware	996	589	519	372	371	70	9.3	7.7	7.9	13.7	13.8	6.5
District of Columbia	924	163	106	743	737	58	12.1	6.3	6.3	15.3	15.3	6.5
Florida	16,776	10,386	7,292	5,878	5,753	3,222	8.2	6.8	7.0	12.5	12.5	6.5
Georgia	11,750	5,771	4,851	5,624	5,555	889	8.8	6.7	7.0	12.9	12.9	5.7
Hawaii	1,385	247	210	60	57	171	8.1	6.5	6.7	11.4	11.5	7.6
Idaho	1,326	1,275	1,063	9	8	187	6.4	6.4	6.3	*	*	6.8
Illinois	14,731	9,463	6,795	4,558	4,535	2,689	8.0	6.6	6.7	13.7	13.8	6.6
Indiana	6,569	5,225	4,825	1,242	1,237	389	7.6	7.0	7.0	12.9	13.0	6.6
Iowa	2,409	2,160	2,023	173	168	139	6.4	6.1	6.1	13.7	13.6	6.2
Kansas	2,709	2,247	1,939	345	340	292	7.0	6.5	6.6	12.4	12.4	6.0
Kentucky	4,539	3,828	3,713	660	656	115	8.3	7.8	7.8	13.4	13.4	7.7
Louisiana	6,825	2,831	2,731	3,883	3,875	103	10.4	7.7	7.7	14.4	14.4	6.6
Maine	830	800	793	14	12	7	6.0	6.0	6.1	*	*	*
Maryland	6,580	3,144	2,779	3,134	3,117	365	9.0	7.0	7.0	12.9	13.0	6.9
Massachusetts	5,773	4,574	3,863	832	710	778	7.2	6.8	6.5	10.2	10.9	8.3
Michigan	10,642	6,971	6,406	3,317	3,300	453	8.0	6.6	6.7	14.1	14.1	6.2
Minnesota	4,254	3,426	3,116	467	460	280	6.3	5.9	5.9	9.8	9.8	6.2
Mississippi	4,505	1,769	1,720	2,683	2,681	50	10.7	7.8	7.8	14.3	14.3	7.0
Missouri	5,741	4,189	4,020	1,406	1,402	169	7.6	6.7	6.8	12.6	12.7	5.7
Montana	758	655	613	2	2	30	6.9	6.9	7.0	*	*	8.0
Nebraska	1,649	1,409	1,205	170	169	183	6.6	6.3	6.3	12.4	12.5	6.2
Nevada	2,380	1,852	1,148	326	307	691	7.6	7.0	7.5	13.0	12.7	6.4
New Hampshire	957	898	785	29	22	30	6.5	6.4	6.1	13.9	13.8	5.9
New Jersey	9,170	5,787	4,231	2,595	2,442	1,647	7.9	6.8	6.7	12.6	13.1	7.0
New Mexico	2,145	1,799	682	67	66	1,124	7.9	7.9	7.8	13.1	13.6	8.0
New York	19,481	12,151	8,331	5,892	5,457	4,050	7.7	6.7	6.4	11.3	11.7	7.4
North Carolina	10,572	6,258	5,371	3,906	3,894	890	8.9	7.3	7.6	13.8	13.8	6.1
North Dakota	472	405	380	5	5	11	6.2	6.1	6.0	*	*	*
Ohio	12,094	8,811	8,480	3,069	3,049	319	8.0	7.0	7.0	13.4	13.4	7.0
Oklahoma	3,908	2,846	2,552	628	625	292	7.8	7.3	7.4	13.6	13.7	5.9
Oregon	2,512	2,217	1,782	95	91	440	5.5	5.4	5.3	10.1	10.0	5.6
Pennsylvania	11,346	8,238	7,483	2,771	2,693	721	7.9	6.9	6.8	13.7	13.7	8.8
Rhode Island	931	738	501	131	118	167	7.3	6.7	6.5	11.8	11.9	7.6
South Carolina	5,340	2,613	2,427	2,647	2,638	196	9.6	7.3	7.4	14.0	14.0	6.6
South Dakota	671	535	514	6	6	21	6.4	6.3	6.2	*	*	8.2
Tennessee	7,212	4,833	4,584	2,252	2,249	253	9.2	8.0	8.1	13.6	13.6	6.5
Texas	27,603	21,377	9,535	5,242	5,195	11,820	7.6	6.9	6.9	12.9	12.9	6.9
Utah	3,077	2,902	2,408	37	36	485	6.4	6.4	6.2	10.8	11.1	7.4
Vermont	377	369	353	1	1	1	5.9	5.9	5.9	*	*	*
Virginia	7,761	4,587	4,066	2,775	2,753	527	7.9	6.5	6.6	12.5	12.5	5.8
Washington	4,599	3,711	3,036	324	318	636	5.8	5.5	5.6	9.8	10.0	5.2
West Virginia	1,730	1,637	1,625	81	81	4	8.5	8.4	8.4	11.5	11.6	*
Wisconsin	4,552	3,485	3,177	861	857	318	6.6	5.9	5.8	13.1	13.2	6.2
Wyoming	510	458	406	11	10	52	8.3	8.0	7.9	*	*	9.1
Puerto Rico	6,264	5,710	---	554	---	---	11.2	11.1	---	12.1	---	---
Virgin Islands	161	33	4	117	102	36	9.7	9.0	*	9.5	9.4	9.4
Guam	287	9	8	2	2	3	8.1	*	*	*	*	*
American Samoa	65	-	---	-	---	---	3.9	*	---	*	---	---
Northern Marianas	120	1	---	-	---	---	8.3	*	---	*	---	---

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
--- Data not available.
- Quantity zero.
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 the territories.

Table 47. Number and percent of births of very low birthweight by race and Hispanic origin of mother: United States, each State and territory, 2001

[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]	57,854	36,842	27,121	18,433	18,121	9,679	1.4	1.2	1.2	3.0	3.1	1.1
Alabama	1,174	524	497	642	642	27	1.9	1.3	1.3	3.3	3.4	1.2
Alaska	126	72	58	12	12	10	1.3	1.1	1.0	*	*	*
Arizona	909	763	393	72	70	365	1.1	1.0	1.0	2.6	2.7	1.0
Arkansas	598	348	312	245	245	35	1.6	1.2	1.2	3.3	3.3	1.3
California	6,014	4,441	1,691	925	902	2,724	1.1	1.0	1.0	2.7	2.8	1.0
Colorado	840	730	470	75	74	263	1.3	1.2	1.1	2.5	2.6	1.3
Connecticut	640	437	320	184	179	114	1.5	1.2	1.1	3.6	3.6	1.6
Delaware	185	83	70	98	97	14	1.7	1.1	1.1	3.6	3.6	*
District of Columbia	206	26	14	176	174	13	2.7	1.0	*	3.6	3.6	*
Florida	3,269	1,790	1,273	1,399	1,372	534	1.6	1.2	1.2	3.0	3.0	1.1
Georgia	2,296	978	828	1,266	1,252	138	1.7	1.1	1.2	2.9	2.9	0.9
Hawaii	206	36	33	12	12	20	1.2	0.9	1.1	*	*	0.9
Idaho	193	187	146	3	3	37	0.9	0.9	0.9	*	*	1.3
Illinois	2,833	1,716	1,269	1,020	1,015	453	1.5	1.2	1.2	3.1	3.1	1.1
Indiana	1,212	919	835	277	277	84	1.4	1.2	1.2	2.9	2.9	1.4
Iowa	431	387	357	29	28	30	1.1	1.1	1.1	2.3	2.3	1.3
Kansas	488	393	328	74	73	64	1.3	1.1	1.1	2.7	2.7	1.3
Kentucky	809	670	653	129	128	16	1.5	1.4	1.4	2.6	2.6	*
Louisiana	1,489	497	481	977	977	16	2.3	1.3	1.4	3.6	3.6	*
Maine	165	158	157	7	7	1	1.2	1.2	1.2	*	*	*
Maryland	1,409	597	516	770	769	76	1.9	1.3	1.3	3.2	3.2	1.4
Massachusetts	1,088	811	668	222	191	157	1.3	1.2	1.1	2.7	2.9	1.7
Michigan	2,143	1,320	1,210	781	779	86	1.6	1.3	1.3	3.3	3.3	1.2
Minnesota	822	634	562	123	119	65	1.2	1.1	1.1	2.6	2.5	1.4
Mississippi	874	299	291	566	565	7	2.1	1.3	1.3	3.0	3.0	*
Missouri	1,046	712	674	317	317	39	1.4	1.1	1.1	2.9	2.9	1.3
Montana	126	110	105	-	-	7	1.1	1.2	1.2	*	*	*
Nebraska	316	262	226	43	43	31	1.3	1.2	1.2	3.1	3.2	1.1
Nevada	332	256	157	53	49	95	1.1	1.0	1.0	2.1	2.0	0.9
New Hampshire	159	152	137	4	2	4	1.1	1.1	1.1	*	*	*
New Jersey	1,865	1,077	745	686	654	336	1.6	1.3	1.2	3.3	3.5	1.4
New Mexico	297	249	94	13	12	156	1.1	1.1	1.1	*	*	1.1
New York	3,740	2,152	1,385	1,411	1,309	819	1.5	1.2	1.1	2.7	2.8	1.5
North Carolina	2,272	1,204	1,048	985	983	155	1.9	1.4	1.5	3.5	3.5	1.1
North Dakota	86	73	70	2	2	1	1.1	1.1	1.1	*	*	*
Ohio	2,302	1,551	1,501	728	722	45	1.5	1.2	1.2	3.2	3.2	1.0
Oklahoma	664	450	402	132	132	44	1.3	1.1	1.2	2.9	2.9	0.9
Oregon	432	379	312	21	19	67	1.0	0.9	0.9	2.2	*	0.8
Pennsylvania	2,146	1,466	1,309	639	619	148	1.5	1.2	1.2	3.2	3.2	1.8
Rhode Island	189	148	96	25	25	35	1.5	1.4	1.3	2.3	2.5	1.6
South Carolina	1,046	435	415	602	602	20	1.9	1.2	1.3	3.2	3.2	0.7
South Dakota	114	95	89	-	-	6	1.1	1.1	1.1	*	*	*
Tennessee	1,327	805	774	511	511	31	1.7	1.3	1.4	3.1	3.1	0.8
Texas	4,804	3,491	1,563	1,174	1,161	1,931	1.3	1.1	1.1	2.9	2.9	1.1
Utah	462	442	364	4	4	79	1.0	1.0	0.9	*	*	1.2
Vermont	72	72	67	-	-	-	1.1	1.2	1.1	*	*	*
Virginia	1,589	853	761	684	680	91	1.6	1.2	1.2	3.1	3.1	1.0
Washington	818	654	529	60	59	117	1.0	1.0	1.0	1.8	1.8	1.0
West Virginia	291	271	269	19	19	2	1.4	1.4	1.4	*	*	*
Wisconsin	870	604	542	234	233	63	1.3	1.0	1.0	3.6	3.6	1.2
Wyoming	70	63	55	2	2	8	1.1	1.1	1.1	*	*	*
Puerto Rico	739	662	---	77	---	---	1.3	1.3	---	1.7	---	---
Virgin Islands	29	6	-	21	17	7	1.7	*	*	1.7	*	*
Guam	33	-	-	-	-	1	0.9	*	*	*	*	*
American Samoa	9	-	---	-	---	---	*	*	---	*	---	---
Northern Marianas	7	-	---	-	---	---	*	*	---	*	---	---

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
- 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 the territories.

Table 48. Live births with selected abnormal conditions of the newborn and rates by age of mother, by race of mother: United States, 2001

[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 [2]
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races [3]										
Anemia	4,025,933	4,043	1.0	1.0	1.0	1.0	1.0	1.2	1.2	38,327
Birth injury [4]	3,635,703	10,119	2.8	3.0	2.8	2.9	2.8	2.6	2.4	42,079
Fetal alcohol syndrome [5]	3,956,861	136	0.0	*	0.0	0.0	0.0	*	*	39,443
Hyaline membrane disease/RDS	4,025,933	23,764	6.0	6.6	6.0	5.8	5.6	6.2	6.8	38,327
Meconium aspiration syndrome	4,025,933	6,333	1.6	1.8	1.6	1.5	1.5	1.6	1.9	38,327
Assisted ventilation less than 30 minutes [6]	3,906,315	84,877	22.0	22.4	21.0	21.7	22.4	23.2	24.4	46,729
Assisted ventilation 30 minutes or longer [6]	3,906,315	35,937	9.3	10.7	9.3	8.7	8.8	10.1	11.7	46,729
Seizures	4,025,933	1,940	0.5	0.6	0.5	0.5	0.4	0.5	0.5	38,327
White										
Anemia	3,177,626	2,976	0.9	1.0	0.9	0.9	1.0	1.1	1.2	30,653
Birth injury [4]	2,843,151	8,163	2.9	3.1	2.9	3.0	2.9	2.6	2.5	33,933
Fetal alcohol syndrome [5]	3,118,243	84	0.0	*	*	0.0	0.0	*	*	31,707
Hyaline membrane disease/RDS	3,177,626	19,156	6.1	6.8	6.1	6.0	5.8	6.2	6.9	30,653
Meconium aspiration syndrome	3,177,626	4,549	1.4	1.6	1.5	1.4	1.3	1.4	1.6	30,653
Assisted ventilation less than 30 minutes [6]	3,110,079	68,273	22.2	22.5	21.0	22.0	22.7	23.5	25.0	37,350
Assisted ventilation 30 minutes or longer [6]	3,110,079	27,709	9.0	10.3	8.8	8.4	8.7	9.8	11.7	37,350
Seizures	3,177,626	1,547	0.5	0.6	0.5	0.5	0.4	0.5	0.6	30,653
Black										
Anemia	606,156	818	1.4	1.2	1.2	1.4	1.4	2.0	*	4,315
Birth injury [4]	564,033	1,004	1.8	2.1	1.7	1.8	1.7	2.0	*	4,659
Fetal alcohol syndrome [5]	599,589	39	0.1	*	*	*	*	*	*	4,353
Hyaline membrane disease/RDS	606,156	3,702	6.2	6.3	6.0	5.9	5.8	7.6	6.7	4,315
Meconium aspiration syndrome	606,156	1,427	2.4	2.1	2.1	2.5	2.5	3.1	3.9	4,315
Assisted ventilation less than 30 minutes [6]	568,635	12,057	21.4	21.4	20.7	20.8	23.0	23.2	21.4	5,272
Assisted ventilation 30 minutes or longer [6]	568,635	6,633	11.8	11.7	11.2	11.4	12.0	14.2	14.9	5,272
Seizures	606,156	299	0.5	0.6	0.5	0.5	0.4	0.4	*	4,315

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
0.0 Quantity more than zero but less than 0.05.
1 Total number of births to residents of areas reporting specified abnormal condition.
2 No response reported for the abnormal conditions item.
3 Includes races other than white and black.
4 Nebraska and Texas do not report this condition.
5 Wisconsin does not report this condition.
6 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, 2001

[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 [2]
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races [3]										
Anencephalus	3,998,805	392	9.9	9.6	10.6	9.7	9.8	8.8	*	36,650
Spina bifida/Meningocele	3,998,805	790	19.9	24.2	23.0	19.4	18.9	14.2	*	36,650
Hydrocephalus	3,998,805	892	22.5	28.7	25.8	21.9	18.5	19.6	*	36,650
Microcephalus	3,998,805	222	5.6	6.1	6.2	6.2	4.7	4.5	*	36,650
Other central nervous system anomalies	3,998,805	981	24.8	26.0	27.4	21.0	24.1	24.8	38.5	36,650
Heart malformations	3,998,805	4,852	122.5	112.6	109.8	114.6	125.2	153.0	218.5	36,650
Other circulatory/respiratory anomalies	3,998,805	5,533	139.6	137.9	142.9	130.6	134.5	156.6	182.1	36,650
Rectal atresia/stenosis	3,998,805	355	9.0	10.3	8.5	9.0	8.3	8.1	*	36,650
Tracheo-esophageal fistula/Esophageal atresia	3,998,805	474	12.0	10.8	9.8	11.9	14.8	10.8	*	36,650
Omphalocele/Gastroschisis	3,998,805	1,258	31.8	82.8	42.2	21.6	15.7	17.8	*	36,650
Other gastrointestinal anomalies	3,998,805	1,357	34.2	37.0	34.5	30.0	33.0	36.9	64.5	36,650
Malformed genitalia	3,998,805	3,504	88.4	92.0	85.9	87.3	90.5	87.1	96.7	36,650
Renal agenesis	3,998,805	586	14.8	15.5	15.0	16.0	14.4	11.9	*	36,650
Other urogenital anomalies	3,998,805	4,072	102.8	87.0	99.9	104.3	102.0	115.2	139.4	36,650
Cleft lip/palate	3,998,805	3,192	80.6	87.0	87.8	78.6	74.0	74.5	87.4	36,650
Polydactyly/Syndactyly/Adactyly	3,998,805	3,263	82.4	106.8	102.6	74.0	67.2	66.6	67.6	36,650
Clubfoot	3,998,805	2,321	58.6	61.5	65.4	57.9	52.2	52.4	71.8	36,650
Diaphragmatic hernia	3,998,805	452	11.4	11.2	11.3	10.3	12.9	9.9	*	36,650
Other musculoskeletal/integumental anomalies	3,998,805	8,969	226.4	264.2	236.5	221.8	207.4	216.3	224.7	36,650
Down's syndrome	3,998,805	1,803	45.5	22.9	23.1	27.0	40.6	106.4	351.6	36,650
Other chromosomal anomalies	3,998,805	1,436	36.2	25.1	31.3	27.8	32.6	59.4	158.1	36,650
White										
Anencephalus	3,154,816	314	10.0	9.8	10.7	10.5	9.3	9.1	*	28,755
Spina bifida/Meningocele	3,154,816	637	20.4	25.6	22.4	20.7	20.0	13.8	*	28,755
Hydrocephalus	3,154,816	699	22.4	30.3	26.3	21.9	18.4	17.4	*	28,755
Microcephalus	3,154,816	158	5.1	*	6.1	5.5	3.5	*	*	28,755
Other central nervous system anomalies	3,154,816	782	25.0	28.4	27.4	20.7	25.6	23.2	37.4	28,755
Heart malformations	3,154,816	3,805	121.7	113.7	109.8	112.8	122.4	151.4	223.1	28,755
Other circulatory/respiratory anomalies	3,154,816	4,441	142.1	141.2	149.7	131.7	135.5	154.4	188.3	28,755
Rectal atresia/stenosis	3,154,816	299	9.6	11.1	9.3	10.3	8.5	8.3	*	28,755
Tracheo-esophageal fistula/Esophageal atresia	3,154,816	404	12.9	12.0	11.3	12.2	15.5	12.1	*	28,755
Omphalocele/Gastroschisis	3,154,816	987	31.6	91.6	43.8	20.4	15.2	17.6	*	28,755
Other gastrointestinal anomalies	3,154,816	1,048	33.5	35.4	35.0	27.7	32.9	36.7	65.8	28,755
Malformed genitalia	3,154,816	3,007	96.2	99.5	95.4	94.8	97.1	95.1	101.9	28,755
Renal agenesis	3,154,816	483	15.5	17.4	15.8	17.1	15.0	11.0	*	28,755
Other urogenital anomalies	3,154,816	3,354	107.3	86.9	107.5	106.9	105.4	121.0	147.0	28,755
Cleft lip/palate	3,154,816	2,715	86.9	100.8	96.3	83.4	79.7	77.2	90.3	28,755
Polydactyly/Syndactyly/Adactyly	3,154,816	1,828	58.5	66.7	67.8	52.3	55.0	53.8	55.5	28,755
Clubfoot	3,154,816	1,980	63.3	70.1	70.6	62.3	56.8	54.9	78.7	28,755
Diaphragmatic hernia	3,154,816	359	11.5	12.6	11.7	10.3	12.5	9.6	*	28,755
Other musculoskeletal/integumental anomalies	3,154,816	5,938	190.0	217.0	198.8	188.5	175.3	183.1	184.4	28,755
Down's syndrome	3,154,816	1,580	50.5	24.0	25.8	30.0	44.4	114.7	385.6	28,755
Other chromosomal anomalies	3,154,816	1,150	36.8	24.3	30.9	27.9	34.5	58.7	161.2	28,755

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, 2001 —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 [2]
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
Black										
Anencephalus	605,645	57	9.5	*	10.6	*	*	*	*	4,255
Spina bifida/Meningocele	605,645	128	21.3	23.8	25.3	14.7	*	*	*	4,255
Hydrocephalus	605,645	151	25.1	26.4	23.3	23.5	23.4	*	*	4,255
Microcephalus	605,645	42	7.0	*	*	*	*	*	*	4,255
Other central nervous system anomalies	605,645	123	20.5	*	22.8	17.6	*	*	*	4,255
Heart malformations	605,645	721	119.9	93.4	107.2	118.2	141.7	176.9	201.9	4,255
Other circulatory/respiratory anomalies	605,645	731	121.6	111.0	106.7	123.3	134.3	174.8	*	4,255
Rectal atresia/stenosis	605,645	37	6.2	*	*	*	*	*	*	4,255
Tracheo-esophageal fistula/Esophageal atresia	605,645	41	6.8	*	*	*	*	*	*	4,255
Omphalocele/Gastroschisis	605,645	222	36.9	57.3	38.4	30.1	26.6	*	*	4,255
Other gastrointestinal anomalies	605,645	216	35.9	35.2	30.8	40.4	37.3	*	*	4,255
Malformed genitalia	605,645	348	57.9	74.0	55.1	49.9	54.4	55.5	*	4,255
Renal agenesis	605,645	69	11.5	*	10.1	*	*	*	*	4,255
Other urogenital anomalies	605,645	399	66.3	67.8	55.6	72.7	69.3	72.0	*	4,255
Cleft lip/palate	605,645	266	44.2	41.4	46.0	42.6	37.3	59.6	*	4,255
Polydactyly/Syndactyly/Adactyly	605,645	1,324	220.2	221.1	245.3	220.9	194.0	178.9	*	4,255
Clubfoot	605,645	256	42.6	40.5	47.0	40.4	34.1	49.4	*	4,255
Diaphragmatic hernia	605,645	66	11.0	*	*	*	*	*	*	4,255
Other musculoskeletal/integumental anomalies	605,645	2,248	373.8	352.3	348.4	386.7	409.3	407.2	438.9	4,255
Down's syndrome	605,645	151	25.1	18.5	12.1	*	27.7	74.0	237.0	4,255
Other chromosomal anomalies	605,645	170	28.3	21.1	26.3	22.0	24.5	59.6	*	4,255

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
1 Total number of births to residents of areas reporting specified congenital anomaly.
2 No response reported for the congenital anomalies item.
3 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, 2001

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]	4,025,933	7,781	445,944	145,324	300,620	1,021,627	1,058,265	942,697	451,723	92,813	5,083
White, total	3,177,626	4,095	318,563	99,192	219,371	779,529	850,343	777,294	368,816	74,856	4,130
White, non-Hispanic	2,326,578	1,581	190,161	52,712	137,449	523,027	622,361	625,435	300,007	60,614	3,392
Black, total	606,156	3,455	110,843	40,842	70,001	199,221	137,400	94,660	49,065	11,001	511
Black, non-Hispanic	589,917	3,401	108,252	39,907	68,345	194,391	133,491	91,710	47,494	10,691	487
Hispanic [2]	851,851	2,555	130,007	47,124	82,883	258,431	227,910	150,352	67,952	13,956	688
Live births in single deliveries											
All races [1]	3,897,216	7,697	438,998	143,391	295,607	998,302	1,026,303	904,124	429,710	88,022	4,060
White, total	3,075,683	4,046	314,271	98,015	216,256	763,468	825,125	744,657	350,160	70,747	3,209
White, non-Hispanic	2,242,802	1,557	187,451	52,040	135,411	511,521	602,112	597,031	283,631	56,947	2,552
Black, total	585,189	3,426	108,412	40,134	68,278	192,702	132,056	90,714	46,809	10,600	470
Black, non-Hispanic	569,412	3,372	105,870	39,209	66,661	187,977	128,277	87,859	45,313	10,296	448
Hispanic [2]	833,884	2,530	128,391	46,613	81,778	253,841	222,956	146,271	65,717	13,556	622
Live births in twin deliveries											
All races [1]	121,246	81	6,849	1,917	4,932	22,752	30,344	35,581	20,265	4,462	912
White, total	95,315	46	4,228	1,164	3,064	15,627	23,759	29,944	17,076	3,822	813
White, non-Hispanic	77,882	21	2,689	669	2,020	11,173	18,974	25,936	14,943	3,402	744
Black, total	20,414	29	2,404	705	1,699	6,395	5,221	3,784	2,161	379	41
Black, non-Hispanic	19,974	29	2,355	695	1,660	6,290	5,094	3,702	2,092	373	39
Hispanic [2]	17,257	25	1,573	501	1,072	4,489	4,774	3,861	2,092	386	57
Live births in higher order multiple deliveries [3]											
All races [1]	7,471	3	97	16	81	573	1,618	2,992	1,748	329	111
White, total	6,628	3	64	13	51	434	1,459	2,693	1,580	287	108
White, non-Hispanic	5,894	3	21	3	18	333	1,275	2,468	1,433	265	96
Black, total	553	-	27	3	24	124	123	162	95	22	-
Black, non-Hispanic	531	-	27	3	24	124	120	149	89	22	-
Hispanic [2]	710	-	43	10	33	101	180	220	143	14	9
	Ratio per 1,000 live births										
All multiple births											
All races [1]	32.0	10.8	15.6	13.3	16.7	22.8	30.2	40.9	48.7	51.6	201.3
White, total	32.1	12.0	13.5	11.9	14.2	20.6	29.7	42.0	50.6	54.9	223.0
White, non-Hispanic	36.0	15.2	14.3	12.7	14.8	22.0	32.5	45.4	54.6	60.5	247.6
Black, total	34.6	8.4	21.9	17.3	24.6	32.7	38.9	41.7	46.0	36.5	80.2
Black, non-Hispanic	34.8	8.5	22.0	17.5	24.6	33.0	39.1	42.0	45.9	36.9	80.1
Hispanic [2]	21.1	9.8	12.4	10.8	13.3	17.8	21.7	27.1	32.9	28.7	95.9
Twin births											
All races [1]	30.1	10.4	15.4	13.2	16.4	22.3	28.7	37.7	44.9	48.1	179.4
White, total	30.0	11.2	13.3	11.7	14.0	20.0	27.9	38.5	46.3	51.1	196.9
White, non-Hispanic	33.5	13.3	14.1	12.7	14.7	21.4	30.5	41.5	49.8	56.1	219.3
Black, total	33.7	8.4	21.7	17.3	24.3	32.1	38.0	40.0	44.0	34.5	80.2
Black, non-Hispanic	33.9	8.5	21.8	17.4	24.3	32.4	38.2	40.4	44.0	34.9	80.1
Hispanic [2]	20.3	9.8	12.1	10.6	12.9	17.4	20.9	25.7	30.8	27.7	82.8
	Ratio per 100,000 live births										
Higher order multiple births [3]											
All races [1]	185.6	*	21.8	*	26.9	56.1	152.9	317.4	387.0	354.5	2183.7
White, total	208.6	*	20.1	*	23.2	55.7	171.6	346.5	428.4	383.4	2615.0
White, non-Hispanic	253.3	*	11.0	*	*	63.7	204.9	394.6	477.7	437.2	2830.2
Black, total	91.2	*	24.4	*	34.3	62.2	89.5	171.1	193.6	200.0	*
Black, non-Hispanic	90.0	*	24.9	*	35.1	63.8	89.9	162.5	187.4	205.8	*
Hispanic [2]	83.3	*	33.1	*	39.8	39.1	79.0	146.3	210.4	*	*

- Quantity zero.
* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
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 2001 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 the percent of records with missing information for maternal and infant characteristics included in this report is shown by State in table I. Data are not shown for the variables race, age, and marital status of mother. Missing data are imputed in these cases; see separate sections in the Technical Notes for more information.

Age of mother

Age of mother is computed in most cases from the mother's and infant's dates of birth as reported on the birth certificate. The mother's age is directly reported by five States (Kentucky, Nevada, North Dakota, Virginia, and Wyoming) and American Samoa. 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 imputed for ages 9 years or under and 55 years and over. 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 2001 age of mother was not reported on 0.01 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 started 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 mother have been discussed in detail elsewhere (131). They include the 1989 revision of the birth certificate, which includes many more health questions which are directly associated with the mother. In these instances, it is more appropriate to tabulate births by the mother's race. A second factor has been the increasing incidence of interracial parentage. In 2001, 5.3 percent of births were to parents of different races compared with just 1.9 percent for 1980. A third factor influencing the decision to tabulate births by race of mother is the large proportion of births with race of father not stated, 13 percent in 2001. 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, 11 States (California, Hawaii, Illinois, Minnesota, Missouri, New Jersey, New York, Texas, Virginia, Washington, and West Virginia) report data on additional API subgroups that would otherwise be included in the "other" API category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API). A report on births in 1992 to women in these API subgroups has been published (132).

In 2001 race of mother was not reported for 0.4 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 0.3 percent of births in 2001.

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 (133). Puerto Rico, American Samoa, and the Northern Marianas do not collect this information. The percent of records for which Hispanic origin of the parents was not reported in 2001 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, the marital status of women giving birth in California and Nevada is determined by a direct question in the birth registration process.

Beginning June 15, 1998, Connecticut discontinued inferring the mother's marital status and added a direct question on mother's marital status to the State's birth certificate.

In the two States (Michigan and New York) which use inferential procedures to compile birth statistics by marital status in 2001, a birth is inferred as nonmarital if any of these factors, listed in priority-of-use order, is present: a paternity acknowledgment was received or the father's name is missing. 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. Details of the changes in reporting procedures are described in previous reports (31, 134).

The mother's marital status was not reported in 2001 on 0.03 percent of the birth records in the 48 States and the District of Columbia where this information is obtained by a direct question. Marital status was imputed as "married" for these records.

Tobacco use

Beginning in 2001, data on whether or not the mother smoked during pregnancy is available for all States and the District of Columbia, except for California. These areas comprised 87 percent of U.S. births in 2001. Data on the number of cigarettes smoked daily were available in a comparable format for 46 States, the District of Columbia, and New York City. Indiana and New York State (except for New York City) reported information on number of cigarettes smoked in a format that was inconsistent with the NCHS standard (**see figure I**). South Dakota did not report this information. The areas reporting on the number of cigarettes smoked comprised 81 percent of U.S. births in 2001.

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 (135,136).

The U.S. Standard Certificate of Live Birth includes an item, "clinical estimate of gestation," that was compared with length of gestation computed from the date the last normal menstrual period (LMP) began when the latter appeared to be inconsistent with birthweight. This was 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 2001 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 283 births or 0.007 percent of all birth records in 2001. The levels of the adjustments in 2001 data were similar to those for 2000 and earlier years (122).

Birthweight

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

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

Method of delivery

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

Computations of percents, percent distributions, and medians

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

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 2001

[By place of residence]

Area	All births	Place of birth	Attendant at birth	Mother's birthplace	Father's age	Father's race	Hispanic origin	
							Mother	Father
Total of reporting areas[1]	4,025,933	0.0	0.0	0.3	13.5	14.1	0.6	14.1
Alabama	60,454	0.0	0.0	0.1	21.4	21.5	0.1	21.4
Alaska	10,003	0.2	0.1	0.7	12.2	13.8	8.7	17.3
Arizona	85,597	0.0	0.0	0.1	18.3	19.5	1.3	19.9
Arkansas	37,010	0.0	0.0	0.4	19.7	21.0	0.4	20.3
California	527,759	0.0	0.1	0.2	7.1	6.7	0.6	6.3
Colorado	67,007	–	0.0	0.4	8.1	8.5	0.0	8.6
Connecticut	42,648	0.0	0.0	0.3	10.2	11.6	1.2	11.3
Delaware	10,749	–	–	0.1	29.7	30.4	0.1	29.6
District of Columbia	7,625	–	–	0.1	39.2	47.4	0.6	39.1
Florida	205,793	0.0	0.0	0.1	16.7	17.0	0.2	18.5
Georgia	133,526	0.0	0.0	0.2	17.6	17.8	1.2	18.5
Hawaii	17,072	–	0.0	0.1	9.4	9.5	0.1	9.2
Idaho	20,688	0.0	0.0	0.7	8.2	11.7	1.9	12.4
Illinois	184,064	0.0	0.0	0.1	13.4	15.2	0.0	15.1
Indiana	86,459	0.0	0.0	0.1	12.6	12.6	0.4	12.9
Iowa	37,619	–	0.0	0.0	12.6	14.3	0.3	14.0
Kansas	38,869	–	0.1	0.1	10.4	11.2	1.1	11.9
Kentucky	54,658	0.0	0.1	0.0	19.6	22.2	0.0	22.4
Louisiana	65,352	0.0	0.0	0.0	20.3	20.3	0.1	20.3
Maine	13,759	–	–	–	8.6	12.4	0.4	10.4
Maryland	73,218	0.0	0.0	0.4	11.5	12.7	0.4	10.7
Massachusetts	81,077	0.0	0.0	0.0	7.0	7.4	0.8	6.7
Michigan	133,427	0.0	0.1	0.1	14.2	16.4	1.4	17.3
Minnesota	67,562	0.0	0.0	0.2	9.4	13.5	0.7	13.3
Mississippi	42,282	–	0.0	0.1	22.1	22.0	0.1	22.1
Missouri	75,464	0.0	–	0.2	18.5	18.3	0.1	17.8
Montana	10,970	–	0.2	0.0	9.8	11.0	2.9	13.6
Nebraska	24,820	–	–	–	11.8	13.3	2.1	13.8
Nevada	31,382	0.0	0.0	0.5	20.0	20.9	1.1	20.0
New Hampshire	14,656	–	–	0.1	5.4	7.5	4.5	10.8
New Jersey	115,795	0.0	0.0	0.1	7.9	9.5	0.3	8.3
New Mexico	27,128	–	0.0	1.3	21.0	20.5	0.0	20.5
New York	254,026	0.1	0.0	0.4	14.0	14.4	1.1	14.8
North Carolina	118,185	–	0.0	0.0	15.7	15.8	0.1	16.1
North Dakota	7,629	0.0	–	0.0	8.5	8.9	2.5	11.5
Ohio	151,570	0.0	0.0	1.1	14.9	15.5	0.2	15.0
Oklahoma	50,118	0.0	0.0	0.0	17.5	18.8	0.2	18.4
Oregon	45,322	–	–	0.1	10.3	4.0	0.3	4.3
Pennsylvania	143,495	0.0	0.0	0.9	5.0	5.4	0.7	4.2
Rhode Island	12,713	–	–	0.5	13.4	13.9	9.9	20.5
South Carolina	55,756	–	–	0.1	27.1	27.3	0.1	27.1
South Dakota	10,483	–	–	0.0	13.1	13.2	0.1	13.4
Tennessee	78,340	0.0	0.0	0.1	15.3	15.5	0.0	15.5
Texas	365,410	0.0	0.0	0.5	14.2	14.4	0.3	14.4
Utah	47,959	–	–	0.2	8.4	10.0	0.6	9.4
Vermont	6,366	–	–	0.1	7.6	13.6	3.0	15.9
Virginia	98,884	–	0.0	0.1	16.6	18.5	0.2	16.7
Washington	79,570	0.0	0.1	0.5	10.6	13.1	1.7	13.3
West Virginia	20,428	0.2	0.0	0.1	12.7	13.1	0.3	13.2
Wisconsin	69,072	0.0	0.0	0.1	29.5	29.6	0.0	29.6
Wyoming	6,115	–	–	0.1	13.6	14.0	0.1	13.8
Puerto Rico	55,866	0.0	0.1	–	3.4	4.2	---	---
Virgin Islands	1,669	–	0.1	–	19.4	21.0	3.1	24.7
Guam	3,565	0.1	0.9	0.8	22.1	23.1	2.6	27.5
American Samoa	1,655	–	0.2	5.1	28.3	30.3	---	---
Commonwealth of the Northern Marianas Islands	1,449	–	0.3	–	7.4	4.1	---	---

See footnotes at end of table.

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 2001—Con.

[By place of residence]

Area	Educational attainment of mother	Live-birth order	Length of gestation	Month prenatal care began	Number of prenatal visits
Total of reporting areas[1]	1.4	0.3	1.0	2.4	3.1
Alabama	0.2	0.0	0.1	0.3	0.3
Alaska	3.4	2.1	0.4	4.1	7.2
Arizona	2.3	0.3	0.1	1.6	2.9
Arkansas	0.7	0.2	0.2	1.8	2.4
California	1.6	0.1	[2]5.9	1.6	2.8
Colorado	1.1	0.0	0.0	1.6	2.3
Connecticut	1.5	0.7	0.2	1.9	4.1
Delaware	0.6	0.1	0.1	0.2	0.4
District of Columbia	7.0	1.1	0.3	14.3	9.6
Florida	0.7	0.0	0.1	1.2	2.1
Georgia	1.2	0.4	0.1	4.4	3.9
Hawaii	0.8	0.0	0.7	2.5	2.5
Idaho	3.1	0.2	0.5	6.7	4.2
Illinois	1.1	0.1	0.2	2.5	2.7
Indiana	0.6	0.1	0.1	0.9	2.2
Iowa	0.3	0.0	0.1	0.5	1.4
Kansas	0.4	0.0	0.1	0.9	1.1
Kentucky	0.3	0.0	0.1	1.2	1.5
Louisiana	0.1	0.1	0.1	0.4	0.4
Maine	0.9	0.4	0.1	0.5	0.7
Maryland	1.4	0.2	0.4	2.3	3.4
Massachusetts	0.3	0.3	0.4	1.5	0.5
Michigan	2.2	0.2	0.1	1.9	2.5
Minnesota	2.3	0.5	0.5	4.0	4.8
Mississippi	0.3	0.1	0.1	0.6	1.1
Missouri	0.7	0.3	0.2	2.2	3.8
Montana	0.1	0.0	0.1	0.4	0.3
Nebraska	0.1	0.0	0.0	0.4	0.4
Nevada	2.9	0.8	1.0	4.1	8.1
New Hampshire	1.3	0.2	0.2	2.1	1.9
New Jersey	2.9	0.1	0.1	3.9	3.9
New Mexico	2.9	1.4	0.2	5.1	5.1
New York	1.0	0.3	0.1	4.6	2.9
North Carolina	0.2	0.0	0.0	0.6	0.6
North Dakota	0.5	0.0	0.1	0.9	0.7
Ohio	0.9	1.1	0.0	1.9	2.9
Oklahoma	0.3	0.7	0.1	1.9	0.7
Oregon	1.2	0.0	0.0	0.1	0.2
Pennsylvania	2.7	0.5	0.4	5.0	6.4
Rhode Island	2.4	1.1	0.2	2.6	3.0
South Carolina	1.1	0.1	0.1	0.9	1.0
South Dakota	0.3	–	0.0	0.3	0.3
Tennessee	0.3	0.1	0.2	1.8	1.9
Texas	2.0	1.1	0.9	3.2	6.7
Utah	1.6	0.3	0.1	2.2	2.8
Vermont	0.9	0.5	0.2	4.0	2.2
Virginia	1.0	0.0	0.0	0.3	1.1
Washington	6.1	1.4	0.8	8.2	9.7
West Virginia	0.6	0.0	0.1	3.4	2.0
Wisconsin	0.3	0.0	0.0	0.3	0.4
Wyoming	0.3	–	0.1	0.4	0.6
Puerto Rico	0.3	0.0	0.1	0.3	0.1
Virgin Islands	1.7	1.3	0.6	0.1	2.0
Guam	1.6	1.5	0.2	1.7	2.6
American Samoa	---	–	---	---	---
Commonwealth of the Northern Marianas Islands	3.0	0.7	0.8	2.0	2.1

See footnotes at end of table.

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 2001—Con.

[By place of residence]

Area	Birthweight	5-minute Apgar score	Medical risk factors	Tobacco use	Alcohol use	Weight gain
Total of reporting areas[1]	0.1	0.4	0.9	0.7	0.9	7.0
Alabama	0.1	0.3	0.0	0.1	0.1	3.6
Alaska	0.4	0.6	2.7	0.9	1.1	7.6
Arizona	0.1	0.3	0.0	1.2	1.3	17.3
Arkansas	0.1	3.3	0.1	0.7	0.8	7.7
California	0.0	---	0.0	---	---	---
Colorado	0.0	0.3	0.0	0.3	0.3	3.4
Connecticut	0.0	0.6	2.4	1.0	1.1	6.9
Delaware	0.1	0.2	0.0	0.1	0.1	0.8
District of Columbia	0.0	1.0	–	0.0	0.0	15.1
Florida	0.1	0.2	0.0	0.1	0.1	5.8
Georgia	0.0	0.4	0.4	0.5	0.5	10.0
Hawaii	0.1	0.5	0.4	0.1	0.1	14.4
Idaho	0.1	0.6	0.4	0.6	0.7	10.9
Illinois	0.1	0.3	0.0	0.2	0.1	4.3
Indiana	0.4	0.3	0.1	[4]0.2	0.2	2.8
Iowa	0.1	0.3	0.1	0.1	0.1	0.7
Kansas	0.0	0.4	[3]0.2	0.2	0.2	0.2
Kentucky	0.2	0.4	4.6	2.7	3.2	8.0
Louisiana	0.0	0.3	0.1	0.1	0.1	5.6
Maine	0.1	0.2	0.1	0.9	1.3	1.7
Maryland	0.0	0.5	0.0	0.2	0.2	4.5
Massachusetts	0.4	0.4	0.5	0.3	0.2	0.8
Michigan	0.1	0.3	0.0	1.1	1.1	7.7
Minnesota	0.1	0.4	8.2	8.1	8.2	17.9
Mississippi	0.0	0.2	0.1	0.3	0.3	5.6
Missouri	0.1	0.5	0.1	0.4	0.4	3.1
Montana	0.1	0.4	0.0	0.8	1.1	1.0
Nebraska	0.0	0.1	0.0	0.0	0.0	1.6
Nevada	0.0	1.1	8.6	1.6	1.6	7.7
New Hampshire	0.1	0.2	0.0	0.6	0.6	4.2
New Jersey	0.1	0.3	0.8	0.7	0.8	5.8
New Mexico	0.2	3.4	0.0	1.3	1.4	8.8
New York	0.1	0.2	2.3	[4]0.2	0.2	5.9
North Carolina	0.0	0.3	0.0	0.2	0.2	2.3
North Dakota	0.1	0.2	0.2	0.5	0.9	2.9
Ohio	0.1	0.2	0.0	0.3	0.3	3.2
Oklahoma	0.1	1.1	1.4	0.8	0.9	1.7
Oregon	0.0	0.4	0.7	0.8	0.8	1.9
Pennsylvania	0.1	0.4	0.1	0.9	1.0	11.1
Rhode Island	0.1	0.3	6.0	1.7	1.8	13.2
South Carolina	0.0	0.2	0.0	0.1	0.1	1.6
South Dakota	0.0	0.3	0.0	[5]0.1	[5]0.2	1.1
Tennessee	0.0	0.2	0.0	0.2	0.2	9.3
Texas	0.1	---	[6]1.2	1.1	1.1	12.6
Utah	0.1	0.3	0.1	0.7	0.7	4.1
Vermont	0.3	0.3	0.3	0.9	0.5	2.7
Virginia	0.1	0.2	0.0	0.0	0.0	3.6
Washington	0.3	0.6	12.7	2.5	9.7	23.8
West Virginia	0.1	0.3	1.9	0.8	1.4	9.1
Wisconsin	0.0	0.4	0.1	0.1	0.1	2.2
Wyoming	0.0	0.2	0.0	0.2	0.2	1.8
Puerto Rico	0.0	0.1	0.0	0.0	0.0	0.1
Virgin Islands	0.1	2.2	2.5	0.4	0.5	16.2
Guam	0.2	0.9	2.1	0.5	0.6	4.8
American Samoa	–	---	---	---	---	---
Commonwealth of the Northern Marianas Islands	0.6	1.5	---	[5]0.6	[5]0.6	---

See footnotes at end of table.

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 2001—Con.

[By place of residence]

Area	Obstetric procedures	Complications of labor and/or delivery	Method of delivery	Abnormal conditions of newborn	Congenital anomalies
Total of reporting areas[1]	0.5	0.6	0.5	1.0	0.9
Alabama	0.0	0.0	0.4	0.0	0.0
Alaska	2.6	2.8	0.5	2.3	2.2
Arizona	0.0	0.0	0.4	0.0	[11]0.3
Arkansas	0.1	0.1	0.3	0.1	0.1
California	0.0	0.0	0.0	0.0	0.0
Colorado	0.0	0.0	–	0.0	0.2
Connecticut	2.3	2.1	0.6	2.7	2.8
Delaware	0.0	–	0.0	0.0	–
District of Columbia	–	–	0.1	0.0	–
Florida	0.0	0.0	0.7	0.0	0.0
Georgia	0.0	0.0	0.5	0.0	0.0
Hawaii	0.2	0.3	0.4	0.2	0.2
Idaho	0.3	0.4	0.5	0.6	0.7
Illinois	0.0	0.0	0.4	0.0	0.1
Indiana	0.0	0.1	0.5	0.1	0.1
Iowa	0.0	0.1	0.5	0.0	0.1
Kansas	0.1	0.1	0.3	0.2	0.2
Kentucky	2.5	4.7	3.2	6.8	5.5
Louisiana	0.1	0.1	0.2	0.1	0.1
Maine	0.0	0.1	0.2	0.1	0.1
Maryland	0.0	0.0	0.2	0.0	0.0
Massachusetts	0.5	0.5	0.6	0.6	0.9
Michigan	0.0	0.0	0.4	0.0	0.0
Minnesota	6.4	8.1	2.6	9.2	9.2
Mississippi	0.0	0.1	0.3	0.0	0.0
Missouri	0.1	0.1	0.6	0.1	0.1
Montana	0.0	0.0	0.3	0.0	0.0
Nebraska	0.0	0.1	0.3	[7]0.0	0.0
Nevada	1.5	4.1	1.2	3.1	7.8
New Hampshire	0.0	0.0	0.4	0.0	0.1
New Jersey	0.1	0.6	0.6	4.3	2.1
New Mexico	0.0	0.0	0.5	0.0	---
New York	0.3	0.5	0.4	[8]2.3	2.2
North Carolina	0.0	0.0	0.5	0.0	0.0
North Dakota	0.2	0.1	1.8	0.2	0.2
Ohio	0.0	0.0	0.6	0.0	0.0
Oklahoma	1.3	1.6	1.6	2.9	[11]3.0
Oregon	0.0	0.0	0.5	0.0	0.0
Pennsylvania	0.0	0.0	0.0	0.1	0.0
Rhode Island	6.2	6.0	0.4	10.8	10.9
South Carolina	0.0	0.0	0.7	0.0	0.0
South Dakota	–	0.0	0.3	0.0	0.0
Tennessee	0.0	0.0	0.5	0.0	0.0
Texas	0.0	[9]0.0	0.7	[7]0.0	0.1
Utah	0.0	0.0	0.0	0.1	0.1
Vermont	0.3	0.3	0.1	0.3	0.3
Virginia	0.0	0.0	0.3	0.2	0.0
Washington	10.1	11.9	0.4	12.4	12.5
West Virginia	0.2	1.0	0.3	3.1	0.7
Wisconsin	0.0	0.1	0.0	[10]0.1	0.1
Wyoming	–	–	0.0	–	0.0
Puerto Rico	0.1	0.1	0.0	0.0	0.1
Virgin Islands	1.4	2.9	0.9	4.4	3.8
Guam	1.1	3.2	0.4	2.3	2.2
American Samoa	---	---	---	---	---
Commonwealth of the Northern Marianas Islands	---	---	1.6	---	---

0.0 Quantity more than zero but less than 0.05. --- Data not available. – Quantity zero.

[1]Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas.

[2]California reports date last normal menses began but does not report clinical estimate of gestation. [3]Kansas does not report Rh sensitization.

[4]Indiana and New York State report tobacco use but do not report the average number of cigarettes smoked per day in standard categories; data for New York City are reported in standard categories.

[5]South Dakota and the Commonwealth of the Northern Marianas report tobacco and alcohol use but do not report the average number of cigarettes smoked per day or the average number of drinks per week.

[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 and assisted ventilation of 30 minutes or more.

does not report anesthetic complications and fetal distress. [10]Wisconsin does not report fetal alcohol syndrome.

of "Other central nervous system anomalies" may be overstated for Arizona and Oklahoma for 2001.

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)*

- Fever (>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

Population denominators

Birth and fertility rates for 2001 shown in tables 1, 3–6, 8, 9, 13, 14, A, and B are based on populations projected from the 1990 Census, estimated as of July 1, 2001. These populations are shown in tables II and III. The population estimates have been provided by the U.S. Bureau of the Census (7) and are based on the 1990 census counts by age, race, and sex, 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 (137).

The U.S.- and State-level birth and fertility rates in this report are based on estimates projected from the 1990 census because detailed populations based on the 2000 census were not available when this report was prepared. As a result, rates are generally larger than would be the case if 2000-based estimates were used. The magnitude of the overestimate will vary by population subgroup; overestimates are likely greatest for those of Hispanic origin. A comparison of the estimates for the total population based on the 1990 and 2000 censuses show that the total 2001 population used in this report is 2.5 percent lower than the estimated population based on the 2000 census (138). A comparison of summary 2000 census results and the estimates for 2000 used in the 2000 report indicates that the total U.S. Hispanic population the 2000 report is 8 percent lower than the population based on the 2000 census (5–7). The underestimate for Hispanic women 15–44 years of age is 9.5 percent (compared with an underestimate of 2 percent for all women 15–44 years of age). Therefore, the birth and fertility rates for Hispanic women presented here are overstated because the population base is too small. There may be similar, but less pronounced effects for other population groups. Comparison between rates for the current year and for 2000, which also uses population denominators based on the 1990 census, should be affected only marginally when more accurate denominators from the 2000 census are used. Comparisons with rates for the early 1990s will be more affected. Revised rates based on the 2000 census will be presented in a forthcoming report planned for early 2003.

Rates for Hispanic subgroups for 2001 are not shown because the special population estimates for these groups, based on the 1990 census, are not available.

Birth and fertility rates by State shown in table 10 are based on State-level population estimates projected from the 1990 census provided by the U.S. Bureau of the Census that are consistent with the U.S. populations (139). 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 2001 estimates (from the 1990 census). Rates for unmarried women shown in tables 17 and 18 are based on distributions of the population by marital status as of March

Table II. Estimated total population by race, and estimated female population by age and race: United States, 2001

[Populations estimated as of July 1]

Age	All races	White	Black	American Indian	Asian or Pacific Islander
Total population	277,739,757	227,871,696	35,756,802	2,475,455	11,635,804
Female population					
15–44 years	60,139,584	47,937,842	8,723,292	591,092	2,887,358
10–14 years	9,880,471	7,727,436	1,597,050	124,733	431,252
15–19 years	9,742,425	7,686,099	1,513,573	120,207	422,546
15–17 years	5,760,522	4,538,264	895,077	73,360	253,821
18–19 years	3,981,903	3,147,835	618,496	46,847	168,725
20–24 years	9,298,249	7,342,201	1,439,985	105,013	411,050
25–29 years	8,724,955	6,827,902	1,320,214	93,755	483,084
30–34 years	9,905,270	7,855,968	1,412,512	91,006	545,784
35–39 years	10,949,346	8,812,256	1,524,550	90,394	522,146
40–44 years	11,519,339	9,413,416	1,512,458	90,717	502,748
45–49 years	10,393,696	8,572,211	1,300,698	78,420	442,367

NOTE: These population counts are projected from the 1990 census; see Technical Notes.

SOURCE: U.S. Census Bureau. See reference 7.

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, 2001

[Populations estimated as of July 1]

	Hispanic					Non-Hispanic		
Age	Total	Mexican	Puerto Rican	Cuban	Other Hispanic[1]	Total[2]	White	Black
Total population	33,580,089	---	---	---	---	244,159,668	197,247,498	33,867,772
Female population								
15–44 years	7,915,469	---	---	---	---	52,224,115	40,737,072	8,272,507
10–14 years	1,485,159	---	---	---	---	8,395,312	6,381,537	1,510,992
15–19 years	1,404,972	---	---	---	---	8,337,453	6,409,702	1,435,133
15–17 years	827,199	---	---	---	---	4,933,323	3,788,153	848,462
18–19 years	577,773	---	---	---	---	3,404,130	2,621,549	586,671
20–24 years	1,389,655	---	---	---	---	7,908,594	6,073,152	1,364,829
25–29 years	1,303,247	---	---	---	---	7,421,708	5,637,565	1,249,912
30–34 years	1,321,283	---	---	---	---	8,583,987	6,656,246	1,335,639
35–39 years	1,320,324	---	---	---	---	9,629,022	7,614,051	1,444,897
40–44 years	1,175,988	---	---	---	---	10,343,351	8,346,356	1,442,097
45–49 years	940,263	---	---	---	---	9,453,433	7,718,844	1,244,594

--- Data not available.

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

[2]Includes races other than white and black.

NOTE: These population counts are projected from the 1990 census; see Technical Notes.

SOURCE: U.S. Census Bureau. See reference 7.

2001 provided by the U.S. Bureau of the Census (30) which have been adjusted to July 2001 population levels (7) by the Division of Vital Statistics, NCHS (31,134). The 2001 population levels are consistent with the 1990 census. 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, 2001 (7).

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 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 (0.6 percent) were actually to 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 13 percent of all birth certificates, the age is missing from more than a third of 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, 6, and 11 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 aged 40–44 years 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 significance testing for natality data

The number of births reported for an area is essentially a complete count, because more than 99 percent of all births are registered. Although this number is not subject to sampling error, it may be affected by nonsampling errors in the registration process such as mistakes in recording the mother's residence or age during the registration process.

When the number of births is used for analytic purposes (that is, the comparison of numbers, rates, and percents over time, for different areas, or between different groups), the number of events that *actually* occurred can be thought of as one outcome in a large series of possible results that *could have* occurred under the same (or similar) circumstances. When considered in this way, the number of births is subject to random variation and a probable range of values estimated from the actual figures, according to certain statistical assumptions.

The confidence interval is the range of values for the number of births, birth rates, or percent of births that you could expect in 95 out of 100 cases. The confidence limits are the end points of this range of values (the highest and lowest values). Confidence limits tell you how much the number of events or rates could vary under the same (or similar) circumstances.

Confidence limits for numbers, rates, and percents can be estimated from the actual number of vital events. Procedures differ for rates and percents and also differ depending on the number of births on which these statistics are based. Below are detailed procedures and examples for each type of case.

When the number of vital events is large, the distribution is assumed to follow a normal distribution (where the relative standard error is small). When the number of events is small and the probability of the event is small, the distribution is assumed to follow a Poisson probability distribution. Considerable caution should be observed in interpreting the occurrence of infrequent events.

95-percent confidence limits for numbers less than 100

When the number of births is less than 100 and the rate is small, the data are assumed to follow a Poisson probability distribution (140). Confidence limits are estimated using the following formulas:

Lower limit = $B \times L$

Upper limit = $B \times U$

where

B = number of births
L = value in table IV that corresponds to the number of events B
U = value in table IV that corresponds to the number of events B

Example

Suppose that the number of first births to American Indian women 40–44 years of age was 47. The confidence limits for this number would be:

Lower limit = $B \times L$
= 47 x 0.73476
= 35

Upper limit = $B \times U$
= 47 x 1.32979
= 63

This means that the chances are 95 out of 100 that the actual number of first births to American Indian women 40–44 years of age would lie between 35 and 63.

95-percent confidence limits for numbers of 100 or more

When the number of events is greater than 100, the data are assumed to approximate a normal distribution. Formulas for 95-percent confidence limits are:

Lower limit = $B - (1.96 \times \sqrt{B})$

Upper limit = $B + (1.96 \times \sqrt{B})$

where

B = number of births

Example

Suppose that the number of first births to white women 40–44 years of age was 14,108. The 95-percent confidence limits for this number would be:

Lower limit = $14{,}108 - (1.96 \times \sqrt{14{,}108})$
= 14,108 – 233
= 13,875

Upper limit = $14{,}108 + (1.96 \times \sqrt{14{,}108})$
= 14,108 + 233
= 14,341

This means that the chances are 95 out of 100 that the actual number of first births to white women 40–44 years of age would lie between 13,875 and 14,341.

Computing confidence intervals for rates

The same statistical assumptions can be used to estimate the variability in birth rates. Again, one formula is used for rates based on numbers of events less than 100, and another formula for rates based on numbers of 100 or greater. For our purposes, assume that the denominators of these rates (the population estimates) have no error. While this assumption is technically correct *only* for denominators based on the census that occurs every 10 years, the error in intercensal population estimates is usually small, difficult to measure,

Table IV. Values of L and U for calculating 95-percent confidence limits for numbers of events and rates when the number of events is less than 100

N	L	U	N	L	U
1	0.02532	5.57164	51	0.74457	1.31482
2	0.12110	3.61234	52	0.74685	1.31137
3	0.20622	2.92242	53	0.74907	1.30802
4	0.27247	2.56040	54	0.75123	1.30478
5	0.32470	2.33367	55	0.75334	1.30164
6	0.36698	2.17658	56	0.75539	1.29858
7	0.40205	2.06038	57	0.75739	1.29562
8	0.43173	1.97040	58	0.75934	1.29273
9	0.45726	1.89831	59	0.76125	1.28993
10	0.47954	1.83904	60	0.76311	1.28720
11	0.49920	1.78928	61	0.76492	1.28454
12	0.51671	1.74680	62	0.76669	1.28195
13	0.53246	1.71003	63	0.76843	1.27943
14	0.54671	1.67783	64	0.77012	1.27698
15	0.55969	1.64935	65	0.77178	1.27458
16	0.57159	1.62394	66	0.77340	1.27225
17	0.58254	1.60110	67	0.77499	1.26996
18	0.59266	1.58043	68	0.77654	1.26774
19	0.60207	1.56162	69	0.77806	1.26556
20	0.61083	1.54442	70	0.77955	1.26344
21	0.61902	1.52861	71	0.78101	1.26136
22	0.62669	1.51401	72	0.78244	1.25933
23	0.63391	1.50049	73	0.78384	1.25735
24	0.64072	1.48792	74	0.78522	1.25541
25	0.64715	1.47620	75	0.78656	1.25351
26	0.65323	1.46523	76	0.78789	1.25165
27	0.65901	1.45495	77	0.78918	1.24983
28	0.66449	1.44528	78	0.79046	1.24805
29	0.66972	1.43617	79	0.79171	1.24630
30	0.67470	1.42756	80	0.79294	1.24459
31	0.67945	1.41942	81	0.79414	1.24291
32	0.68400	1.41170	82	0.79533	1.24126
33	0.68835	1.40437	83	0.79649	1.23965
34	0.69253	1.39740	84	0.79764	1.23807
35	0.69654	1.39076	85	0.79876	1.23652
36	0.70039	1.38442	86	0.79987	1.23499
37	0.70409	1.37837	87	0.80096	1.23350
38	0.70766	1.37258	88	0.80203	1.23203
39	0.71110	1.36703	89	0.80308	1.23059
40	0.71441	1.36172	90	0.80412	1.22917
41	0.71762	1.35661	91	0.80514	1.22778
42	0.72071	1.35171	92	0.80614	1.22641
43	0.72370	1.34699	93	0.80713	1.22507
44	0.72660	1.34245	94	0.80810	1.22375
45	0.72941	1.33808	95	0.80906	1.22245
46	0.73213	1.33386	96	0.81000	1.22117
47	0.73476	1.32979	97	0.81093	1.21992
48	0.73732	1.32585	98	0.81185	1.21868
49	0.73981	1.32205	99	0.81275	1.21746
50	0.74222	1.31838			

and therefore not considered. (See however, discussion of "population denominators" earlier in the Technical Notes.)

95-percent confidence limits for rates based on fewer than 100 events

When the number of events in the numerator is less than 20, an asterisk is shown in place of the rate because there were too few births to compute a statistically reliable rate. When the number of events in the numerator is greater than 20 but less than 100, the confidence interval for a rate can be estimated using the two formulas that follow and the values in table IV.

Lower limit = $R \times L$

Upper limit = $R \times U$

where

R = birth rate
L = value in table IV that corresponds to the number of events B
U = value in table IV that corresponds to the number of events B

Example

Suppose that the first birth rate for American Indian women 40–44 years of age was 0.50 per thousand, based on 47 births in the numerator. Using table IV:

Lower limit = 0.50 x 0.73476 = 0.37

Upper limit = 0.50 x 1.32979 = 0.66

This means that the chances are 95 out of 100 that the actual first birth rate for American Indian women 40–44 years of age lies between 0.37 and 0.66.

95-percent confidence limits for rates when the numerator is 100 or more

In this case, use the following formula for the birth rate R based on the number of births B:

$$\text{Lower limit} = R - [1.96 \times (R / \sqrt{B})]$$

$$\text{Upper limit} = R + [1.96 \times (R / \sqrt{B})]$$

where

R = the birth rate
B = the number of births

Example

Suppose that the first birth rate for white women 40–44 years of age was 1.55 per thousand, based on 14,108 births in the numerator. Therefore, the 95-percent confidence interval would be:

$$\text{Lower limit} = 1.55 - [1.96 \times (1.55 / \sqrt{14{,}108})]$$
$$= 1.55 - 0.026$$
$$= 1.52$$

$$\text{Upper limit} = 1.55 + [1.96 \times (1.55 / \sqrt{14{,}108})]$$
$$= 1.55 + 0.026$$
$$= 1.58$$

This means that the chances are 95 out of 100 that the actual first birth rate for white women 40–44 years of age lies between 1.52 and 1.58.

Computing 95-percent confidence intervals for percents

In many instances we need to compute the confidence intervals for percents. Percents derive from a binomial distribution. As with birth rates, an asterisk will be shown for any percent which is based on fewer than 20 births in the numerator. We easily compute a 95-percent confidence interval for a percent when the following conditions are met:

$$B \times p \geq 5 \text{ and } B \times q \geq 5$$

where

B = number of births in the denominator
p = percent divided by 100
$q = 1 - p$

For natality data, these conditions will be met except for very rare events in small subgroups. If the conditions are *not* met, the variation in the percent will be so large as to render the confidence intervals meaningless. When these conditions are met the 95-percent confidence interval can be computed using the normal approximation of the binomial. The 95-percent confidence intervals are computed by the following formulas:

$$\text{Lower limit} = p - [1.96 \times (\sqrt{p \times q / B})]$$

$$\text{Upper limit} = p + [1.96 \times (\sqrt{p \times q / B})]$$

where

p = percent divided by 100
$q = 1 - p$
B = number of births in the denominator

Example

Suppose that the percent of births to Hispanic women in Arizona that were to unmarried women was 49.7 percent. This was based on 14,751 births in the numerator and 29,682 births in the denominator. First we test to make sure we can use the normal approximation of the binomial:

29,682 x 0.497 = 14,752
29,682 x (1 – 0.497) = 29,682 x 0.503 = 14,930

Both 14,752 and 14,930 are greater than 5 so we can proceed. The 95-percent confidence interval would be:

$$\text{Lower limit} = 0.497 - [1.96 \times (\sqrt{0.497 \times 0.503 / 29{,}682})]$$
$$= 0.497 - 0.006$$
$$= 0.491 \text{ or } 49.1 \text{ percent}$$

$$\text{Upper limit} = 0.497 + [1.96 \times (\sqrt{0.497 \times 0.503 / 29{,}682})]$$
$$= 0.497 + 0.006$$
$$= 0.503 \text{ or } 50.3 \text{ percent}$$

This means that the chances are 95 out of 100 that the actual percent of births to unmarried Hispanic women in Arizona lies between 49.1 and 50.3 percent.

Significance testing

One or both of the rates is based on fewer than 100 cases

To compare two rates, when one or both of those rates are based on less than 100 cases, you first compute the confidence intervals for both rates. Then you check to see if those intervals overlap. If they **do** overlap, the difference is not statistically significant at the 95-percent level. If they **do not** overlap, the difference is indeed statistically significant.

Example

Suppose that the first birth rate for American Indian women 40–44 years of age was 0.70 per 1,000 in year X and 0.50 in year Y. Is the rate for year X significantly higher than the rate for year Y? The two rates are based on 63 events in year X and 47 events in year Y. Both rates are based on fewer than 100 events; therefore, the first step is to compute the confidence intervals for both rates.

	Lower Limit	Upper Limit
Year X	0.54	0.90
Year Y	0.37	0.66

These two confidence intervals overlap. Therefore, the first birth rate for American Indian women 40–44 in year X is not significantly higher (at the 95-percent confidence level) than the rate in year Y.

Both rates are based on 100 or more events

When both rates are based on 100 or more events, the difference between the two rates, irrespective of sign (+/-), is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two rates.

$$1.96\sqrt{\frac{R_1^2}{N_1}+\frac{R_2^2}{N_2}}$$

where

R_1 = first rate
R_2 = second rate
N_1 = first number of births
N_2 = second number of births

If the difference is **greater** than this statistic, then the difference would occur by chance less than 5 times out of 100. If the difference is **less than or equal** to this statistic, the difference might occur by chance more than 5 times out of 100. We say that the difference is not statistically significant at the 95-percent confidence level.

Example

Is the first birth rate for black women 40–44 years of age (1.08 per 1,000) significantly lower than the comparable rate for white women (1.55)? Both rates are based on more than 100 births (1,535 for black women and 14,108 for white women). The difference between the rates is 1.55 – 1.08 = .47. The statistic is then calculated as follows:

$$1.96\sqrt{\frac{1.08^2}{1{,}535}+\frac{1.55^2}{14{,}108}}$$

$$= 1.96 \times \sqrt{([1.166/1{,}535] + [2.403/14{,}108])}$$

$$= 1.96 \times \sqrt{0.00076 + 0.00017}$$

$$= 1.96 \times \sqrt{0.00093}$$

$$= 1.96 \times 0.03$$

$$= 0.06$$

The difference between the rates (.47) is greater than this statistic (.06). Therefore, the difference is statistically significant at the 95-percent confidence level.

Testing differences between two percents

When testing the difference between two percents, both percents must meet the following conditions:

$$B \times p \geq 5 \text{ and } B \times q \geq 5$$

where

B = number of births in the denominator
p = percent divided by 100
$q = 1 - p$

When both percents meet these conditions then the difference between the two percents is considered statistically significant if it is **greater** than the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two percents.

$$1.96\sqrt{p(1-p)\left(\frac{1}{B_1}+\frac{1}{B_2}\right)}$$

where

B_1 = number of births in the denominator for the first percent
B_2 = number of births in the denominator for the second percent

$$p = \frac{B_1 p_1 + B_2 p_2}{B_1 + B_2}$$

p_1 = the first percent
p_2 = the second percent

Example

Is the percent of births to Hispanic women that were to unmarried women higher in New Mexico (50.2) than in Arizona (49.7)? Suppose that the number in the denominator was 13,714 in New Mexico and 29,682 in Arizona. The necessary conditions are met for both percents (calculations not shown). The difference between the two percents is .502- .497 = .005. The statistic is then calculated as follows:

$$1.96\sqrt{0.499(0.501)\,(0.000106609)} = 1.96 \times \sqrt{0.000026652}$$
$$= 1.96 \times 0.005162563$$
$$= 0.010$$

The difference between the percents (0.005) is less than this statistic (0.010). Therefore, the difference is not statistically significant at the 95-percent confidence level.

Information on computing confidence intervals for and testing differences between rates for Hispanic subgroups is available elsewhere (4).

Definitions of medical terms

The 1989 revision of the U.S. Standard Certificate of Live Birth includes several maternal and infant health items in checkbox format, including obstetric procedures, medical risk factors, complications of labor and delivery, abnormal conditions of the newborn, and congenital anomalies of the child (**figure I**). The definitions which follow are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the National Association of Public Health Statistics and Information Systems, formerly known as the Association for Vital Records and Health Statistics (141).

Medical risk factors for this pregnancy

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

Cardiac disease—Disease of the heart.

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

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

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

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

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

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

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

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

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

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

Previous preterm or small-for-gestational-age infant—Previous birth of an infant prior to term (before 37 completed weeks of gestation) or of an infant weighing less than the 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.

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

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

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

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

Complications of labor and/or delivery

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

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

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

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

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

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

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

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

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

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

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

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

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

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 (133); twin births (121); trends in teenage births (9, 142); cesarean deliveries (91), attendant at birth, place of delivery, and obstetric procedures (79, 81); births to unmarried mothers (31); trends in pregnancies and pregnancy rates (10,11), and trends in smoking (48).

Contents

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

Division of Vital Statistics

Director, Mary Anne Freedman

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Internet: www.cdc.gov/nchs

DEPARTMENT OF
HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention
National Center for Health Statistics
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