

Births: Final Data for 2004

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

Abstract

Objectives—This report presents 2004 data on U.S. births according to a wide variety of characteristics. Data are presented for maternal demographic characteristics including age, live-birth order, race, Hispanic origin, marital status, and educational attainment; maternal lifestyle and health characteristics (medical risk factors, weight gain, and tobacco use); medical care utilization by pregnant women (prenatal care, obstetric procedures, characteristics of labor and/or delivery, attendant at birth, and method of delivery); and infant

characteristics (period of gestation, birthweight, Apgar score, 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 4.1 million births that occurred in 2004 are presented.

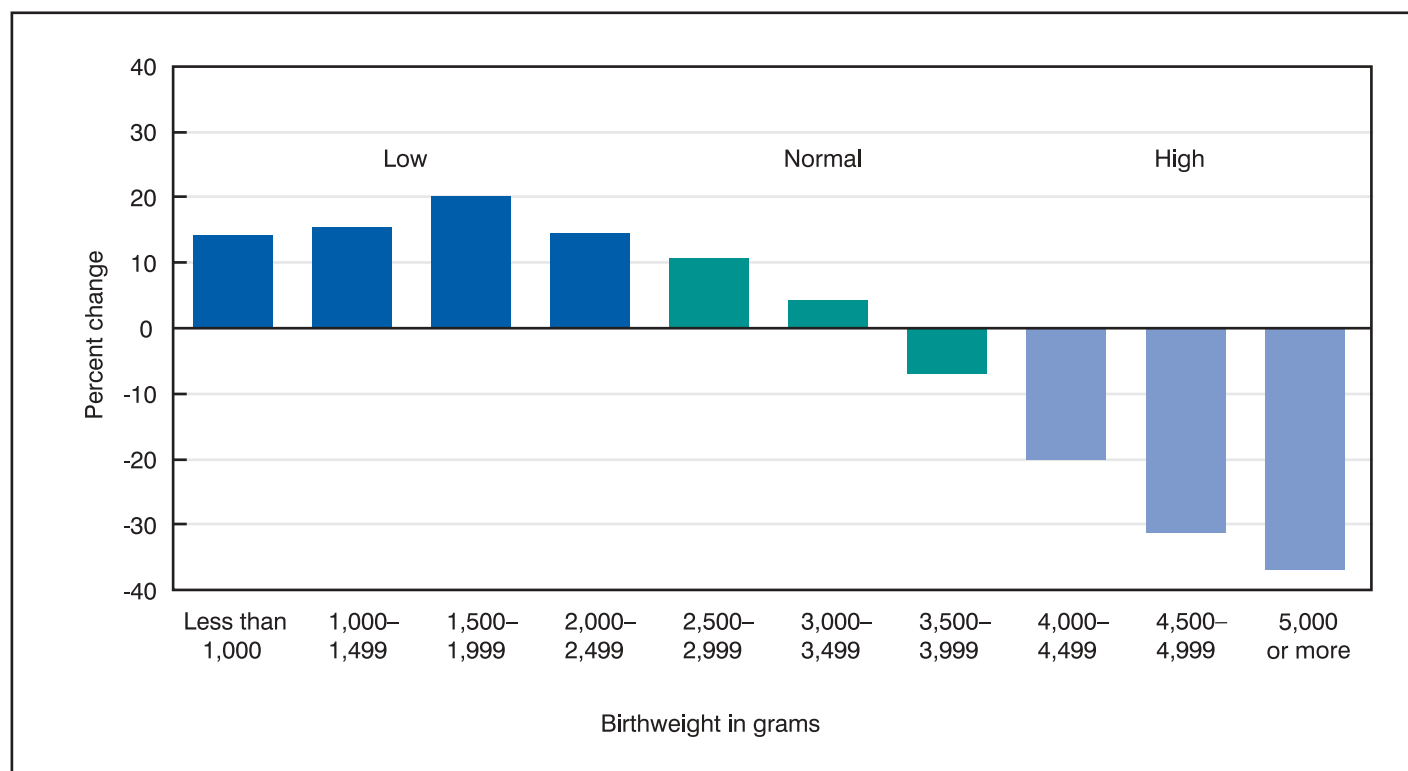


Figure 1. Percentage change in birthweight by 500 gram intervals: United States, 1990 and 2004

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Denominators for population-based rates are post-censal estimates derived from the U.S. 2000 census.

Results—In 2004, 4,112,052 births were registered in the United States, less than 1 percent more than the number in 2003. The crude birth rate declined slightly; the general fertility rate increased by less than 1 percent. Childbearing among teenagers and women aged 20–24 years declined to record lows. Rates for women aged 25–34 and 45–49 years were unchanged, whereas rates for women aged 35–44 years increased. All measures of unmarried childbearing rose in 2004. Smoking during pregnancy continued to decline. No improvement was seen in the timely initiation of prenatal care. The cesarean delivery rate jumped 6 percent to another all-time high, whereas the rate of vaginal birth after previous cesarean fell by 13 percent. Preterm and low birthweight rates continued their steady rise. The twinning rate increased, but the rate of triplet and higher order multiple births was down slightly.

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

Highlights

- In 2004, 4,112,052 births were registered in the United States, 22,102 more than in 2003. Births increased for Hispanic women, were essentially unchanged for non-Hispanic black women, and declined for non-Hispanic white women.
- The crude birth rate for the U.S. in 2004 declined slightly from 2003, to 14.0 live births per 1,000 total population. However, the general fertility rate in 2004 increased slightly from the 2003 rate, to 66.3 live births per 1,000 women aged 15–44 years. Fertility rates for non-Hispanic white and non-Hispanic black women were essentially unchanged between 2003 and 2004; the rate for Hispanic women increased by 1 percent. Fertility also increased for Asian or Pacific Islander (API) women, but was essentially unchanged for American Indian or Alaska Native (AIAN) women.
- The **birth rate for teenagers** declined 1 percent in 2004 to 41.1 births per 1,000 women aged 15–19 years. The rate has dropped one-third since its recent peak in 1991. The rates for teenage

subgroups 15–17 and 18–19 years each fell 1 percent, to 22.1 and 70.0, respectively. These reductions were the smallest since the downward trend began after 1991. The rate for the youngest teenagers, 10–14 years, rose slightly from 0.6 to 0.7 per 1,000 in 2004, the first increase since 1988–89. Among population subgroups, rates fell 2 to 3 percent for non-Hispanic white and black teenagers 15–19 years. Since 1991, the rate for black teenagers has fallen almost one-half, from 118.2 to 63.1 per 1,000, whereas rates for non-Hispanic white, AIAN, and API teenagers dropped 36–38 percent. The rate for Hispanic teenagers declined 21 percent over this period, but there was very little change in the rate for 2004.

- The **birth rate for women aged 20–24 years** declined to 101.7 births per 1,000 women in 2004, marking another record low. The birth rate for **women aged 25–29 years**, 115.5 births per 1,000 women, was not significantly different from the rate in 2003. The **birth rate for women aged 30–34 years** was 95.3 births per 1,000, the highest level since 1964 but not significantly different from the rate in 2003, whereas the **birth rate for women aged 35–39 years** was up 4 percent, to 45.4 births per 1,000 women. The **birth rate for women aged 40–44 years** rose by 2 percent, to 8.9. The birth rate for women aged 45–49 years was unchanged. A total of 374 births to women aged 50–54 years were reported in 2004.
- The **first birth rate** declined slightly between 2003 and 2004, to 26.4 births per 1,000 women aged 15–44 years. First birth rates for women aged 10–14 and 45–49 years were unchanged between 2003 and 2004, whereas the rates for women in all 5-year age groups 15–34 years decreased by 1 percent. The rates for women aged 35–39 and 40–44 years increased by 3 and 5 percent, respectively.
- The **mean or average age at first birth** for the United States in 2004 was 25.2 years, unchanged from 2003. Mean age at first birth for non-Hispanic white, non-Hispanic black, and Hispanic women was unchanged between 2003 and 2004. Mean age at first birth was highest for API women, 28.4 years, and lowest for American Indian or Alaska Native women, 21.8 years.
- For the second consecutive year, all measures of **childbearing by unmarried women** rose. The **birth rate** rose 3 percent to 46.1 per 1,000 unmarried women aged 15–44 years in 2004, essentially matching the previous high point recorded in 1994. During the years 1995–2002 the rate was fairly stable. The **number of births to unmarried women** climbed 4 percent, to 1,470,189, the highest number ever recorded in the more than six decades for which comparable national statistics are available. The **proportion of all births to unmarried women** increased to 35.8 percent in 2004. Birth rates for unmarried teenagers continued to fall, though more modestly than in previous years, whereas rates for unmarried women aged 20 years and over continued to increase. Unmarried teenagers accounted for only 24 percent of all non-marital births in 2004, whereas unmarried women in their twenties accounted for 59 percent.
- **Cigarette smoking** during pregnancy was reported in two distinct formats in 2004. For the nearly three-quarters of births in states asking about tobacco use with a simple “yes/no” question, 10.2 percent of their mothers reported smoking in 2004, down slightly compared with 2003 (10.4 percent). Among the seven

states that reported this information from a revised question asking for tobacco use in each trimester of pregnancy, 16.3 percent reported smoking at some point during pregnancy. The higher level reflects both higher smoking prevalence in those states and the more specific focus of the revised question, capturing smoking at three separate points during pregnancy. Infants born to mothers who smoke are substantially more likely than infants born to nonsmokers to be low birthweight (LBW). For the seven states collecting information using the revised question, the LBW levels were 11.9 percent for births to smokers and 7.2 percent for non-smokers.

- **Timely initiation of prenatal care** does not appear to have improved in the United States in 2004. For the 41-state reporting area for which comparable data are available, 83.9 percent of women began care in the first trimester of pregnancy, essentially unchanged from 2003. No improvement was reported in the percentage of women with late (care beginning in the last trimester of pregnancy) or no care for 2003–2004 (3.6 percent). Prenatal care utilization had improved modestly, but fairly steadily between 1990 and 2003.
- The **rate of induction of labor** increased for 2003–2004 to 21.2 percent. This is more than twice the 1990 rate (9.5 percent).
- Between 2003 and 2004, the **rate of cesarean delivery** increased by 6 percent to 29.1 percent of all births, the highest rate ever reported in the U.S. After falling between 1989 and 1996, the cesarean rate has risen by 41 percent. The primary rate increased 8 percent, and the rate of vaginal birth after cesarean delivery (VBAC) fell by 13 percent for 2003–2004.
- The **preterm birth rate** rose 2 percent in 2004, to 12.5 percent of all births. The percentage of infants delivered preterm (less than 37 completed weeks of gestation) has climbed 18 percent since 1990. Increases for 2003–2004 were reported among both very preterm (less than 32 weeks) and moderately preterm (32–36 weeks) births. Although multiple births have contributed importantly to this recent rise, preterm rates for singletons have also increased, up 11 percent since 1990. Nearly all of the increase in the singleton preterm rate is among late preterm (34–36 week) births. All preterm infants are at heightened risk of morbidity and mortality compared with infants born at higher gestational ages.
- The **low birthweight (LBW) rate** rose to 8.1 percent in 2004, the highest level reported since 1969. The percentage of infants born at less than 2,500 grams has increased 16 percent since 1990. In contrast, large reductions in the percentage of heavier birthweight infants (3,500 grams or greater or 7 lb 12 oz or more) are seen since 1990 ([Figure 1](#)). Increases in LBW between 2003 and 2004 are seen for very low (less than 1,500 grams) and moderately LBW (1,500–2,499 grams) infants, and for each of the largest racial/ethnic groups. The LBW rate for infants born in single deliveries (multiple births have a large influence on overall LBW levels) also rose for 2003–2004, and is up 7 percent since 2000.
- The **twin birth rate** rose 2 percent in 2004, to 32.3 twins per 1,000 births, another record high. The twinning rate has climbed 42 percent since 1990 and 70 percent since 1980. The rate of triplet/+ births declined 6 percent for 2004, to 176.9 per 100,000 births. The triplet/+ birth rate soared 400 percent between 1980 and 1998, but has trended slightly downward since. Twins and triplets/+ are on average born much smaller than infants born in single deliveries.

On average twins weigh more than 2 lb and triplets more than 3 lb less than singletons.

Introduction

This report presents detailed data on numbers and characteristics of births in 2004, 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 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 LBW and preterm birth, be continuously monitored, because these variables are important predictors of infant mortality and morbidity.

A report of preliminary birth statistics for 2004 presented data on selected topics based on a substantial sample (99.1 percent) of the 2004 birth file (1). Findings for the selected measures (age, race, Hispanic origin, marital status of mother, live-birth order, prenatal care, maternal smoking, cesarean delivery, preterm births, and LBW) 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 file that is issued for each year. The data file has been available on tape and in CD-ROM format since 1968, and a selection of tables of detailed data are available on the National Center for Health Statistics (NCHS) website at <http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab2001.htm> (2,3).

The 1989 and the 2003 Revisions of the U.S. Certificate of Live Birth

This report includes 2004 data on items that are collected on *both* the 1989 Revision of the U.S. Standard Certificate of Live Birth (unrevised) and the 2003 Revision of the U.S. Standard Certificate of Live Birth (revised). The 2003 revision is described in detail elsewhere (4–6). Pennsylvania and Washington implemented the revised certificate in 2003; five states, Idaho, Kentucky, New York (excluding New York City), South Carolina, and Tennessee implemented as of January 1, 2004. Two additional states, Florida and New Hampshire, implemented the revised birth certificate in 2004, but after January 1. The nine revised states represent 20 percent of all 2004 births; the seven revised states, for which data are available for all of 2004, represent 14 percent of all births.

Data items exclusive to either the 1989 (i.e., maternal anemia, ultrasound, and alcohol use) or the 2003 birth certificate revision (i.e., use of infertility treatment, NICU admission, and maternal morbidity) are

not shown in this report. Supplemental 2004 tables for data exclusive to the 1989 revision are available on the NCHS website (www.cdc.gov/nchs), including alcohol use during pregnancy. A forthcoming report will present selected information exclusive to the 2003 revision.

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 (7). 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.

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: non-Hispanic white, non-Hispanic black, and Hispanic. Data for American Indian or Alaska Native (AIAN) 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 in some tables for four specific Hispanic subgroups: Mexican, Puerto Rican, Cuban, and Central and South American, and for an additional subgroup referred to as "other and unknown Hispanic." Text references to black births and black mothers or white births and white mothers are used interchangeably for ease in writing.

In 1997, the Office of Management and Budget (OMB) issued "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity" (8–10). The 1997 revised standards incorporated two major changes designed to reflect the changing racial and ethnic profile of the United States. First, the revision increased from four to five the minimum set of categories to be used by federal agencies for identification of race. The 1977 standards required federal agencies to report race-specific tabulations using a minimum set of four single-race categories: AIAN, API, black, and white. The revised standards called for reporting of Asians separately from Native Hawaiians or Other Pacific Islanders. The revised standards also require federal data collection programs to allow respondents to select *one or more race categories*.

For the 2000 decennial census, the U.S. Census Bureau collected race and ethnicity data in accordance with the 1997 revised standards. However, the National Vital Statistics System, which is based on data collected by the states, will not be fully compliant with the new standards until all of the States revise their birth certificates to reflect the new standards. Thus, beginning with the 2000 data year, the numerators (births) for birth rates are incompatible with the denominators (populations) (see "Population denominators"). In order to compute rates, it is necessary to bridge population data for multiple-race persons to single-race categories. This has been done for birth rates by race presented in this report. Once all states revise their birth registration systems to be compliant with the 1997 OMB standards, the use of bridged populations can be discontinued.

For the 2004 data year, multiple race was reported by California, Florida (for births occurring from March 1, 2004, only), Hawaii, Idaho,

Kentucky, Michigan (for births at selected facilities only), Minnesota, New Hampshire (for births occurring from July 19, 2004, only), New York State (excluding New York City), Ohio, Pennsylvania, South Carolina, Tennessee, Utah, and Washington. Data from the vital records of the remaining states, the District of Columbia, and New York City followed the 1977 OMB standards in which a single race is reported (8,9). In addition, these areas also report the minimum set of four races as stipulated in the 1977 standards, compared with the minimum of five races for the 1997 standards.

To provide uniformity and comparability of the data during the transition period, before multiple-race data are available for all reporting areas, it is necessary to bridge the responses of those who reported more than one race to a single race. Multiple race is imputed to a single race (one of the following: AIAN, API, black, or white) according to the combination of races, Hispanic origin, sex, and age indicated on the birth certificate of the mother or father (10–13); see "Technical Notes." The bridging procedure imputes multiple race of mothers as reported on the birth certificate to one of the four minimum races stipulated in the 1977 OMB standards, that is, AIAN, API, black, or white. Mothers of a specified API subgroup, that is, Chinese, Japanese, Hawaiian, or Filipino, in combination with another race, that is, AIAN, black, or white, or another API subgroup cannot be imputed to a particular API subgroup. For this report, data are not shown for the specified API subgroups because of this change (4,14); see "Technical Notes." Reports on 2003 and 2004 births to multiple-race women are forthcoming.

Changes in the processing of information on Hispanic origin for the 2003 Revision of the U.S. Standard Certificate of Live Birth (revised) allows for the capturing of multiple Hispanic subgroups for the nine states that implemented the revised certificate, and for Minnesota, which used the 1989 Revision of the U.S. Standard Certificate of Live Birth in 2004. Mothers reporting more than one Hispanic origin subgroup represented 1.5 percent of all 2004 births and are classified as "other and unknown" Hispanic; see "Technical Notes."

Information on educational attainment, prenatal care, and tobacco use, although collected on both the 1989 and the 2003 revisions of the U.S. Standard Certificates of Live Birth, are not considered comparable between revisions, and, accordingly, are presented separately in this report. Data on educational attainment, prenatal care, and tobacco use for the two states that revised after January 1, 2004 are excluded from all tabulations; see "Technical Notes."

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 2003. (See "Technical Notes" for additional information.) All other maternal, paternal, 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 percentages, percent distributions, and medians are computed. Levels of incomplete reporting vary substantially by specific item and by state. Table I in the "Technical Notes" provides information on the percentage of records with missing information for each item by state for 2004.

Demographic Characteristics

Births and birth rates

Number of births

In 2004, a total of 4,112,052 **births** were registered in the United States, 22,102 more than in 2003. The number of births in 2004 is the highest reported since 1990 (4,158,212). After a downward trend from 1990 to 1997, the total number of births has generally increased. (See [Tables 1–15](#) for national and state data by age, live-birth order, race, and Hispanic origin.)

The number of births to non-Hispanic white women declined by 1 percent in 2004; births to non-Hispanic black women were essentially unchanged ([Tables 1 and 5](#)). Births rose by 2 percent for American Indian or Alaska Native (AIAN) women, and 4 percent for Asian or Pacific Islander (API) and Hispanic women. Among the specified Hispanic groups, births increased by 1 percent for Cuban women, 4 percent for Mexican women, 5 percent for Puerto Rican women, and 6 percent for Central and South American women.

Crude birth rate

In 2004, the **crude birth rate** (CBR) was 14.0 live births per 1,000 women (total population), 1 percent lower than the rate for 2003 (14.1). After dropping steadily from 1990, the most recent peak (16.7), to 1997 (14.2), the CBR has fluctuated between 13.9 and 14.4 per 1,000 ([Tables 1 and 5](#)).

Fertility rate

The 2004 **general fertility rate** (GFR) was 66.3 live births per 1,000 women of childbearing age (15–44 years), a slight increase over the 2003 rate (66.1), and the highest rate since 1993 (67.0). After decreasing substantially from 1990 to 1997 (from 70.9 to 63.6), then increasing moderately from 1997 to 2000, the GFR has generally fluctuated ([Figure 2 and Tables 1 and 5](#)).

The GFRs for non-Hispanic white and non-Hispanic black women were essentially unchanged between 2003 and 2004; in contrast, the rate for Hispanic women increased by 1 percent ([Table 5](#)). Among the specified Hispanic origin groups, fertility levels for Mexican women were up 1 percent and fertility levels for Puerto Rican women were up 11 percent, whereas the levels for “other” Hispanic and Cuban women were down 2 and 14 percent, respectively. The 2004 fertility rates for all race and Hispanic origin groups except Cubans were below the 1990 levels. The fertility rate for API women increased by 1 percent from 2003 to 2004; the rate for AIAN women was essentially unchanged ([Table 1](#)).

Age of mother

Teenagers—Birth rates for adolescents aged 15–19 years declined again in 2004, but at a much slower pace than reported over the dozen years extending from 1991 to 2003. The rates for 2004 were still record lows for the United States ([Tables A, 3, 4, 8, and Figures 3 and 4](#)). The **birth rate for the youngest teenagers increased** to 0.7 births per 1,000 females aged 10–14 years in 2004, compared with 0.6 in 2003; nonetheless, the 2004 rate was one-half the rate reported a decade earlier (1.4 per 1,000 in 1994) (15). The

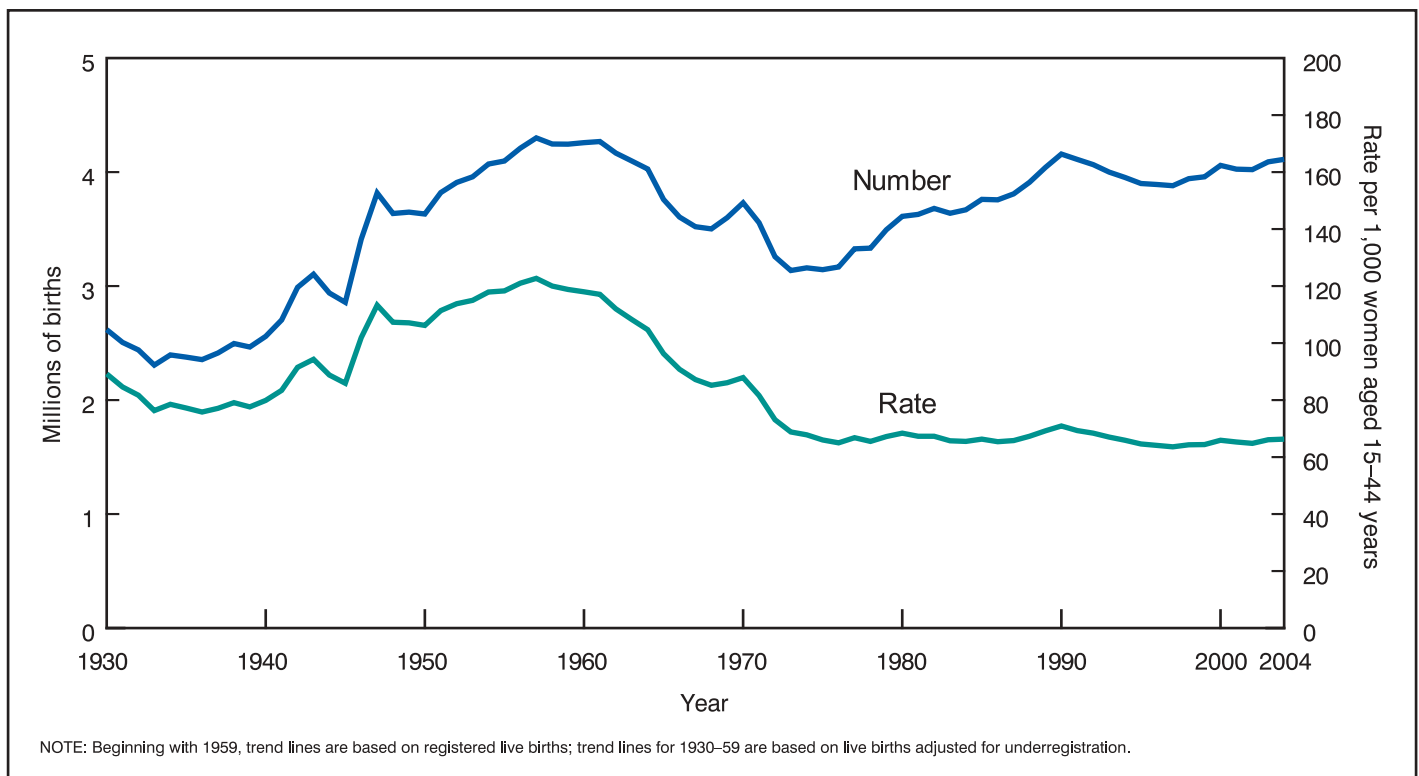


Figure 2. Live births and fertility rates: United States, 1930–2004

Table A. Birth rates for women aged 10–19 years, by age and race and Hispanic origin of mother: United States, 1991, 2002, 2003, and 2004, and percentage change in rates, 1991–2004 and 2003–04

[Rates per 1,000 women in specified group]

Age and race and Hispanic origin of mother	2004	2003	2002	1991	Percent change, 2003–04	Percent change, 1991–2004
10–14 years						
All races and origins ¹	0.7	0.6	0.7	1.4	17	–50
Non-Hispanic white	0.2	0.2	0.2	0.5	0	–60
Non-Hispanic black	1.6	1.6	1.9	4.9	0	–67
American Indian total ^{2,3}	0.9	1.0	0.9	1.6	–10	–44
Asian or Pacific Islander total ³	0.2	0.2	0.3	0.8	0	–75
Hispanic ⁴	1.3	1.3	1.4	2.4	0	–46
15–19 years						
All races and origins ¹	41.1	41.6	43.0	61.8	–1	–33
Non-Hispanic white	26.7	27.4	28.5	43.4	–3	–38
Non-Hispanic black	63.1	64.7	68.3	118.2	–2	–47
American Indian total ^{2,3}	52.5	53.1	53.8	84.1	–1	–38
Asian or Pacific Islander total ³	17.3	17.4	18.3	27.3	–1	–37
Hispanic ⁴	82.6	82.3	83.4	104.6	0	–21
15–17 years						
All races and origins ¹	22.1	22.4	23.2	38.6	–1	–43
Non-Hispanic white	12.0	12.4	13.1	23.6	–3	–49
Non-Hispanic black	37.1	38.7	41.0	86.1	–4	–57
American Indian total ^{2,3}	30.0	30.6	30.7	51.9	–2	–42
Asian or Pacific Islander total ³	8.9	8.8	9.0	16.3	1	–45
Hispanic ⁴	49.7	49.7	50.7	69.2	0	–28
18–19 years						
All races and origins ¹	70.0	70.7	72.8	94.0	–1	–26
Non-Hispanic white	48.7	50.0	51.9	70.6	–3	–31
Non-Hispanic black	103.9	105.3	110.3	162.2	–1	–36
American Indian total ^{2,3}	87.0	87.3	89.2	134.2	0	–35
Asian or Pacific Islander total ³	29.6	29.8	31.5	42.2	–1	–30
Hispanic ⁴	133.5	132.0	133.0	155.5	1	–14

¹Includes origin not stated.

²Includes births to Aleuts and Eskimos.

³Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see "Technical Notes."

⁴Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTES: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

increase in the birth rate resulted in a 2 percent increase in the number of births in this age group, to 6,781, the first increase among the youngest teenagers since 1993–94.

The birth rate for teenagers 15–19 years declined 1 percent to 41.1 births per 1,000 females (Tables A, 4, and 9). The 2004 rate was 33 percent lower than the rate for the recent peak in 1991 (61.8). There was a fractional increase in the number of births to teenagers 15–19 years, entirely resulting from the 1 percent increase in the number of female teenagers (16) (2004 estimates shown in "Technical Notes" Table II). In 2004, 415,262 babies were born to adolescents 15–19 years.

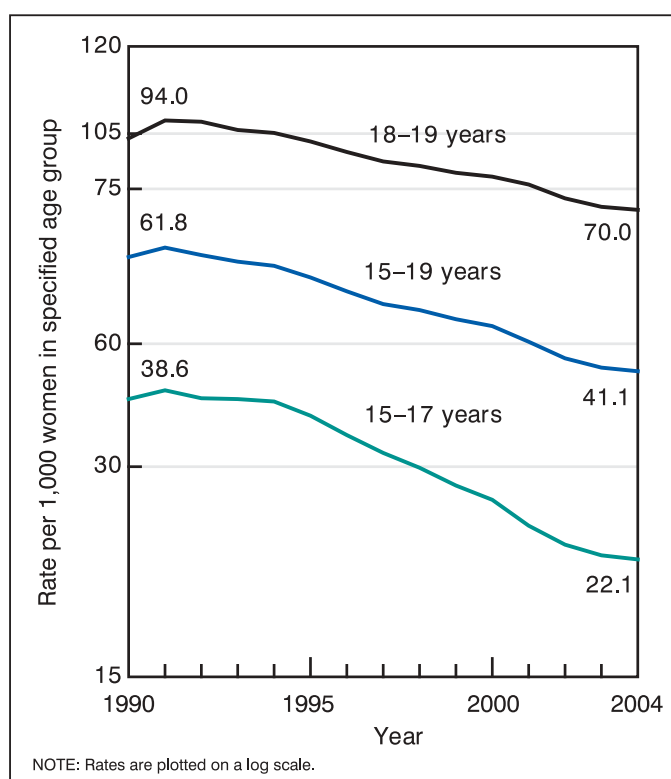


Figure 3. Birth rates for teenagers: United States, 1990–2004

Birth rates for teenagers 15–17 and 18–19 years each dropped 1 percent in 2004, to 22.1 and 70.0 per 1,000, respectively. Overall since 1991, the rate for teenagers 15–17 years fell 43 percent, whereas the rate for older teenagers declined 26 percent. Births to 15–17-year-olds fell to 133,980, the fewest in more than half a century (126,941 in 1950), whereas births to older teenagers increased slightly to 281,282.

Generally, the declines in teenage birth rates for ages 15–19 years in 2004 were strongest among non-Hispanic white and non-Hispanic black females, for whom rates fell 2 to 3 percent. The rate declined 1 percent for AIAN teenagers, increased slightly for Hispanic teenagers, and were essentially unchanged for API teenagers. Among Hispanic subgroups, rates increased for both Mexican teenagers (95.5 per 1,000 aged 15–19 years) and Puerto Rican teenagers (62.6). In 2004, the overall rate remained highest for Mexican teenagers, and lowest for API teenagers, 17.3. Rates for other population groups were 63.1 for non-Hispanic black, 52.5 for AIAN, and 26.7 for non-Hispanic white teenagers.

Throughout the period of steady decline from 1991 to 2004, the sharpest declines were for non-Hispanic black teenagers. Overall, their rate fell 47 percent during this period, but for young black teenagers 15–17 years, the rate dropped more than one-half, from 86.1 per 1,000 in 1991 to 37.1 in 2004 (Table A). Trends in state-specific teenage birth rates are discussed in the section "Births and birth rates by state."

Teenage pregnancy rates fell substantially from 1990 to 2000. Pregnancy rates are computed from the sums of live births, induced abortions, and fetal losses. Currently, teenage pregnancy rates are available through 2000, the most recent year for which detailed national abortion estimates are available (17–20). The teenage pregnancy rate in 2000 was 84.5 per 1,000 females aged 15–19 years, the lowest rate

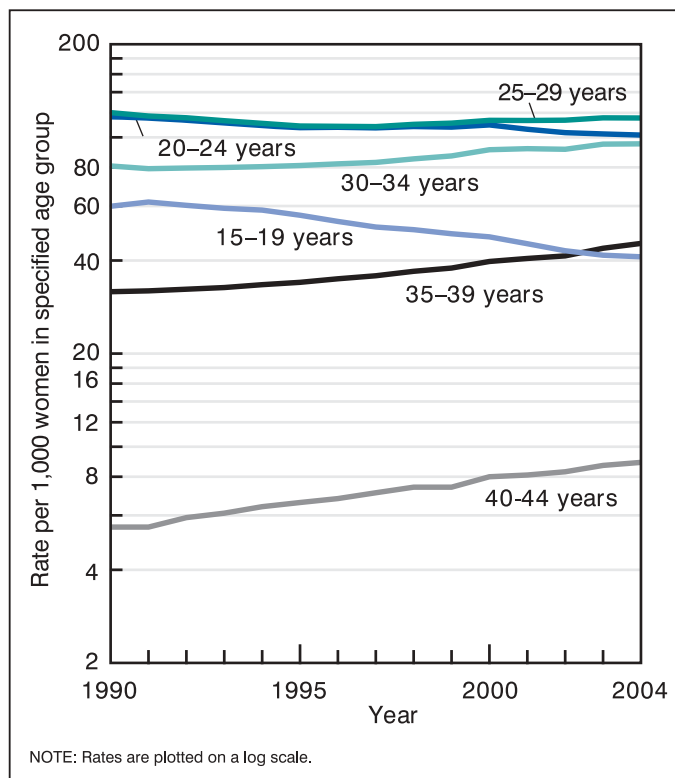


Figure 4. Birth rates by age of mother: United States, 1990–2004

reported since 1976, when the Centers for Disease Control and Prevention (CDC) NCHS series of national estimates first became available (19,20). The rate dropped 27 percent from its 1990 peak (116.3) to 2000. The decline in the pregnancy rate during 1990–2000 is reflected in declines in live birth and induced abortion rates, with larger declines reported for abortions. While national abortion data for years since 2000 are not available, information from CDC's Abortion Surveillance system for 2001 and 2002 for 46 states and the District of Columbia suggest continued declines in the numbers and rates of abortions for teenagers (21,22). These declines together with the declines in birth rates among teenagers indicate that teenage pregnancy rates have continued to fall. An analysis of recent trends in pregnancies is in preparation.

Analyses of the 2002 National Survey of Family Growth (NSFG) suggest a number of factors that likely account for the falling pregnancy rates (23). According to the 2002 NSFG, the proportions of young teenage males and females (ages 15–17 years) who had ever had sexual intercourse declined significantly in comparison with the 1995 NSFG and the 1995 National Survey of Adolescent Males. There were also declines for males 18–19 years. At the same time, the use of contraception increased in ways indicating more effective and consistent use. About three out of four teenagers used a method of contraception at first intercourse, and the overwhelming majority (83 percent of females and 91 percent of males) used a method at their most recent sex. The 2002 NSFG also reported that the use of highly effective hormonal methods such as Depo ProveraTM and LunelleTM increased, as did the use of dual methods, such as the condom with a hormonal method. Data for 2005 from CDC's Youth Risk Behavior Survey for school-age youth substantiate the NSFG findings for teenagers' contraceptive use at their most recent sexual intercourse (24). Since the

mid-1990s, many private and public efforts have focused teenagers' attention on the importance of pregnancy prevention through abstinence and responsible behavior (25,26).

Women aged 20 years and over: Women in their twenties—The birth rate for women aged 20–24 years was 101.7 births per 1,000 women in 2004, down 1 percent from 2003 (102.6). This is fourth consecutive decline in this rate and marks another record low for this age group for the United States (3). Since 1990, the rate has generally declined, down 13 percent from 116.5 per 1,000 (Figures 4, 5, and Tables 3, 4, 7, and 8). The rate for women aged 25–29 years in 2004, 115.5 births per 1,000 women, was not significantly different from the rate in 2003. Between 1990 and 1997, the rate for this age group steadily declined but has generally risen since 1998. Women aged 20–29 years, the principal childbearing ages, historically account for the largest share of all births. However, the proportion of births to these women has declined over the last three decades, falling from 65 percent in 1976 to 52 percent of all births in 2004. The distinct differences in trends in birth rates by age for 1990–2004 are illustrated in Figure 5.

Women in their thirties—The birth rate for women aged 30–34 years in 2004 was 95.3 births per 1,000 women, the highest level since 1964 but not significantly different from the rate in 2003 (95.1) (Tables 4 and 8). Between 1991 and 2004, the rate rose by 20 percent. During that period, the number of births to women aged 30–34 years increased by 9 percent, entirely reflecting the increase in the birth rates; the population of women in this age group declined by 9 percent. The birth rate for women aged 35–39 years was 45.4 births per 1,000 women, up 4 percent from the rate in 2003 (43.8). The rate for this age group has increased each year since 1978 (19.0) and has risen 43 percent since only 1990 (31.7). The number of births to women aged 35–39 years reached yet another record high in 2004 (475,606) (Tables 2 and 6). From 1990 to 2004, the number of births to this age group rose by 50 percent, compared with a 5-percent increase in the population of women aged 35–39 years (16,27).

Women in their forties—In 2004, the birth rate for women aged 40–44 years rose to 8.9 births per 1,000 women from 8.7 births in 2003, an increase of 2 percent. The rate for this age group is the highest since 1968 (9.6), and more than double the 1981 rate (3.8), the lowest on record. Since 1981, the rate for this age group has generally increased and has risen 62 percent since 1990 (5.5). The number of births to women aged 40–44 years increased by 3 percent during 2003–04, from 101,005 to 103,769, more than twice the number reported for 1990 and the highest number on record for the United States; the population of women aged 40–44 years increased only slightly (by less than 1 percent from 2003 to 2004) (16,27). The birth rate for women aged 45–49 years was unchanged between 2003 and 2004, at 0.5 births per 1,000 women. This rate more than doubled between 1990 and 2000 but has remained stable since. The number of births to women aged 45–49 years increased 4 percent, from 5,522 to 5,748 between 2003 and 2004, more than three times the number for 1990 (1,638), and the highest reported since 1939.

Births to women aged 50 years and over—The number of births to women aged 50–54 years increased from 323 to 374 for 2003–04 (Tables 2 and 6). The number of births to women in this age group has increased dramatically from 144 in 1997, when data for women 50–54 years became available again. (From 1964 to 1996, age of mother was imputed if the reported age was under 10 years or aged 50 years and over; see “Technical Notes.”)

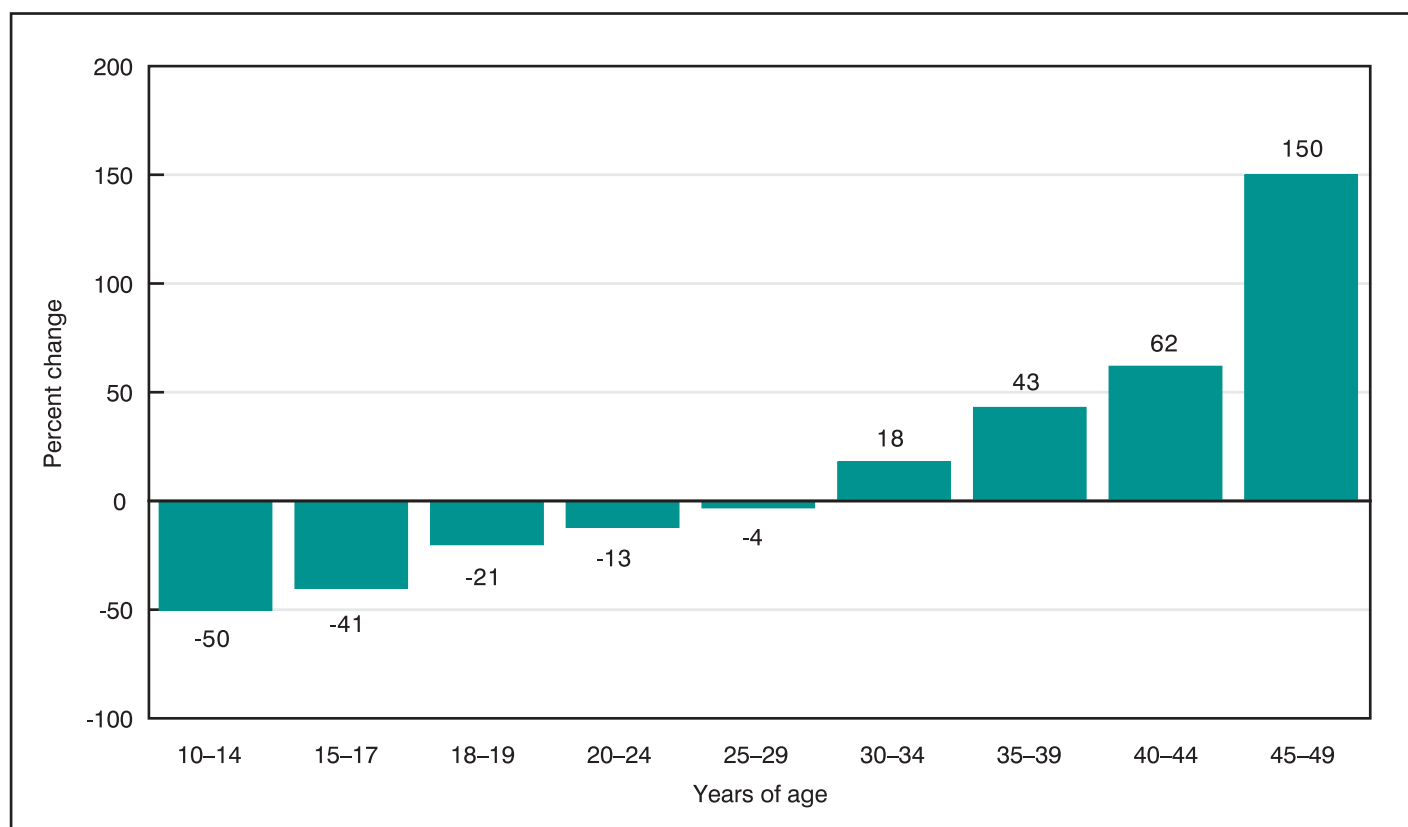


Figure 5. Percentage change in birth rates by age of mother: United States, 1990 and 2004

Because of small numbers, births to women aged 50–54 years historically have been included with births to women aged 45–49 years when computing birth rates by age of mother (the denominator for the rate is women aged 45–49 years). To estimate the incidence of births for women aged 45–49 and 50–54 years separately, we calculated rates for these age groups for 2003 and 2004. Rates are expressed *per 10,000 women* because of the small number of births to women aged 50–54 years. The birth rate for women aged 50–54 years was 0.4 births per 10,000 women in this age group in the U.S. population, significantly higher than the 0.3 births per 10,000 in 2003. Excluding births to women aged 50–54 years had essentially no impact on the birth rate for women aged 45–49 years.

The increase in birth rates for women 35 years of age and over during the last 20 years has been linked, in part, to the use of fertility-enhancing therapies (28). The proportion of childless women aged 35–44 years reporting impaired fecundity who sought fertility treatment rose considerably from 1982 to 1995, although the proportion has leveled off from 1995 to 2002 (29,30). In 2004, 1 out of 18 births to women aged 35 years and over was in a multiple delivery, an outcome associated with infertility treatment, compared with 1 out of 33 births to women under 35 years of age (see section on “Multiple births”). The incidence of multiple deliveries dramatically increases with the age of mother; for example, one out of five births to women aged 45–49 years and one out of every two births to women aged 50–54 years was a multiple birth in 2004.

Live-birth order

The first birth rate for women aged 15–44 years was 26.4 births per 1,000 women in 2004, a slight decline from 2003 (26.5)

(Tables 3 and 7). The first birth rate dropped steadily between 1990 (29.0) and 1997 (25.9), and has since fluctuated moderately (Table 9).

First birth rates for women aged 10–14 and 45–49 years were unchanged between 2003 and 2004, whereas the rates for women in each 5-year age group 15–34 years decreased by 1 percent on average; rates for women aged 35–39 and 40–44 years increased by 3 and 5 percent, respectively.

The rates for third- and fourth-order births for women aged 15–44 years increased by 1 and 2 percent, respectively, from 2003 to 2004, whereas rates of second-, fifth-, sixth and seventh-, and eighth and higher-order births were unchanged.

Another useful measure in interpreting childbearing patterns is the **mean age at first birth**. The mean is the arithmetic average of the age of mothers at the time of birth and is computed directly from the frequency of first births by age of mother. The mean age of first-time mothers in 2004 was 25.2 years, unchanged from the record high set for the United States in 2003 (Tables 10, 14, 15). Since 1970, the mean age at first birth has increased 3.8 years, compared with a 2.9 year increase in the total mean age of mother at birth (Figure 6) (31).

Mean age at first birth was also unchanged for nearly all race and Hispanic origin groups between 2003 and 2004. The average age of first-time mothers remained at 26.2 years for non-Hispanic white, 22.7 years for non-Hispanic black, and 23.1 years for Hispanic women in 2004. Despite the stability in mean age among the three largest race and Hispanic origin groups, substantial variations nevertheless persist. In 2004, API women had the highest mean age at first birth, 28.4 years, and AIAN women had the lowest mean age at first birth, 21.8 years.

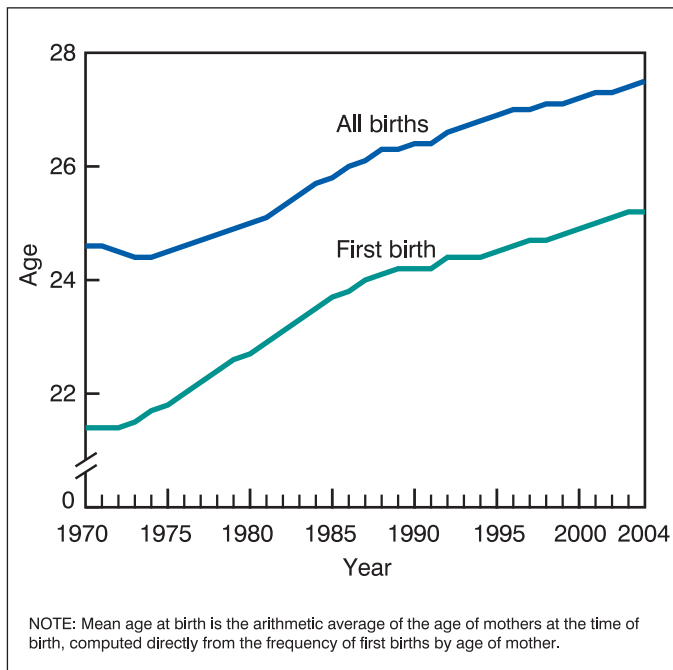


Figure 6. Mean age of mother for all births and mean age of mother at first birth: United States, 1970–2004

Total fertility rate

The **total fertility rate** (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 with populations across time or among geographic areas.

In 2004, the TFR was 2,045.5 (or 2.05 births per woman), slightly higher than the rate in 2003 (2,042.5) (Tables 4, 8, 14, and 15). After falling substantially from 1990 (2,081.0) to 1997 (1,971.0), then rising moderately from 1997 to 2000, the TFR has fluctuated. The rise in the TFR between 2003 and 2004 is the result of increases in birth rates for women aged 30–44 years, and especially those aged 35–39 years (see previous section on “Age of mother”).

The TFRs for two of the three largest **race and Hispanic origin** groups declined between 2003 and 2004, falling by less than 1 percent for both non-Hispanic white and non-Hispanic black women; the rate for Hispanic women rose by 1 percent. Rates for Mexican and Puerto Rican women were up by 2 and 12 percent, respectively; the rates for “other” Hispanic and Cuban women were down by 3 and 16 percent, respectively. The rate for API women rose by 1 percent in 2004, whereas the rate for AIAN women was essentially unchanged.

Differences among these groups are even more apparent when their rates are compared with a “replacement” rate. A replacement rate is the rate at which a given generation can exactly replace itself, generally considered to be 2,100 births per 1,000 women. The U.S. TFR was below the replacement rate for the 33rd consecutive year in 2004. Whereas the TFRs for nearly all groups were below “replacement” in 2004, the rate was above replacement for Hispanic women overall

(2,824.5), Mexican women (3,021.0), and “other” Hispanic women (2,648.0) (Tables 4, 8, 14, and 15). State-specific TFRs for 2004 are discussed in the next section.

Births and birth rates by state

Nationally, the number of births increased by less than 1 percent between 2003 and 2004. Among the states, 12 reported significant increases in their numbers of births in 2004, whereas only 4 reported significant declines. See Tables 11–13 for 2004 data.

In 2004, crude birth rates by state ranged from 10.6 births per 1,000 total population (Maine and Vermont) to 21.2 (Utah). Between 2003 and 2004 rates increased significantly only in the District of Columbia and Virginia and declined in 9 states (Colorado, Connecticut, Illinois, Maryland, Massachusetts, Michigan, New Jersey, New York, and Rhode Island). All other reporting areas were essentially unchanged.

Fertility rates per 1,000 women aged 15–44 years in 2004 ranged from a low of 52.1 in Vermont to a high of 92.3 in Utah (Table 11). Between 2003 and 2004 fertility rates increased significantly in only 4 states (California, Florida, Georgia, and Virginia) and the District of Columbia.

In 2004, TFRs, which provide a summary of lifetime fertility, increased significantly for California, Georgia, Virginia, and the District of Columbia. TFRs for all other states, like the national rate, were essentially unchanged between 2003 and 2004.

Fertility tends to be higher for states in the western half of the country. In 2004, as in previous years, the majority of western states reported TFRs significantly above the national rate, whereas the majority of eastern states reported TFRs significantly below the national rate (32). In 2004, state-specific TFRs ranged from a high of 2,544.5 (2.5 births per women) in Utah, to a low of 1,711.0 (1.7 births per women) in Rhode Island.

Birth rate for teenagers by state

Birth rates for teenagers vary considerably by state (Tables 11 and B). Birth rates by state for teenagers 15–19 years ranged from 18.2 per 1,000 (New Hampshire) to 62.6 (Texas) in 2004; among all reporting areas the District of Columbia reported the highest rate (66.7). Nationally, birth rates for teenagers 15–19 years fell significantly between 2003 and 2004; however, among states only New Jersey and New York reported significant declines. Birth rates were essentially unchanged for all other states and territories. Since 1991 teen birth rates have declined significantly for all reporting areas (Table B). Also see discussion of births to teenagers in the “Age of mother” section of this report.

Sex ratio

In 2004, there were 2,104,661 male and 2,007,391 female live births in the United States, or 1,048 males for every 1,000 female births (Tables 14 and 15). Similar to previous years, the sex ratio was the highest for births to API mothers (1,058), followed by births to non-Hispanic white (1,053), Hispanic (1,042), non-Hispanic black (1,038), and AIAN (1,030) mothers.

Since 1940, the overall sex ratio has ranged from 1,046 to 1,059. Annual fluctuations within this range make the identification of

Table B. Birth rates for teenagers 15–19 years by state, 1991 and 2004, and percentage change 1991–2004: United States and each state and territory

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

State	1991	2004	Percent change, 1991–2004	State	1991	2004	Percent change, 1991–2004
United States ¹	61.8	41.1	–33	Nebraska	42.4	35.9	–15
Alabama	73.6	52.4	–29	Nevada	74.5	51.1	–31
Alaska	66.0	38.9	–41	New Hampshire	33.1	18.2	–45
Arizona	79.7	60.1	–25	New Jersey	41.3	24.1	–42
Arkansas	79.5	60.3	–24	New Mexico	79.5	60.8	–24
California	73.8	39.5	–46	New York	45.5	26.9	–41
Colorado	58.3	43.9	–25	North Carolina	70.0	48.8	–30
Connecticut	40.1	24.4	–39	North Dakota	35.5	27.2	–23
Delaware	60.4	43.5	–28	Ohio	60.5	38.5	–36
District of Columbia	109.6	66.7	–39	Oklahoma	72.1	55.6	–23
Florida	67.9	42.4	–38	Oregon	54.8	33.3	–39
Georgia	76.0	53.4	–30	Pennsylvania	46.7	30.5	–35
Hawaii	59.2	36.1	–39	Rhode Island	44.7	32.9	–26
Idaho	53.9	38.6	–28	South Carolina	72.5	52.1	–28
Illinois	64.5	40.2	–38	South Dakota	47.6	38.5	–19
Indiana	60.4	43.5	–28	Tennessee	74.8	52.1	–30
Iowa	42.5	31.6	–26	Texas	78.4	62.6	–20
Kansas	55.4	40.7	–27	Utah	48.0	34.0	–29
Kentucky	68.8	49.2	–28	Vermont	39.2	20.9	–47
Louisiana	76.0	56.2	–26	Virginia	53.4	35.2	–34
Maine	43.5	24.3	–44	Washington	53.7	31.3	–42
Maryland	54.1	32.4	–40	West Virginia	58.0	43.8	–24
Massachusetts	37.5	22.3	–41	Wisconsin	43.7	30.2	–31
Michigan	58.9	34.1	–42	Wyoming	54.3	42.7	–21
Minnesota	37.3	26.7	–28	Puerto Rico	72.4	61.7	–15
Mississippi	85.3	61.9	–27	Virgin Islands	77.9	52.7	–32
Missouri	64.4	43.4	–33	Guam	95.7	62.6	–35
Montana	46.8	35.8	–24	American Samoa	---	45.8	---
				Northern Marianas	---	39.3	---

--- Data not available.

¹Excludes data for the territories.

meaningful short-term trends difficult. However, a recent report identified a gradual decline in the sex ratio beginning in the early 1970s (33).

Month of birth

The monthly average number of births in 2004 was 342,671. The actual number of births per month ranged from 315,821 (February) to 359,426 (July) (Table 16). Historically, the number of births peaks during the summer, and is at its lowest during the winter. Following the historic pattern, observed birth rates in 2004, which take into account the different number of days in the month, were at their highest in September and lowest in December.

When compared with 2003, observed monthly birth rates in 2004 were up for only 3 months (March, June, and November), whereas observed monthly fertility rates were higher for 6 months and lower for 6 months. When seasonal variation is filtered from the monthly birth and fertility rates, an estimate of the underlying trends is obtained. In 2004, adjusted birth rates fell for all months; adjusted fertility rates fell for 4 months.

Day of the week of birth

In 2004, an average of 11,235 infants were born each day. Looking at the average number of births by specific day of the week

reveals considerable differences. As in previous years, the average number of births was highest on Tuesday (13,045), and lowest on Sunday (7,501) (Table 17).

An index of occurrence can be used to measure the variation in the daily pattern of births. 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 2004, Tuesday again had the highest index at 116.1, indicating that there were 16.1 percent more births on Tuesday than on the average day. Consistent with established patterns, infants in 2004 were much less likely to be born on weekends, with indices of occurrence of 66.8 for Sunday and 75.6 for Saturday.

Patterns in the average number of births by day of the week may be influenced by the scheduling of induction of labor and cesarean delivery. For example, the index of occurrence for vaginal births excluding inductions (spontaneous vaginal births) ranged from 86.5 on Sunday to 106.6 on Tuesday (detailed data not shown). The relatively narrow range for spontaneous vaginal births contrasts sharply with that of repeat cesarean deliveries that ranged from 32.7 on Sunday to 130.5 on Tuesday (Table 17). Also see section on “Method of delivery.”

Births to unmarried women

All measures of childbearing by unmarried women increased substantially in 2004, the largest increases in a decade (1993–94).

The **birth rate for unmarried women** increased 3 percent in 2004, to 46.1 births per 1,000 unmarried women aged 15–44 years. The 2004 rate essentially matched the previous high point for this measure, 46.2 in 1994. The rate indicates the risk that an unmarried woman will give birth. During the years 1995–2002, the rate changed little, ranging from 42.9 to 44.3 ([Figure 7](#) and [Tables C, 18, and 19](#)). Largely, as a result of the rising birth rate, the **number of births to unmarried women** climbed 4 percent in 2004, to 1,470,189, the highest number ever in the more than six decades for which national statistics are available (34). The number rose 9 percent from 2000 to 2004, following on smaller yet steady increases through the mid- to late 1990s that resulted principally from increases in the number of unmarried women in the reproductive ages (35–37). The recent increase since 2002 reflects in small part population growth (up about 2 percent), but mostly it reflects the increase in the birth rate.

In 2004, **35.8 percent of all births were to unmarried women**. This percentage has risen steadily since the late 1990s, following several years of essentially no change ([Table C](#)). About 43 percent of first births in 2004 were to unmarried women (tabular data not shown). Data from the 2002 National Survey of Family Growth, conducted by CDC's NCHS show that 40 percent of recent nonmarital births were to cohabiting women (29).

Since 1998, all states except Michigan and New York report mother's marital status on the birth certificate through a direct question in the 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 detailed information.

Table C. Number, rate, and percentage of births to unmarried women, and birth rate for married women: United States, 1980 and 1985–2004

Year	Births to unmarried women			Birth rate for married women ³
	Number	Rate ¹	Percent ²	
2004	1,470,189	46.1	35.8	87.6
2003	1,415,995	44.9	34.6	88.1
2002	1,365,966	43.7	34.0	86.3
2001	1,349,249	43.8	33.5	86.7
2000	1,347,043	44.1	33.2	87.4
1999	1,308,560	43.3	33.0	84.8
1998	1,293,567	43.3	32.8	84.2
1997	1,257,444	42.9	32.4	82.7
1996	1,260,306	43.8	32.4	82.3
1995	1,253,976	44.3	32.2	82.6
1994	1,289,592	46.2	32.6	82.9
1993	1,240,172	44.8	31.0	86.1
1992	1,224,876	44.9	30.1	88.5
1991	1,213,769	45.0	29.5	89.6
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

¹Births to unmarried women per 1,000 unmarried women aged 15–44 years.

²Percent of all births to unmarried women.

³Births to married women per 1,000 married women aged 15–44 years.

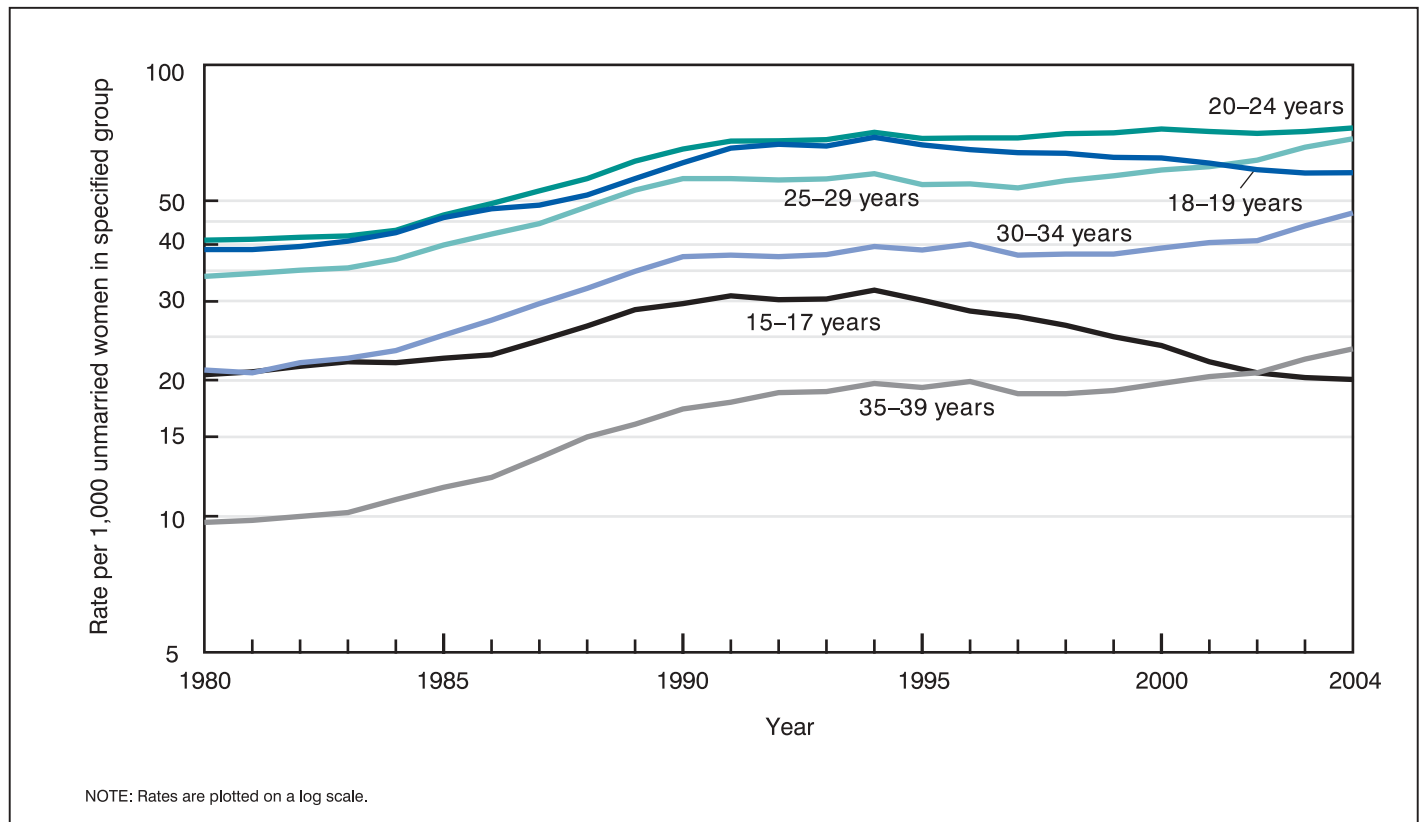


Figure 7. Birth rates for unmarried women, by age of mother: United States, 1980–2004

Birth rates for unmarried women by age continue to be highest for women in their twenties ([Tables 18 and 19](#)). In 2004, the rates were 72.5 per 1,000 for women aged 20–24 years and 68.6 for women aged 25–29 years. The next highest rate was for older unmarried teenagers, 18–19 years, 57.7. Rates for other age groups are considerably lower.

The overall increase in the nonmarital birth rate from 2003 to 2004 entirely reflects increases in rates for women aged 20 years and over; these increases have been ongoing since the mid-1970s. In contrast, the birth rate for unmarried teenagers 15–19 years continued to fall, albeit very slightly, in 2004. The rate for young teenagers 15–17 years declined, whereas the rate for older teenagers was essentially stable. Overall, the birth rate for unmarried teenagers has dropped 24 percent since the 1994 peak. During the decade 1994–2004, the decline in the rate for younger teenagers was more than double that for older teenagers, 37 percent compared with 16 percent. The contrasting trends between teenagers and adult women have been observed since the mid-1990s, and they have led to changes in the distribution of nonmarital births by age. Over the decade 1994–2004, the proportion of nonmarital births to teenagers dropped from 31 to 24 percent, whereas the proportion to women in their twenties rose from 53 to 59 percent (34).

Rates for unmarried women vary widely by race and ethnicity, mirroring the fertility differentials for all women described above. In 2004, the nonmarital rate for Hispanic women was highest, at 95.7 per 1,000, followed by black women, 67.2, non-Hispanic white women, 29.4, and API women, 23.6. These variations have changed little in recent years. Birth rates increased for all groups, by 1 percent for black women, 3 to 4 percent for Hispanic and non-Hispanic white women, and 6 percent for API women ([Table 19](#)).

Differences in nonmarital childbearing among race and ethnicity groups are reflected in contrasting patterns within groups by maternal age. Birth rates for unmarried black and Hispanic teenagers are relatively similar, but at ages 20 years and over, the rates quickly diverge. In age groups 30–34 years and over, the rates for unmarried Hispanic women are about double the rates for unmarried black women. Among age groups under 20 years, API women have the lowest rates, whereas at aged 30 years and over, rates are lowest for non-Hispanic white women.

Among teenage population subgroups, nonmarital birth rates have generally fallen since 1994, although rates for black teenagers have been declining since 1991. The rate for young black teenagers has declined more than one-half since 1991. Rates for other groups have fallen as well, but the declines slowed or reversed slightly for some groups in 2004.

The **proportion of all births that are to unmarried women** increased for all population groups in 2004. The proportions in 2004 were 15.5 percent for API women, 24.5 percent for non-Hispanic white women, 46.4 percent for Hispanic women, 62.3 percent for AIAN women, and 69.3 percent for non-Hispanic black women.

Numbers and proportions of births to unmarried women by race and Hispanic origin and by state are shown in [Table 20](#). Numbers increased in every area with the exception of Wyoming and Northern Marianas; each reported very small declines. The increases amounted to 6 percent or more in 11 areas and Guam. Proportions rose in 36 states, the District of Columbia, and Puerto Rico; and were essentially unchanged in all other areas.

Age of father

The **birth rate per 1,000 men aged 15–54 years** was 48.8 in 2004, slightly lower than the rate in 2003 (48.9), but higher than the all-time low of 48.4 reported in 2002 ([Table 21](#)). The birth rate for males aged 15–19 years was 17.0 in 2004, essentially unchanged from the all-time low of 16.9 in 2003. Between 2003 and 2004 rates declined for men in their twenties, but increased for men aged 30–49 years. Rates for men aged 50 years and over were essentially unchanged.

Information on age of father is often missing on birth certificates of children born to women less than 25 years of age and to unmarried women. In 2004, age of father was not reported for 14 percent of all births, 24 percent of births to all women less than 25 years of age, and 36 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

Information on educational attainment is reported on both the 2003 Standard Certificate of Live Birth (revised) and 1989 Standard Certificate of Live Birth (unrevised). However, the format of the education item on the revised standard certificate substantively differs from that of the unrevised standard certificate (see “[Technical Notes](#)”). The 1989 certificate item asks for the highest grade completed at the time of the birth; the 2003 certificate item asks for the highest degree or level of school completed at the time of the birth (e.g., high school diploma, bachelor degree, etc.). Accordingly, education data for the states that have implemented the revised certificates are not directly comparable with the data for the states that are not yet using the revised certificate. For 2004, unrevised data are available for 41 states, New York City, and the District of Columbia (80 percent of all 2004 births). Revised data are available for all of 2004 for seven states (Idaho, Kentucky, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington), representing 14 percent of all births.

For the 41-state reporting area described above, 77.8 percent of women who gave birth in 2004 completed at least 12 or more years of school, slightly lower than the percentage for these 41 states in 2003 (77.9) ([Table D](#)). The percentage of women who completed 16 or more years of school in 2004 was 26.9, 1 percent more than the percentage for these 41 states in 2003 (26.7). The educational attainment of women giving birth has increased substantially over the last few decades. This trend in part reflects increases in educational attainment of all women during this time (38).

For the seven revised states for which data are available for all of 2004, 81.0 percent of women who gave birth had at least a high school diploma or higher and 26.4 percent had a Bachelor's degree or higher in 2004 ([Table D](#)).

Table D. Years of schooling and degrees achieved, by age and race and Hispanic origin of mother: 41 states, the District of Columbia, and New York City (unrevised) and 7 states (revised), 2004

Age and race and Hispanic origin of mother	Unrevised ¹		Revised ²	Unrevised ¹		Revised ²
	2004 ³	2003 ³	2004 ⁴	2004 ³	2003 ³	2004 ⁴
	12 years or more years of school		High school diploma (GED) or higher	16 years or more years of school		Bachelor's degree or higher
All races and origins ⁵	77.8	77.9	81.0	26.9	26.7	26.4
Under 15 years	*	*	*	*	*	*
15–19 years	41.6	40.6	40.4	*	*	*
20–24 years	72.2	72.0	73.9	6.1	5.9	4.6
25–29 years	82.7	83.0	86.7	28.8	28.6	27.9
30–34 years	88.1	88.7	92.0	46.4	46.2	45.9
35–39 years	89.0	89.2	92.8	48.8	47.8	47.8
40 years and over	87.7	87.8	90.8	46.2	45.7	43.4
Non-Hispanic white	89.0	89.0	87.0	37.0	36.4	31.0
Under 15 years	*	*	*	*	*	*
15–19 years	48.6	47.6	45.1	*	*	*
20–24 years	81.5	81.3	79.2	8.4	8.1	5.3
25–29 years	93.5	93.7	92.0	38.2	37.5	31.9
30–34 years	97.0	97.0	95.9	57.0	56.2	50.2
35–39 years	97.4	97.3	96.2	59.3	57.8	51.9
40 years and over	96.7	96.5	94.5	56.4	55.4	47.4
Non-Hispanic black	76.6	76.5	73.0	13.8	13.9	10.1
Under 15 years	*	*	*	*	*	*
15–19 years	44.2	42.8	39.2	*	*	*
20–24 years	77.2	77.0	74.4	4.6	4.6	3.3
25–29 years	85.1	85.7	83.5	17.5	17.9	13.3
30–34 years	90.1	90.3	87.4	30.0	29.9	23.1
35–39 years	90.6	90.5	88.9	32.5	31.8	26.1
40 years and over	89.9	89.6	84.9	32.2	32.0	24.4
Hispanic ⁶	51.6	51.3	47.8	8.0	7.8	7.5
Under 15 years	*	*	*	*	*	*
15–19 years	31.7	30.5	24.8	*	*	*
20–24 years	52.9	52.2	46.2	2.5	2.4	1.4
25–29 years	55.2	55.2	52.1	9.5	9.4	8.2
30–34 years	57.3	58.0	56.8	15.8	15.9	16.7
35–39 years	57.7	57.8	61.3	17.3	16.8	20.4
40 years and over	53.8	53.8	56.9	16.5	16.3	18.3

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

¹Data are based on the 1989 Revision of the U.S. Certificate of Live Birth; these data are not comparable with those based on the 2003 Revision of the U.S. Certificate of Live Birth.

²Data are based on the 2003 Revision of the U.S. Certificate of Live Birth; these data are not comparable with those based on the 1989 Revision of the U.S. Certificate of Live Birth.

³Excludes data from Florida, Idaho, Kentucky, New Hampshire, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington.

⁴Includes data from Idaho, Kentucky, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington.

⁵Includes races other than white and black and origin not stated.

⁶Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTES: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

For the 41-state reporting area variations in educational attainment are seen among the largest **racial and Hispanic origin groups**, for 2004 as in previous years. In 2004, 89.0 percent of non-Hispanic white and 76.6 percent of non-Hispanic black mothers completed at least 12 years of school, essentially unchanged from 2003. The percentage of Hispanic mothers who completed high school increased to 51.6 percent in 2004, but was nonetheless much lower than the percentages for non-Hispanic white and non-Hispanic black women. The levels of advanced educational attainment (at least 16 years of school) for women giving birth in 2004 were 37.0 percent for non-Hispanic white, 13.8 for non-Hispanic black, and 8.0 for Hispanic mothers. The

percentages for non-Hispanic white and Hispanic mothers in 2004 were significantly higher than in 2003; the percentage for non-Hispanic black mothers was essentially unchanged.

Maternal education has long been considered an important factor in fertility and maternal and infant 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 are less likely to engage in behaviors detrimental to health and pregnancy (29,39,40).

Maternal Lifestyle and Health Characteristics

Weight gain in pregnancy

Excessive and insufficient maternal weight gain during pregnancy can negatively influence pregnancy outcome. Inadequate weight gain has been associated with an increased risk of intrauterine growth retardation, shortened gestational age, low birthweight, and perinatal mortality (41,42). High weight gain during pregnancy has been linked with an elevated risk of a large-for-gestational-age infant, cesarean delivery, and long-term maternal weight retention (43). The body mass index (BMI) is an indirect measure of body fat (44). The Institute of Medicine (IOM) recommended the following weight gains for singleton pregnancy based on the mother's pre-pregnancy BMI (45). However, the IOM recommends that weight gain goals be tailored to the individual's needs.

Pre-pregnancy category	BMI range	Recommended gain
Low	Less than 19.8	28–40 pounds
Normal	19.8–26.0	25–35 pounds
High	26.0–29.0	15–25 pounds

Recommendations for obese women (a BMI of at least 29) are currently under discussion (43).

In 2004, 13.0 percent of women who gave birth gained less than 16 pounds, considered inadequate for most women (45); 20.0 percent had weight gains of more than 40 pounds, considered excessive for most women (Table 22). Thus, approximately one-third of mothers had gains outside of the guidelines (based on weight alone). Studies show that the majority of American women have pregnancy weight gains outside their BMI-based recommendations (43).

The distribution of reported weight gain has changed markedly between 1990 and 2004. For the mothers of *at least full term, singleton* births, the percentage of mothers who gained less than 16 pounds increased by 48 percent (from 8.3 to 12.2), and those who gained over 40 pounds, by 25 percent (from 16.1 to 20.1 percent) (data not shown).

Weight gained during pregnancy differs widely by racial or ethnic group. For 2004, non-Hispanic white women and Asian or Pacific Islander (API) women have relatively low proportions of women with weight gains of less than 16 pounds (10.7 and 10.1 percent, respectively), whereas non-Hispanic black women and American Indian or Alaska Native (AIAN) women have higher proportions of women with inadequate weight gains (19.0 and 17.5 percent, respectively) (Tables 23, 24). Non-Hispanic white women were the most likely to gain more than 40 pounds (22.2 percent), compared with the least likely, those of API origin (14.2 percent) (data not shown).

Moderate maternal weight gain (between 16 and 40 pounds) and healthy birthweight are positively correlated, as demonstrated in 2004 by a general decline in the percentage of low birthweight (LBW) infants as maternal weight gain increases (from 13.9 percent for weight gains of less than 16 pounds, to 5.8 percent for gains of 36–40 pounds) (data not shown).

Risk factors in this pregnancy

During pregnancy, medical risk factors can contribute to serious complications and maternal and infant morbidity and mortality,

particularly if not treated properly (46–48). Sixteen risk factors that can affect pregnancy outcome are separately identified on the 1989 Certificate of Live Birth used by 41 states and the District of Columbia in 2004; 10 such factors are identified on the 2003 revised certificate and were reported by 7 states for 2004. Shown in Table 25, and discussed here, are the four risk factors comparable across revisions, and for which national data are available.

In 2004, two pregnancy risk factors, **pregnancy-associated hypertension** and **diabetes** during pregnancy, occurred among 4 percent of mothers (37.9 and 35.8 per 1,000 births, respectively) (Table 25). These risk factors have had the highest prevalence since these data became available from birth certificates. After steadily rising during the 1990s, the level of pregnancy-associated hypertension peaked in 2000 and since then has essentially not changed. Reported diabetes prevalence rose by more than two-thirds in the years 1990–2004 (from 21.3 to 35.8 per 1,000 live births). Pregnancy-associated hypertension and chronic hypertension are closely related hypertensive disorders, but the latter is a rarer condition. The prevalence of **chronic hypertension** has increased by almost one-half since 1990 (6.5 in 1990, 9.6 in 2004).

The risk of having a medical condition often differs by maternal age (Table 25). Older mothers are much more prone to chronic conditions such as diabetes. The 2004 level was 80.9 per 1,000 for mothers 40 years of age and over, compared with 11.2 for mothers under age 20 years. The age-specific diabetes levels from birth certificate data are comparable to those obtained from recent National Health Interview Surveys (49). Figure 8 shows sharp increases in diabetes levels for each age group between 1990 and 2004 (50).

Rates for chronic hypertension are more than seven times higher for mothers aged 40 years and over than for those under 20 years of age (26.7 compared with 3.5 per 1,000). However, rates for pregnancy-related hypertension tend to be highest for both the oldest and youngest mothers.

The risk factors during pregnancy can also vary greatly by maternal race and ethnicity (Tables 23–25). In 2004, diabetes rates among API women were higher than those for the other major racial or ethnic groups (5.8 compared with 3.4 percent for non-Hispanic black women).

Tobacco use during pregnancy

Information on **smoking during pregnancy** was reported according to two distinct questions in 2004. For 40 states, New York City, and the District of Columbia, smoking status was based on the 1989 U.S. Standard Certificate (unrevised), whereas data for 7 states are drawn from the 2003 revision of the birth certificate (revised). The questions on the two versions of the birth certificate are not comparable. Briefly stated, the 1989 revision asks a simple “yes/no” question on tobacco use during pregnancy. In contrast, the 2003 revision asks for tobacco use during each trimester of pregnancy (as well as the 3-month period prior to pregnancy). For the purposes of this report, data are shown separately for the areas using the unrevised certificate and for the areas using the revised certificate. For the 7 revised states, if the mother reported smoking in any of the 3 trimesters of pregnancy she was recorded as a smoker. Data are not included in this report for Florida and New Hampshire, which revised their certificates in 2004, but after January 1, or for California, which did not report tobacco use in 2004.

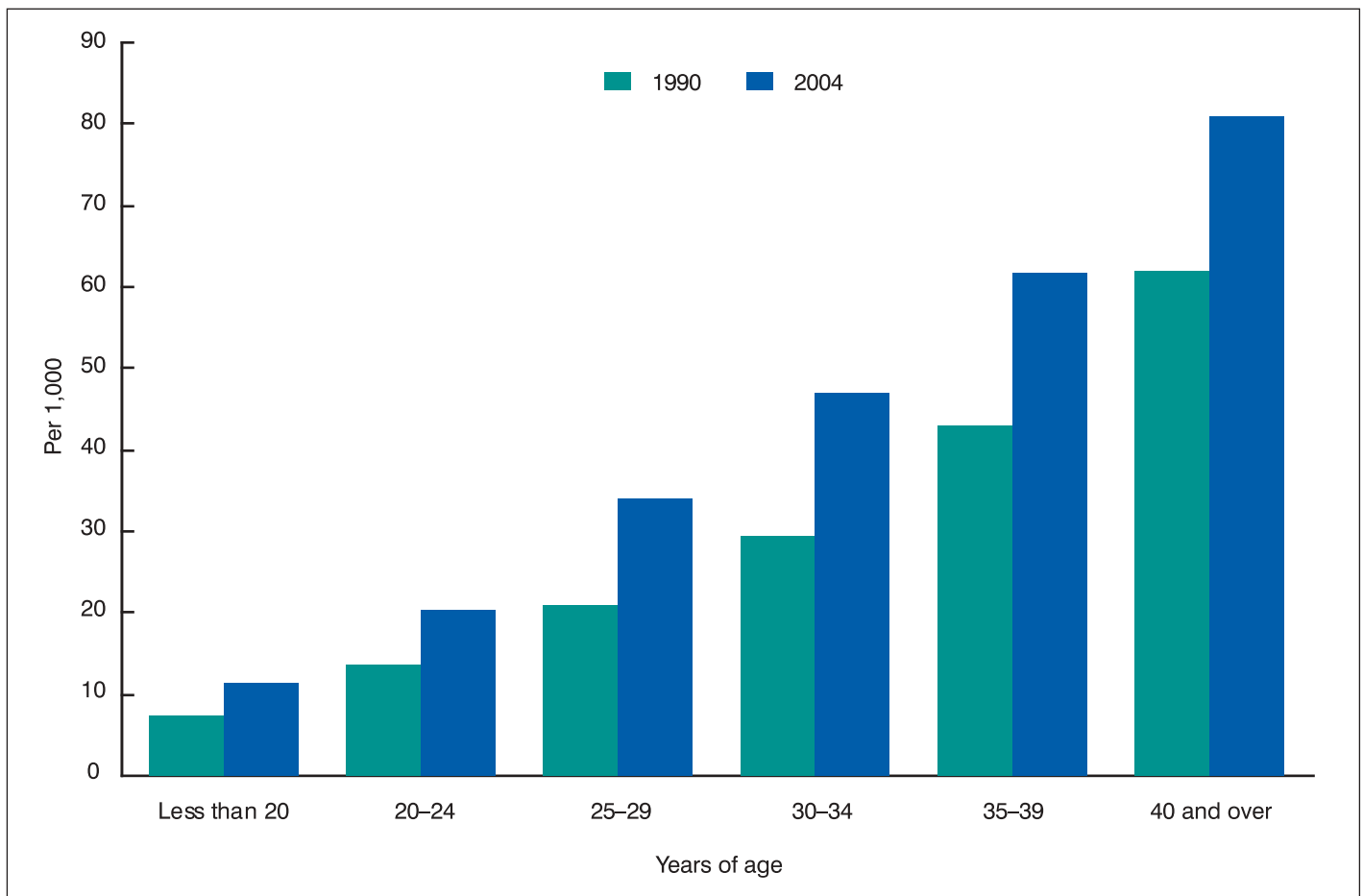


Figure 8. Diabetes rates by age of mother: United States, 1990 and 2004

Smoking during pregnancy declined slightly to 10.2 percent of women giving birth in 2004, compared with 10.4 percent for the same group of 40 reporting areas, the District of Columbia, and New York City ([Table E](#)). These areas accounted for 67 percent of U.S. births in 2004. Differences among population subgroups were essentially unchanged from previous years. The smoking rate was highest for AIAN women, at 18.2 percent, followed by non-Hispanic white women, 13.8 percent, and non-Hispanic black women, 8.4 percent. Rates for Hispanic (2.6 percent) and API women (2.2 percent) were substantially lower.

For the seven revised areas for which revised data on tobacco use are available for all of 2004, the overall smoking rate was 16.3 percent. As noted above, the revised question on smoking differs considerably from the question on the 1989 certificate, and it is expected that the revised question will elicit higher rates of smoking during pregnancy. Moreover, the seven revised states individually have traditionally reported higher smoking rates than other states (51). Despite these differences in smoking levels between the two sets of reporting areas, the variations among population subgroups by race and Hispanic origin persist for the revised states ([Table E](#)).

Studies based on the unrevised smoking question have suggested some underreporting of smoking on the birth certificate, although the trends and variations in smoking among population subgroups have been confirmed by surveillance and survey data (29,52). Some of the underreporting no doubt reflected the lack of a specific time reference, that is, when during pregnancy the mother smoked. It is believed that the new question on prenatal smoking is providing higher quality, more

reliable information in part because there is a specific time reference (each trimester) and women are afforded the chance to report that their smoking behavior has changed (53–55).

Over the 15-year period for which smoking status has been reported on U.S. birth certificates, the relationship between smoking status and educational attainment has been consistent. Regardless of whether the comparisons are based on the unrevised or revised smoking question, smoking rates are highest for women who have attended but not graduated from high school and lowest for college-educated women. In 2004, based on information from the seven revised states, 33 percent of women who attended but did not complete high school were smokers compared with 2 percent of college graduates ([Table F](#)). Women with a grammar school education have relatively low smoking rates, about 10 percent in 2004.

The concern about smoking during pregnancy has been longstanding and is linked to adverse pregnancy outcomes, including low birthweight (LBW), intrauterine growth retardation, miscarriage, and infant mortality, as well as negative consequences for child health and development (56). These adverse consequences in turn are associated with substantial economic and social costs (57). Over the period for which the information has been reported on birth certificates and in national surveys, the negative relationship between smoking and LBW has been replicated repeatedly (58,59). Babies born to women who smoke are at substantially greater risk of LBW than babies born to nonsmokers. The revised smoking question corroborates this pattern for 2004 births. In the seven states with the revised question, 11.9

Table E. Trimester of pregnancy prenatal care began and smoking status during pregnancy, by race and Hispanic origin of mother: 41 states, the District of Columbia, and New York City (unrevised) and 7 states (revised), 2004

Characteristic and race and Hispanic origin of mother	Unrevised ¹		Revised ²
	2004 ³	2003 ³	2004 ⁴
All races and origins ⁵			
Prenatal care beginning in the			
1st trimester	83.9	84.0	72.9
Prenatal care beginning in			
3rd trimester or no care	3.6	3.6	6.2
Smoker.	10.2	10.4	16.3
Non-Hispanic white			
Prenatal care beginning in the			
1st trimester	88.9	89.1	78.0
Prenatal care beginning in			
3rd trimester or no care	2.2	2.1	4.5
Smoker.	13.8	13.8	19.0
Non-Hispanic black			
Prenatal care beginning in the			
1st trimester	76.5	76.2	58.9
Prenatal care beginning in			
3rd trimester or no care	5.7	5.9	11.4
Smoker.	8.4	8.4	13.0
American Indian total ^{6,7}			
Prenatal care beginning in the			
1st trimester	69.9	70.6	58.7
Prenatal care beginning in			
3rd trimester or no care	7.9	7.7	11.2
Smoker.	18.2	18.2	21.2
Asian or Pacific Islander total ⁷			
Prenatal care beginning in the			
1st trimester	85.6	85.4	69.1
Prenatal care beginning in			
3rd trimester or no care	3.0	3.1	6.8
Smoker.	2.2	2.2	2.9
Hispanic ⁸			
Prenatal care beginning in the			
1st trimester	77.5	77.3	56.5
Prenatal care beginning in			
3rd trimester or no care	5.4	5.3	11.0
Smoker.	2.6	2.7	5.7

¹Data are based on the 1989 Revision of the U.S. Certificate of Live Birth; these data are not comparable with those based on the 2003 Revision of the U.S. Certificate of Live Birth.

²Data are based on the 2003 Revision of the U.S. Certificate of Live Birth; these data are not comparable with those based on the 1989 Revision of the U.S. Certificate of Live Birth.

³Excludes data from Florida, Idaho, Kentucky, New Hampshire, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington. Information on smoking status excludes data for California.

⁴Includes data from Idaho, Kentucky, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington.

⁵Includes origin not stated.

⁶Includes births to Aleuts and Eskimos.

⁷Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see "Technical Notes."

⁸Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTES: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

percent of babies born to smokers were LBW compared with 7.2 percent of babies born to nonsmokers. This variation was observed for population subgroups as well (Table F).

Medical Services Utilization

Prenatal care

This report includes data on the timing of prenatal care based on both the 1989 (unrevised) and the 2003 Revisions to the U.S. Standard Certificate of Live Birth (revised). The 2003 revision of the birth certificate introduced substantive changes in item wording and also to the sources of prenatal information; see "Technical Notes." Accordingly, prenatal care data for the two revisions are not directly comparable, and are shown separately. For 2004, unrevised data are available for 41 states, New York City, and the District of Columbia. Revised data are available for seven states (New York state excluding New York City); see Tables E, 26(a), and 26(b).

Timely initiation of prenatal care does not appear to have improved in the United States in 2004. For the 41-state reporting area for which comparable data are available, 83.9 percent of mothers were reported to have begun care within the first 3 months of pregnancy, a level not significantly different from that reported for the same reporting area for 2003 (84.0 percent); see Table E. No change was observed in the percentage of women receiving late (care beginning in the 3rd trimester of pregnancy) or no care for 2003–04 (3.6 percent). Prenatal care utilization had improved modestly, but quite steadily from 1990 to 2003 (4). Appropriate prenatal care, that is, care provided by a health professional to pregnant women, can enhance pregnancy outcome by assessing risk, providing health care advice, and managing chronic and pregnancy-related health conditions (60–63). Preconception care, that is, care which promotes the health of women of reproductive age *before* conception, is also recommended (64). Information on preconception care is not available from birth certificate data.

The percentage of women beginning care in the first trimester of pregnancy was essentially unchanged among the largest **racial and Hispanic origin groups** in the 41-state reporting area between 2003 and 2004; see Table E. Sizable gains in prenatal care utilization had been observed for 1990–2003 among non-Hispanic black, Hispanic, and AIAN women (4). These gains may be linked in part to the expansion of Medicaid for pregnant women in the late 1980s (65,66). Despite improvements in recent years among groups with lower levels of care, large disparities persist. In 2004, non-Hispanic white and API women were more than 10 percent more likely to receive timely care than non-Hispanic black and Hispanic women.

Among the states for which comparable data are available for 2003–04, no clear pattern was observed in changes in prenatal care utilization. See Tables 26(a) and 26(b) for 2004 data.

The Adequacy of Prenatal Care Utilization (APNCU) Index is an alternative measure of prenatal care timing that takes into account the number of prenatal care visits and gestational age of the newborn at delivery (67,68). The APNCU shows a small increase in the proportion of women receiving less than adequate care for 2003–04; see Table G.

For the seven revised states for which data are available for all of 2004, 72.9 percent of women were reported to have begun care in the first 3 months of pregnancy; 6.2 percent of mothers were reported to have late or no prenatal care (Table 26(a)). As noted above, the revised prenatal care item is substantively different from the unrevised question. As one result, levels of prenatal care utilization based on revised data are substantially lower than those based on unrevised data. For example, unrevised 2003 data for Kentucky indicate that 87.0 of residents began care in the first trimester of pregnancy in 2003. This

Table F. Smoking during pregnancy according to educational attainment of mother, and percentage low birthweight by smoking status, by race and Hispanic origin of mother: Total of 7 states (revised), 2004

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

Education of mother	Percent smokers	Race and Hispanic origin of mother	Percent low birthweight by smoking status	
			Yes	No
Total	16.3	All races and origins ¹	11.9	7.2
Grammar school	10.4	Non-Hispanic white	11.0	6.2
Some high school	33.2	Non-Hispanic black	19.0	12.9
High school diploma, GED	24.9	American Indian total ^{2,3}	7.9	7.4
Some college	13.6	Asian or Pacific Islander total ³	9.8	7.1
College graduate	2.1	Hispanic ⁴	12.5	6.6

¹Includes origin not stated.²Includes births to Aleuts and Eskimos.³Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see "Technical Notes."⁴Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTES: Data are based on the 2003 Revision of the U.S. Certificate of Live Birth; these data are not comparable with those based on the 1989 Revision of the U.S. Certificate of Live Birth. Includes data for Idaho, Kentucky, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington, which implemented the 2003 revision of the birth certificate. Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Table G. Percentage of births by adequacy of prenatal care utilization index: 41 states, the District of Columbia, and New York City (unrevised), 2003 and 2004

	2004	2003
Intensive use	32.6	32.6
Adequate.	42.6	42.8
Intermediate	13.7	13.6
Inadequate.	11.2	11.1

NOTES: Data are based on the 1989 Revision of the U.S. Certificate of Live Birth; these data are not comparable with those based on the 2003 Revision of the U.S. Certificate of Live Birth. Excludes data for Idaho, Florida, Kentucky, New Hampshire, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington; see "Technical Notes."

compares with a level of 74.5 percent based on 2004 revised data. Much, if not all of the difference between 2003 and 2004 for Kentucky and other revised states is related to changes in reporting and *not* to changes in prenatal care utilization.

Obstetric procedures

In this report, data are presented for the two obstetric procedures reported on both the revised and unrevised U.S. Standard Certificates of Live Birth; see "Technical Notes."

The rate of induction of labor increased for 2003–04 from 20.6 to 21.2 percent. This rate has increased more than two-fold since 1990 (9.5 percent) (Tables 25 and H). The rate of induction had generally risen steadily every year 1989–2000 for all gestational ages, including preterm deliveries (less than 37 completed weeks of gestation). Since 2000, rates have fluctuated somewhat for very preterm (less than 32 weeks) and moderately preterm infants (32–36 weeks); rates for 2004 were 7.5 and 15.0, respectively. Induction rates for births at 37 weeks and over generally continued to rise, reaching 22.4 percent for 2004 (Figure 9; data not shown).

Induction levels more than doubled for each racial and ethnic group between 1990 and 2004 (Table 25 for 2004 data); rates among

groups continue to vary widely (Table H). For example, the rate for non-Hispanic white women (25.4 percent) was notably higher than that for Hispanic (14.3) and API women (14.4). For Hispanic subgroups, rates ranged from 13.3 percent among Mexican, to 20.6 percent for Cuban mothers (data not shown).

It has been suggested that increasing induction rates may be related, in part, to an increase in elective inductions (inductions with no medical or obstetric indication). In a study of variation in induction rates among hospitals and clinicians, 25 percent of inductions had no apparent medical indication (69). Induction (whether for a medical indication or elective) may increase the risk of cesarean delivery in nulliparous women (70,71).

The rate for tocolysis, the use of agents that hinder or delay uterine activity for the management of preterm labor, was 2.0 percent for 2004, compared with 2.1 percent for 2001–03. The rate of tocolysis has fluctuated only slightly since 1996. Discussion is ongoing regarding the safety, efficacy, and appropriate use of these agents (72).

Characteristics of labor and delivery

The report includes national data for the three characteristics of labor and delivery that are comparable across the 1989 and 2003 revisions of the U.S. Standard Certificate of Live Birth.

Moderate or heavy **meconium** staining occurred in about 5 percent of all deliveries in 2004. The presence of meconium during labor and delivery can directly alter the amniotic fluid, reduce antibacterial activity (and subsequently increase the risk of perinatal bacterial infection), and damage the infant's lungs if inhaled (47). Depending on the severity of the condition, other complications of labor and delivery reported on the birth certificate may require medical interventions and can also affect the health of the infant. The two other complications of labor and delivery reported in common on the 1989 revision and the 2003 revision of the birth certificate occur less frequently: **breech/malpresentation** (4.2 percent of live births) and **precipitous labor** (1.9 percent) (Table 25).

Rates for breech/malpresentation and for precipitous labor rise steadily with age. The 2004 rate of breech/malpresentation for mothers

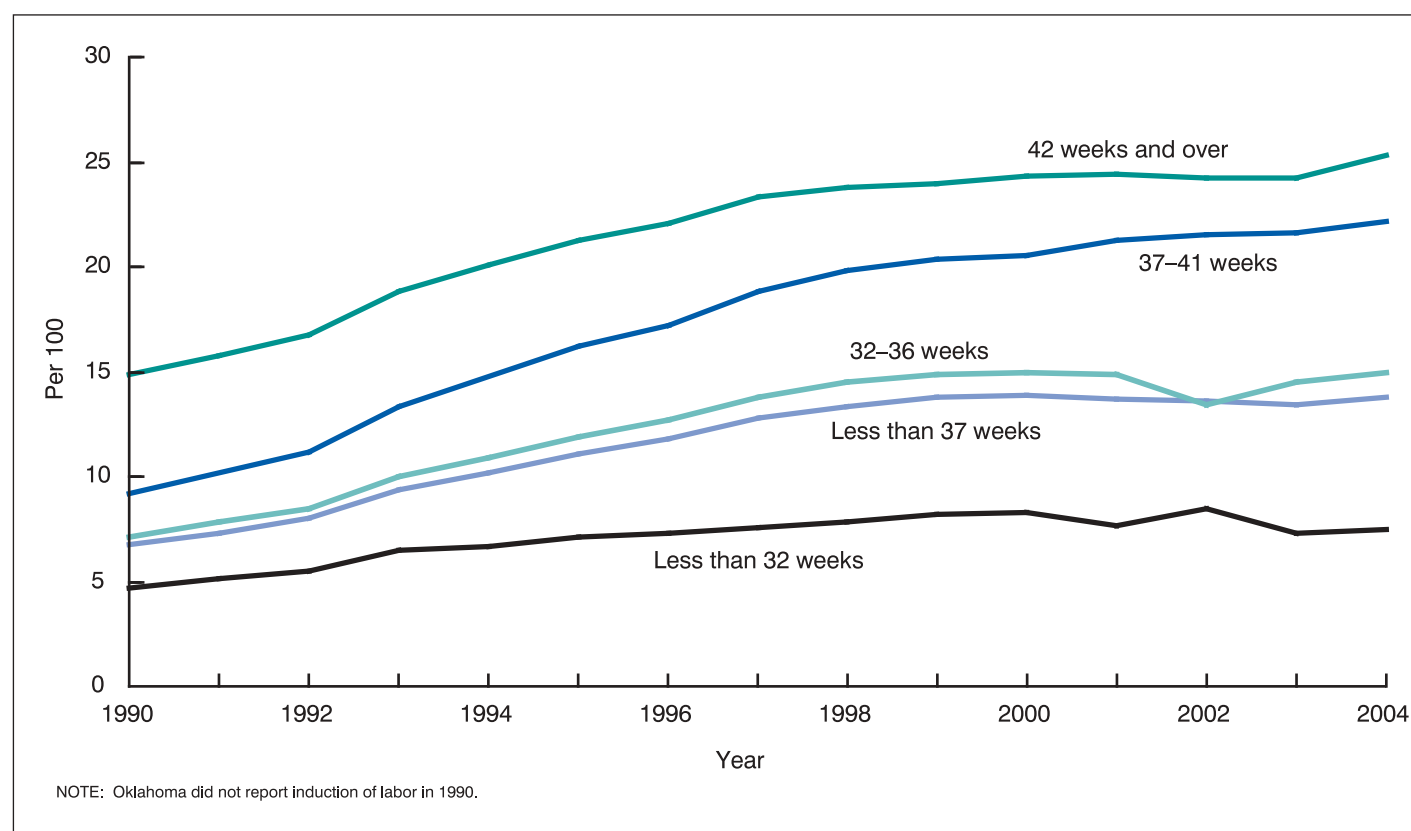
Table H. Rate of induction of labor by race and Hispanic origin of mother: United States, 1990, 1995, 2000, 2003, and 2004 and percentage change, 1990–2004

[Rates are number of live births with induction per 100 live births in specified group]

Race and Hispanic origin of mother	2004	2003	2000	1995	1990	Percent change, 1990–2004
All races and origins ¹	21.2	20.6	19.9	16.0	9.5	123
Non-Hispanic white	25.4	24.7	23.6	18.9	11.3	125
Non-Hispanic black	18.6	17.5	16.5	11.7	6.7	178
American Indian total ^{2,3}	20.1	19.9	20.1	15.6	9.4	114
Asian or Pacific Islander total ³	14.4	14.0	13.3	10.8	5.9	144
Hispanic ⁴	14.3	13.6	13.2	10.2	5.6	155

¹Includes origin not stated.²Includes births to Aleuts and Eskimos.³Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see "Technical Notes."⁴Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTES: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

**Figure 9. Rates of induction of labor by gestational age: United States, 1990–2004**

aged 40 years and over (65.3 per 1,000 live births) is more than double that for mothers under age 20 years (29.5 per 1,000). Older mothers are also much more likely to experience precipitous labor (22.0 versus 13.0 complications per 1,000 live births) (Table 25). Rates of labor and delivery characteristics vary also by race and ethnicity (Table 25). For example, non-Hispanic black mothers had the highest rate of meconium staining (63.5 per 1,000 live births), Hispanic mothers had an intermediate rate (53.0), and non-Hispanic white mothers the lowest—at 42.5 per 1,000. The rate was fairly constant across age groups for each racial and ethnic group.

Attendant at birth and place of delivery

The percentage of all births delivered by physicians in hospitals was 91.5 percent for 2004, unchanged from 2003 (Table 27). This level has increased only slightly from 2001–02 (91.3 percent). In 2004, as in previous years, almost all doctor-attended births were attended by doctors of medicine (M.D.s). The percentage of physician-attended births attended by doctors of osteopathy (D.O.s) was 4.9 percent, a slight increase from 2002 and 2003 (4.8). This

rate has increased fairly steadily from 2.8 percent reported in 1989 (the first year data on D.O.s were available from the birth certificate).

The percentage of *all* births attended by midwives, which had increased steadily between 1975 and 2002 (from less than 1.0 to 8.1 percent), declined slightly between 2003 (8.0 percent) and 2004 (7.9 percent). Because cesarean deliveries are almost exclusively performed by physicians, the percentage of *all vaginal* births attended by midwives was calculated. This rate has steadily increased each year since 1991 (the first year that method of delivery was reported on birth certificates by all states and the District of Columbia). In 2004, midwives attended 11.1 percent of vaginal births, almost double the 1991 rate (5.7 percent).

Most midwife-attended births are by certified nurse midwives (CNMs). For 2004, the percentage of midwife-attended births by certified nurse midwives was 94.5 percent (essentially the same as in 2002 and 2003). This rate has remained at 90 percent or more since 1989 (the first year that this information was collected on birth certificates). Most midwife-attended births occur in hospitals. Due to underreporting of midwife-attended deliveries, these data should be considered lower estimates of the actual number of midwife-attended births (7,73).

In 2004, 99 percent of all births were delivered in hospitals. This level has been stable over the past several decades. Of the 1 percent of out-of-hospital births in 2004, 65 percent were in a residence and 27 percent were in a freestanding birthing center. These levels have varied only moderately since 1989.

As in past years, about 92 percent of births to non-Hispanic white and black women were attended by a physician in a hospital, compared with 90 percent of births to Hispanic women. CNM-attended hospital births were more likely among Hispanic women (8.9 percent) than among non-Hispanic white and black women (6.6 and 6.8 percent, respectively). See [Tables 23 and 24](#) for CNM-attended births by race and Hispanic origin.

Method of delivery

The rate of cesarean delivery for 2004 increased to 29.1 percent, the highest rate ever reported in the United States. This rate represents a 6 percent increase from 2003 (27.5 percent). After falling between 1989 and 1996, the cesarean rate rose by 41 percent from the 1996 low of 20.7 ([Figure 10](#) and [Table 28](#)). Data from the National Hospital Discharge Survey show similar trends in cesarean delivery for 1990–2004 (74,75).

The continued escalation in the total cesarean rate is being driven by both the increase in the primary cesarean rate and the decrease in the rate of vaginal birth after cesarean delivery (VBAC). The risks, benefits, and long-term consequences of cesarean delivery, especially with regard to medically indicated or cesarean delivery with no medical or obstetrical indication, and VBAC delivery are the subject of intense debate (76–78). A National Institutes of Health expert panel recently acknowledged a lack of national data or other studies on mothers' preferences and recommended against cesareans that are not medically indicated for women desiring several children, and for pregnancies of less than 39 weeks of gestation (79).

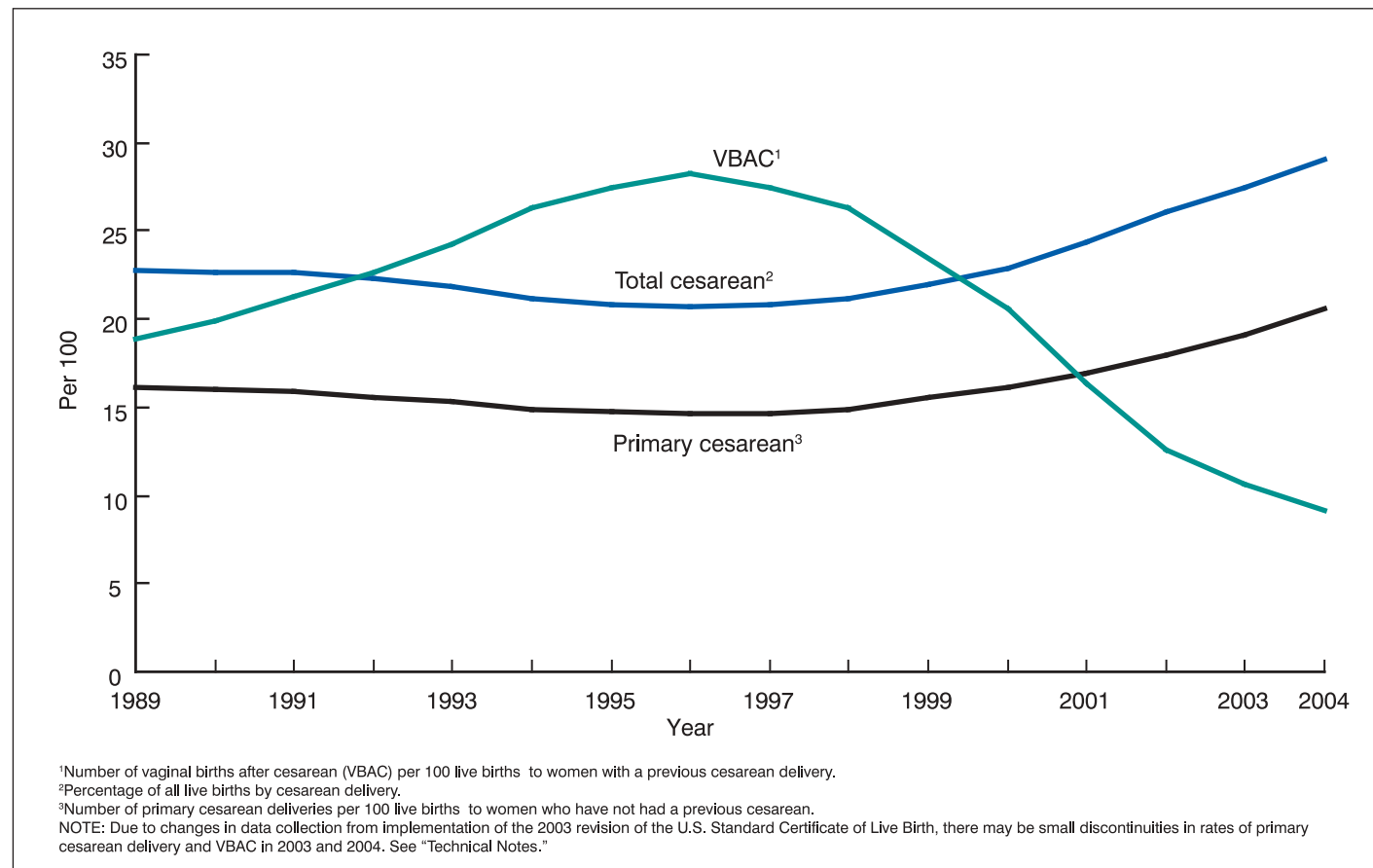


Figure 10. Total and primary cesarean rate and vaginal birth after cesarean rate: United States, 1989–2004

Method of delivery data based on the 1989 and the 2003 revisions of the U.S. Certificate of Live Birth are combined for all measures shown in this report. The numbers and percentages of total vaginal and total cesarean deliveries (e.g., the total cesarean delivery rate) appear to be very consistent between revisions. However, information on whether the delivery is a VBAC, primary cesarean, or repeat cesarean appears to be less comparable. In brief, data for the revised states show higher-than-expected VBAC and primary cesarean rates and lower-than-expected repeat cesarean rates. These discontinuities are likely due to wording and formatting changes to the method of delivery item on the 2003 Revision of the U.S. Standard certificate of live birth (5,6). The changes to the method of delivery item appear to have a small impact (2 to 3 percent) on the national primary and VBAC rates shown in this report. However, changes in VBAC, primary, and repeat cesarean deliveries for states that have implemented the revised certificates should be interpreted with caution; see “[Technical Notes](#).”

The primary cesarean rate for 2004 (20.6 per 100 live births to women who had no previous cesarean) was 8 percent higher than in 2003 (19.1). This rate has increased by an average of 5 percent each year during 1998–2003, and was 41 percent higher than the low reported for 1996–97 (14.6). The trends for rates for low-risk women, (i.e., women with a singleton, full-term infant in vertex presentation) are similar to those for all women (80,81). Rates for women at no indicated risk (i.e., those with singleton, full-term, vertex presentation births with no risk factors or complications of labor and delivery reported on the birth certificate) more than doubled between 1991–2003 (82) (data not shown). The increase in primary cesarean deliveries may be associated with nonclinical factors such as demographics, physician practice patterns, and maternal choice (77,83,84).

Between 2003 and 2004, the rate of VBAC fell 13 percent—from 10.6 to 9.2 per 100 women with a previous cesarean and the lowest level reported since this information has been collected on birth certificates (1989). The VBAC rate has fallen by 67 percent since 1996, after increasing by 50 percent between 1989 and 1996 (from 18.9 to 28.3 percent) ([Figure 10](#) and [Table 28](#)).

Among women with a first (primary) cesarean delivery, subsequent deliveries will be either a repeat cesarean or a VBAC. This steep decline in the rate of VBAC implies a corresponding rise in the rate of repeat cesarean deliveries (the rate of cesarean delivery per 100 women with a previous cesarean). The repeat rate increased from 71.7 to 90.8 percent between 1996 and 2004; therefore, once a woman has a cesarean delivery, it is highly likely (there is more than a 90 percent chance) that subsequent deliveries will be by cesarean. The trend was essentially the same for low-risk women ([Figure 11](#)). The steep decline in the VBAC rate (and, accordingly, the increase in the repeat cesarean rate) may be related to reports of risks associated with VBAC, more conservative practice guidelines, legal pressures, as well as the continuing debate regarding the harms and benefits of vaginal birth compared with cesarean delivery (78,84–87).

Between 2003 and 2004, the primary rate increased and the VBAC rate decreased for almost all ages, and for all racial and ethnic groups ([Table 28](#) and data not shown). These rates have also changed by a similar magnitude among low-risk women of all ages and racial and ethnic groups (81) and data not shown.

The primary cesarean rate rose 7 to 9 percent between 2003 and 2004, for non-Hispanic white, non-Hispanic black, and Hispanic women. The primary rate for non-Hispanic black women (22.5)

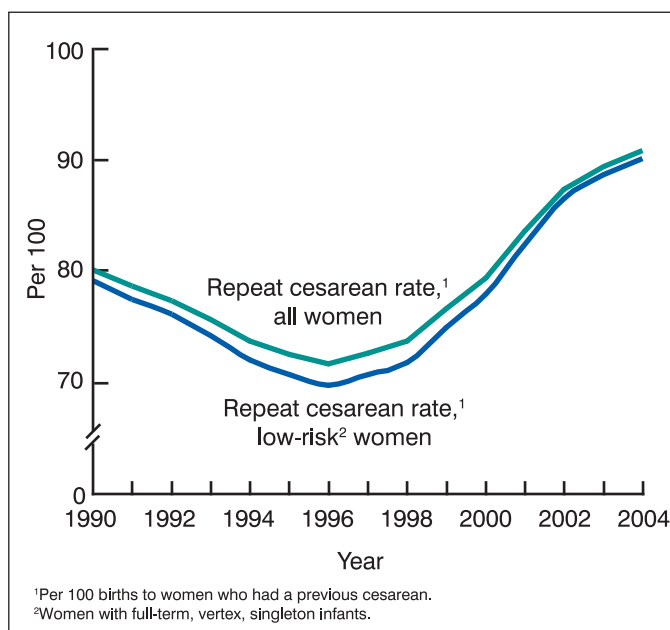


Figure 11. Repeat cesarean rates for all women, and for low-risk women: United States, 1990–2004

remained higher than the rates for non-Hispanic white and Hispanic women (21.1 and 18.2, respectively) ([Table 29](#)).

As in past years, primary cesarean rates rose as maternal age increased. For example, the 2004 rate for mothers aged 40–54 years (32.6) was over 75 percent higher than that for mothers under age 20 years (18.4) ([Table 29](#)). The higher rates for older mothers may be related to increased rates of multiple births, other biologic factors, and patient/practitioner concerns (88).

Declines in the VBAC rate were similar for the largest racial and Hispanic origin groups (11–13 percent) ([Table 29](#)). Until 2002, VBAC rates decreased with advancing maternal age. However, since 2002, VBAC rates have been essentially the same for all age groups.

For American Indian or Alaska Native women, the overall cesarean rate in 2004 was 25.1 percent; the rate for Asian or Pacific Islander women was 28.4 percent. Among Hispanic subgroups, the rate of cesarean delivery ranged between 27.1 for Mexican, to 43.4 for Cuban mothers ([Tables 23](#) and [24](#)).

Since 1996, as the cesarean rate has increased, the percentage of births delivered by either forceps or vacuum extraction has decreased 45 percent, from 9.4 to 5.2 percent ([Table J](#)). The rate of forceps delivery steadily decreased between 1989 and 2004, from 5.5 to 1.1. The rate of delivery by vacuum extraction, which had increased by 77 percent between 1989 (3.5) and 1997 (6.2 percent), has since decreased by one-third, to 4.1 percent for 2004.

Cesarean rates generally increased for all states (except Alaska) and the District of Columbia for 2003–04. As in previous years, there was considerable variation in cesarean rates by state, from under 22 percent in Alaska, Utah, and New Mexico, to over 32 percent for Kentucky, Louisiana, Mississippi, New Jersey, and West Virginia ([Table 30](#)). Almost one-half (47.7 percent) of births in Puerto Rico were cesarean deliveries. An analysis of cesarean delivery rates for Puerto Rican women by place of delivery (Puerto Rico compared with the U.S. mainland) found that rates in Puerto Rico were substantially higher than for Puerto Rican women who delivered on the U.S. mainland (89).

Table J. Percentage of live births delivered by forceps or vacuum extraction: United States, 1989–2004

Year	Forceps	Vacuum extraction	Forceps or Vacuum
2004	1.1	4.1	5.2
2003	1.3	4.3	5.6
2002	1.5	4.4	5.9
2001	1.8	4.5	6.3
2000	2.1	4.9	7.0
1999	2.3	5.1	7.4
1998	2.6	6.0	8.6
1997	2.8	6.2	9.0
1996	3.2	6.2	9.4
1995	3.5	5.9	9.4
1994	3.8	5.7	9.5
1993	4.1	5.3	9.4
1992	4.3	4.8	9.1
1991	4.6	4.4	9.0
1990 ¹	5.1	3.9	9.0
1989 ²	5.5	3.5	9.0

¹Excludes data for Oklahoma, which did not require reporting of method of delivery.

²Excludes data for Louisiana, Maryland, Nebraska, Nevada, and Oklahoma, which did not require reporting of method of delivery.

VBAC rates generally declined between 2003 and 2004 by state. In 2004, VBAC rates ranged from 4.2 in Louisiana, to 19.2 per 100 in Alaska and Utah. As noted above, increases for 2003–04 observed in VBAC rates in states that implemented the revised birth certificate likely reflect differences in wording and format between the 1989 and 2003 birth certificate revisions; see “[Technical Notes](#).”

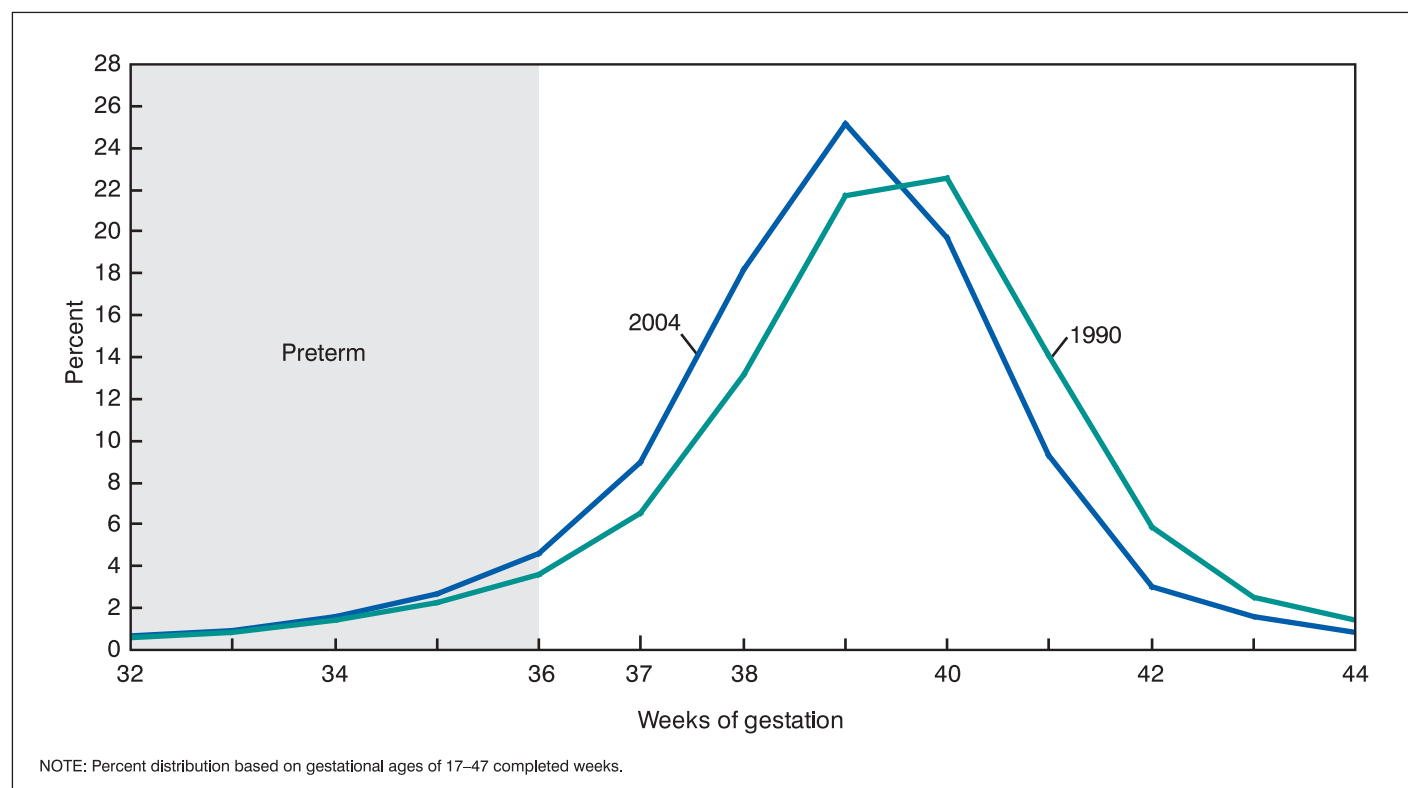
Infant Health Characteristics

Period of gestation

The **preterm birth rate** rose another 2 percent in 2004, to 12.5 percent of all births. More than one-half million (508,356) babies were born preterm (less than 37 completed weeks of gestation) in 2004, the highest number reported since comparable information on gestational age has been available from birth certificates (1981). The percentage of infants born preterm has risen 18 percent since 1990 (from 10.6 percent), and by 33 percent since 1981 (9.4 percent). Increases for 2003–04 are seen among very preterm, (less than 32 completed weeks of gestation), and moderately preterm (32–36 weeks) infants; see [Tables 23, 24, 31, and 32](#). Since 1990, the percentage of very preterm births (VPT) has risen from 1.92 to 2.01 percent, and that of moderately preterm infants (MPT) from 8.7 to 10.5 percent.

Preterm birth is a leading cause of infant morbidity and mortality, accounting for nearly one-half of all congenital neurological defects such as cerebral palsy, and more than two-thirds of infant deaths (90,91). The causes and best management of preterm labor are not fully understood (91–93).

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 infant's date of birth. The LMP-based gestational age is subject to error for several reasons; see “[Technical Notes](#).” Although these data are edited for gestational ages that are

**Figure 12. Percent distribution of births by gestational age (32–44 weeks): United States, 1990 and 2004**

clearly inconsistent with the infant's birthweight, these edits are conservative and substantial incongruities in these data persist. Changes in reporting of this measure over time may have some effect on trends in preterm birth rates, particularly by race (94–96).

Because of their growing numbers and heightened risk of early delivery compared with singletons, multiple births have an important influence on recent trends in preterm birth rates. Accordingly, when only singleton births are examined, a slightly different trend emerges from that for all births. Among singletons only, the preterm rate rose 11 percent between 1990 and 2004 (9.7 to 10.8 percent); nearly all of the increase was among infants delivered at 34–36 weeks, or “late preterm;” see [Figure 12](#) and [Table K](#). A small decline, from 1.69 to 1.61 percent, is seen in singleton VPT births over this period. The increase in late preterm births is of concern because these babies comprise more than 70 percent of all preterm births ([Figures 12 and 13](#)) and, although infants born at 34–36 weeks are at lower risk of adverse outcome compared with infants born at earlier gestational ages, they are at heightened risk when compared with infants delivered at higher ages (97,98).

The trend to earlier deliveries is also seen at later gestational ages, that is, at term or later (37 and more weeks). Among singleton births, the percentage of births delivered at 40 weeks and greater declined from 36.9 to 36.2 between 2003 and 2004, and the percentage of births at 37–39 weeks increased from 52.5 to 53.0 ([Table K](#)). Since 1990, the percentage of births 40 weeks and greater has dropped by more than 25 percent. The marked shift in the gestational age distribution suggests increases in the use of delivery management techniques such as induction of labor and cesarean delivery (99–101). The rise in preterm births has been shown to have occurred among births with these medical interventions, and also among “spontaneous” deliveries or those for whom no intervention is reported (102–104).

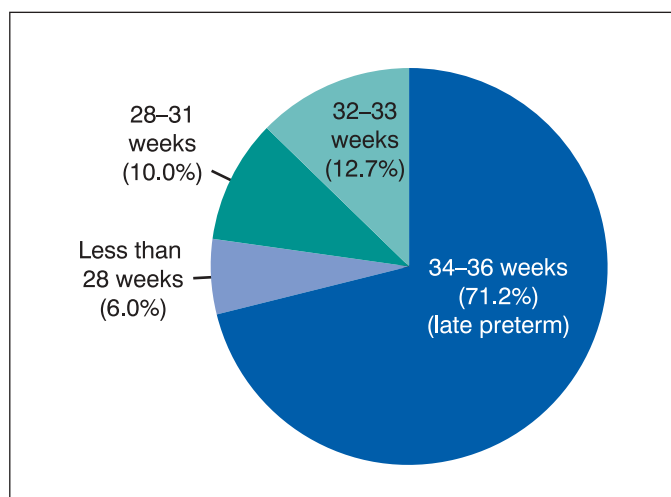


Figure 13. Percent distribution of preterm births: United States, 2004

Preterm rates rose for the current year for non-Hispanic white (11.3 to 11.5 percent), and Hispanic infants (11.9 to 12.0 percent); the change among non-Hispanic black infants was not statistically significant (17.8 to 17.9 percent) ([Table 32](#)). Since 1990, preterm birth rates have risen by more than one-third for non-Hispanic white births (from 8.5 percent), and 9 percent for Hispanic births (11.0 percent). Preterm rates among non-Hispanic black infants appeared to have declined during the 1990s (from 18.9 percent in 1990 to 17.4 in 2000), but have been on the rise since. The risk of preterm birth in 2004 for non-Hispanic black newborns was nearly 50 percent higher than that for non-Hispanic white and Hispanic black infants. Preterm birth rates for American Indian or

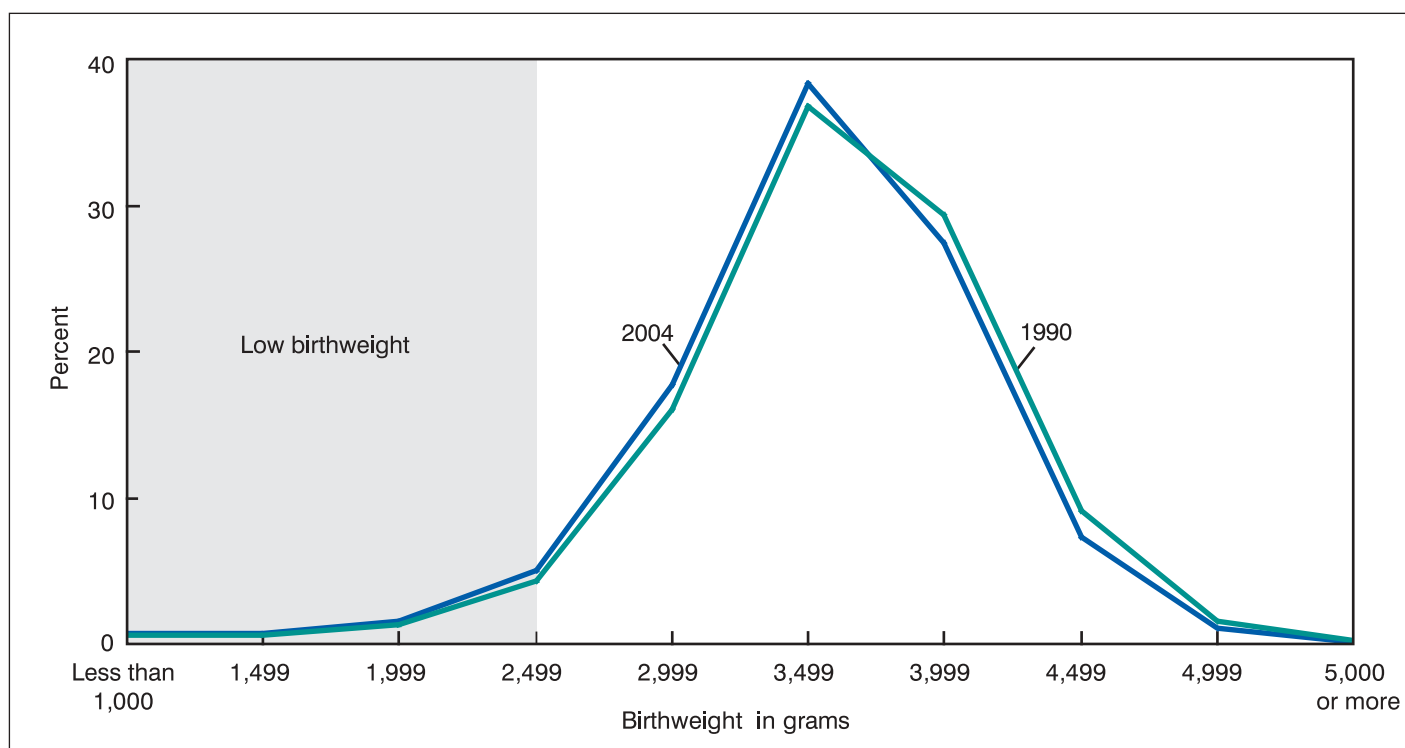


Figure 14. Percent distribution of births by birthweight: United States, 1990 and 2004

Table K. Percent distribution of gestational age of all births and for singleton births only: United States, 1990, 2003, and 2004

Gestational age	All births			Singleton births		
	2004	2003	1990	2004	2003	1990
Under 28 weeks	0.75	0.74	0.71	0.61	0.60	0.61
28–31 weeks	1.25	1.22	1.21	1.01	0.99	1.08
Total under 32 weeks	2.01	1.97	1.92	1.61	1.58	1.69
32–33 weeks	1.59	1.57	1.40	1.28	1.25	1.24
34–36 weeks	8.90	8.80	7.30	7.88	7.81	6.77
Total under 37 weeks	12.49	12.33	10.61	10.77	10.65	9.70
37–39 weeks	52.36	51.85	41.38	53.03	52.48	41.42
40 and higher weeks	35.15	35.82	48.00	36.20	36.87	48.88

Alaska Native (AIAN), Asian or Pacific Islander (API), and the Hispanic subgroups are shown in [Tables 24](#) and [25](#).

Birthweight

The **low birthweight rate (LBW)** increased again, to 8.1 percent in 2004, from 7.9 percent in 2003, the highest level reported since 1969. The percentage of infants born at less than 2,500 grams or 5 lb 8 oz, has generally been on the rise over the last two decades; the 2004 rate is 16 percent higher than that reported for 1990 (7.0 percent), and 21 percent higher than the 1984 low (6.7 percent); (see [Figures 1, 14, and Tables 31, 32, and 34](#)). Increases for 2003–04 were observed for both very low (less than 1,500 grams, or less than 3 lb 4 oz), and moderately low birthweight (1,500 to 2,499 grams or 3 lb 5 oz to 5 lb 8 oz) infants. The percentage of infants born **very low birthweight (VLBW)** increased from 1.45 to 1.48, and is up from 1.27 since 1990. The percentage of infants born moderately low birthweight (MLBW) rose from 6.48 to 6.60 for 2003–04, and is up from 5.69 percent since 1990.

The weight of the newborn is an important predictor of future morbidity and mortality (90,105,106). For VLBW infants, the risk of dying in the first year of life is nearly 100 times that of normal weight infants; the risk for MLBW infants is more than five times higher than that of heavier newborns. Mortality risk is lowest for infants born at 3,500–4,500 grams (7 lb 12 oz to 9 lb 14 oz) (90).

The pronounced shift in recent years in the birthweight distribution toward smaller babies is demonstrated in [Figures 1 and 14](#). Between 1990 and 2004, increases are observed for each 500 gram interval under 3,500 grams. In contrast, large declines are seen at 3,500 grams and over. Trends are similar when singleton births of 2,500 grams and higher are examined; however, increases for birthweight intervals less than 2,500 grams are substantially reduced (see [Table L](#) for trends in singleton birthweight). Of particular note is the large decline in the percentage of infants delivered at 4,000–4,499 grams (8 lb 14 oz–9 lb 14 oz), down 4 percent for 2003–04, and 20 percent since 1990. Infants delivered at 4,000–4,499 grams are more likely than infants delivered at all other birthweights, to survive to their first birthday (90). The percentage of all infants 4,000 grams or more dropped from 8.9 to 8.5 percent between 2003 and 2004. The proportion of higher birthweight infants has fallen from levels of over 11 percent since the 1980s. Increases in the multiple birth rate, obstetric interventions such as induction of labor and cesarean delivery, older maternal age at childbearing, and increased use of infertility therapies may have influenced

the trends toward lower birthweights. See also sections on “Obstetric procedures,” “Method of delivery,” and “Period of gestation” (99,100,107–111).

LBW levels increased for 2003–04 among each of the largest racial and ethnic groups; non-Hispanic white (from 7.0 to 7.2 percent), non-Hispanic black (from 13.6 to 13.7 percent), and Hispanic (from 6.7 to 6.8 percent) ([Table 32](#)). Increases in VLBW rates were statistically significant for non-Hispanic white and Hispanic infants, but not for non-Hispanic black infants. See [Tables 23 and 24](#) for VLBW and LBW levels for population subgroups; AIAN, API, Mexican, Puerto Rican, Cuban, and Central and South American infants.

The rise in the rate of multiple births, which tend to be born much smaller than singletons (see section on “Multiple births”) has strongly influenced the upward swing in the LBW rate; however, low birthweight among infants in single deliveries has also been on the increase. For 2004, the **LBW rate for singletons** increased to 6.3 percent, from 6.2 percent for 2003. Singleton LBW has risen 5 percent since only 2000 (6.0 percent). The VLBW rate among singletons was 1.12 for 2004, compared with 1.11 percent in 2003. In 2004, the **mean or average birthweight** for infants delivered in single deliveries was 3,316 grams (7 lb, 5 oz), down 1 percent since 1990 ([Table L](#)).

Singleton LBW rose between 2003 and 2004 among non-Hispanic white and Hispanic infants; the increase for non-Hispanic black infants was not statistically significant ([Table L](#)). Since 1990, LBW rates for singletons have risen 8 and 14 percent for Hispanic and non-Hispanic white infants, respectively, and declined 2 percent among non-Hispanic black newborns.

The **youngest and oldest mothers** are the most likely to deliver LBW infants. For 2004, the lowest LBW levels were reported for women aged 25–34 years; the highest for teenagers under 15 years and women aged 45–54 years ([Table 34](#)). However, much of the elevated LBW risk among older mothers is associated with their higher multiple birth rates. When only singleton births are examined for this age group for 2004, the LBW rate for the oldest mothers drops from 21 to 10 percent. (Data not shown.)

Low birthweight levels also differ widely by state or reporting area. For 2004, more than 10 percent of all infants in Alabama, Louisiana, Mississippi, South Carolina, and the District of Columbia were born LBW, compared with less than 6.5 percent of infants in Alaska, Maine, Oregon, Vermont, and Washington. Differences in demographic characteristics such as maternal age and race and ethnicity explain some of the overall differences in birth outcome among states ([Tables 35 and 36](#)).

Table L. 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 2004

	2004	2003	2000	1995	1990 ¹
All races and origins ²					
Percent very low birthweight	1.12	1.11	1.11	1.08	1.05
Percent low birthweight	6.31	6.20	6.00	6.05	5.90
Mean birthweight in grams (standard deviation) . . .	3,316 (570)	3,325 (571)	3,348 (577)	3,353 (581)	3,365 (583)
Non-Hispanic white					
Percent very low birthweight	0.83	0.82	0.80	0.78	0.73
Percent low birthweight	5.22	5.11	4.88	4.87	4.56
Mean birthweight in grams (standard deviation) . . .	3,375 (554)	3,384 (555)	3,410 (560)	3,416 (563)	3,433 (562)
Non-Hispanic black					
Percent very low birthweight	2.61	2.61	2.62	2.55	2.54
Percent low birthweight	11.70	11.58	11.28	11.66	11.92
Mean birthweight in grams (standard deviation) . . .	3,115 (628)	3,122 (631)	3,141 (637)	3,132 (635)	3,128 (635)
Hispanic ³					
Percent very low birthweight	0.98	0.94	0.94	0.93	0.87
Percent low birthweight	5.63	5.55	5.36	5.36	5.23
Mean birthweight in grams (standard deviation) . . .	3,316 (548)	3,324 (548)	3,344 (552)	3,343 (553)	3,351 (552)

¹Data for 1990 by race and Hispanic origin exclude data for New Hampshire and Oklahoma, which did not require reporting of Hispanic origin of mother.

²Includes races other than white and black and origin not stated.

³Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTES: Very low birthweight is less than 1,500 grams. Low birthweight is less than 2,500 grams. Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Apgar score

To evaluate the general physical condition of the newborn, the Apgar score has been employed for over 50 years. Historically, the score has been a measure taken at 1 minute (no longer available from vital statistics), 5 minutes, and if desired, at additional 5-minute intervals after delivery (112). The Apgar score measures five easily identifiable characteristics of newborn infants. The total score is the sum of the scores of the five components. A score of 0 to 3 indicates an infant in need of resuscitation; a score 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 Apgar score can be a useful clinical indicator for reporting overall status of the newborn and response to resuscitation efforts, but it has limited use as a stand-alone measure to diagnose conditions such as asphyxia (113). The Apgar score at 5 minutes is a valid predictor of neonatal mortality, but less so for long-term outcome; also it correlates poorly with future neurological dysfunction (113).

In 2004, the **proportion of newborns with 5-minute Apgar scores** indicating excellent infant health status (9 or 10 points) declined to 88.8 percent (**Table M**). This decrease followed a very slow increase from 88.6 to 91.1 percent between 1978 and 2003. A small but significant increase in the proportion of 2004 births with low Apgar scores (below 7) to 1.5 percent is a departure from long-term stability in this measure. The proportion of births with low scores had declined over 30 percent from 1978 to 1993 (2.1 percent to 1.4); was unchanged at 1.4 percent through 2003. Low 5-minute Apgar scores are associated with lower birthweight and shorter gestational age (114,115).

Among racial and ethnic groups in 2004, non-Hispanic blacks had the highest percent (0.95 percent) of very low Apgar scores (0 to 3 points), which is more than twice the level of other groups (**Table M**). APIs had the lowest percent (0.33) of live births in this category.

Congenital anomalies

In this report, data are presented for the five congenital anomalies reported on both the revised and unrevised U.S. Standard Certificates of Live Birth; see "[Technical Notes](#)."

Congenital anomalies are the leading cause of infant death in the U.S. (90). They also cause metabolic disorders and disability (116). The national effort to prevent neural tube defects (NTDs), such as spina bifida and anencephalus, by encouraging increased intake of folic acid among women of childbearing age has been described elsewhere; increased folate use among women of childbearing age has been reported (117,118). It has been suggested that greater maternal weight may be a risk factor for NTDs (119), and that multivitamin supplementation may protect against defects other than NTDs (120).

The rate for the NTD **anencephalus** was 10.9 in 2004, compared with 11.4 per 100,000 births in 2003. The 2003 level was the highest rate reported since 1997. The anencephalus rate, which had declined in the early 1990s, was stable for 1994–97. Between 1998 and 2002, the rate was essentially unchanged, but generally lower than in previous years (117). The spina bifida/meningocele rate was 19.3 per 100,000 in 2004, compared with 18.7 in 2003 (**Table 25**). The spina bifida rate increased between 1992 and 1995 and declined for 1995–99 (117). The rate for this anomaly has not changed significantly in more recent years.

The congenital anomalies reported on birth certificates are rare events. Since a small change in the number of anomalies reported can result in a relatively large change in rates, caution should also be used in comparing yearly rates for a specific anomaly.

Among the most commonly reported specific anomalies, cleft lip/palate was reported at a rate of 77.7 per 100,000 births. The rate of Down's syndrome was 47.9.

Table M. Apgar score at 5 minutes, by race and Hispanic origin of mother: 48 states and the District of Columbia, 2004

5-minute Apgar score	All races and origins ¹	Non-Hispanic white	Non-Hispanic black	American Indian or Alaska Native total ^{2,3}	Asian or Pacific Islander total ³	Hispanic ⁴
0-3 Poor	0.5	0.4	1.0	0.4	0.3	0.4
4-6 Intermediate	1.1	1.0	1.5	1.1	0.7	0.8
7-8 Good	9.7	10.2	10.2	9.5	7.3	7.9
9-10 Excellent	88.8	88.4	87.3	89.1	91.6	90.9

¹Includes origin not stated.²Includes births to Aleuts and Eskimos.³Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see "Technical Notes."⁴Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTES: Excludes data for California and Texas, which did not report 5-minute Apgar score on the birth certificate. Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Congenital anomalies are underreported on the birth certificate; however, birth certificate data may be a valuable resource for exploratory or confirmatory studies (121). Data from birth certificates have been used to support an association between maternal smoking and birth defects such as cleft lip/palate and clubfoot (121,122).

The most serious or apparent anomalies are more likely to be observed and documented prior to birth registration; early recognition and reporting of congenital anomalies are limited because many anomalies are not recognizable at birth (123).

Rates for certain types of anomalies differ widely with maternal age (Table 25). For example, in 2004 as in past years, infants of the youngest mothers have the highest rates for omphalocele/gastroschisis (a defect or abnormality of the anterior abdominal wall) (124); infants of mothers aged 35 years and over have the highest rates for Down's syndrome.

Multiple births

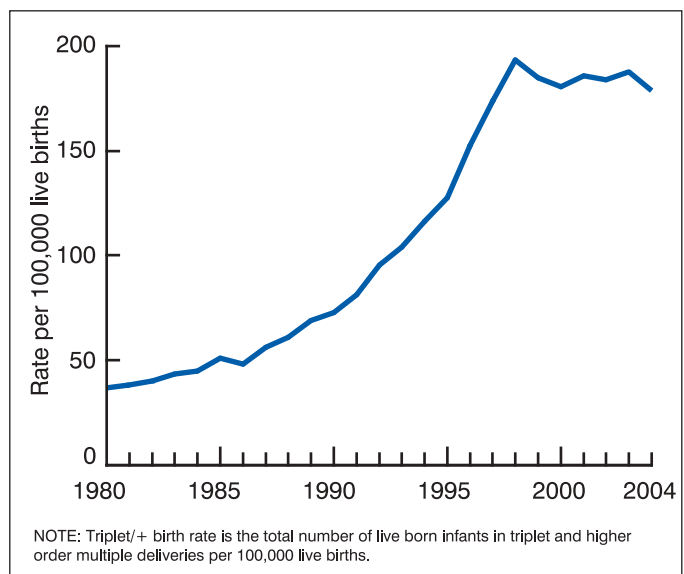
The twin birth rate rose 2 percent for 2004, to 32.2 twins per 1,000 total births, another record high. The twinning rate has climbed 42 percent since 1990 (from 22.6), and 70 percent since 1980 (18.9). The number of live births in twin deliveries rose to 132,219, nearly double the number reported for 1980 (from 68,339) (125); (see Tables 37 and 38).

In contrast to the continued upswing in twin births, the rate of triplet and higher-order multiple births (triplet/+ birth rate) declined 6 percent for 2004, to 176.9 per 100,000, from 187.4 in 2003. The triplet/+ birth rate (the number of triplets, quadruplets, quintuplets, and other higher-order multiples per 100,000 live births) soared by more than 400 percent between 1980 and 1998 (from 37.0 to 193.5 per 100,000 births) (125). Since 1999, however, this rate has been comparatively stable, trending slightly downward; the current year level is 9 percent lower than the 1998 peak; see Figure 15. In 2004, 7,275 triplets/+ were born, a drop of 5 percent from the previous year, and the lowest number reported since 1997. Similar trends in twinning and in triplet/+ birth rates have been observed over the last several decades in England and Wales (126).

Despite the recent small amelioration in triplet/+ birth rates, levels remain 4-fold higher than those observed prior to the introduction of fertility therapies in the early 1980s. Further, because twins make up the bulk of all multiple births (95 percent in 2004), the overall proportion

of multiple births has continued to rise steadily, reaching an all-time high of 33.9 per 1,000 for 2004. The rising incidence of multiple births over the last two decades, especially that for higher-order multiples, has been associated with two related trends, the older age at childbearing (women in their thirties are more likely than younger women to conceive multiples spontaneously) and the increasing use of fertility therapies (28,127-130). These therapies include ovulation-inducing drugs, and assisted reproductive technologies (ART) in which eggs and sperm are handled in the laboratory (e.g., *in vitro* fertilization). ART is estimated to account for 44 percent of triplets and 16 percent of twins born in 2003 (131). (Note: these estimates do not take into account the impact of non-ART procedures.)

The recent interruption in the upsurge of triplet/+ births may be in part related to recommendations in the late 1990s (further refined in 2004) from the American Society of Reproductive Medicine intended to prevent higher-order multiple pregnancies by limiting the number of embryos transferred (132,133). A shift from the transfer of 3 embryos (a predictor of triplet/+ deliveries) to 2 embryos, appears to have occurred between the mid- to late 1990s and 2002 (the most recent

**Figure 15. Triplet/+ birth rate: United States, 1980-2004**

year for which data are available) (130,134). Other factors also may have influenced the recent change in triplet/+ birth rates (135,136).

Twinning rates increased between 2003 and 2004 among non-Hispanic white (36.3 in 2004), non-Hispanic black (35.6), and Hispanic women (21.5); the increase for Hispanic women was not statistically significant. Triplet/+ births declined among non-Hispanic white (243.4 per 100,000 for 2004), non-Hispanic black (99.7), and Hispanic mothers (76.4) (the decline in non-Hispanic black triplet/+ births was not significant). The fastest growth and the highest rates of twins and triplet/+ births in recent years have been observed among non-Hispanic white mothers; this group is also the most likely to receive infertility services (29). Since 1990, the twinning rate has risen 59 percent for non-Hispanic white women, compared with increases of 33 and 19 percent for non-Hispanic black and Hispanic mothers, respectively.

Multiple birth rates have risen for women of all age groups over the last several decades, but the largest growth has been among older mothers, especially those aged 35 years and over. For example, among women aged 20–24 years the twin birth rate increased 31 percent

between 1980 and 2004, compared with an increase of 133 percent for women aged 40–44 years (125) **see Figure 16**.

On average, multiple births are born much earlier and smaller than singletons, and are more likely to die within the first year of life. In 2004, the average birthweight of twins was nearly 1,000 grams lower than that of singletons (2,333 grams, or 5 lb 2 oz, compared with 3,316 grams, or 7 lb 5 oz); the average triplet/+ weighed about one-half the average singleton (1,700 grams, or 3 lb 12 oz); **see Text Table N**. In 2003, the mortality rate for infants born in multiple deliveries was more than four times higher than that for singletons (90).

Twinning and triplet/+ birth rates range widely by the mother's state of residence (**Table 39**). The lowest twin birth rate reported for the combined 3-year period 2002–04 was 23.8 per 1,000 for New Mexico, compared with a high of 45.2 for Massachusetts. These states also reported among the lowest and highest triplet/+ rates for 2002–04 (69.1 per 100,000 for New Mexico and 308.0 for Massachusetts). Other states with substantially higher rates of triplet/+ birth rates were Nebraska (336.2) and New Jersey (331.4).

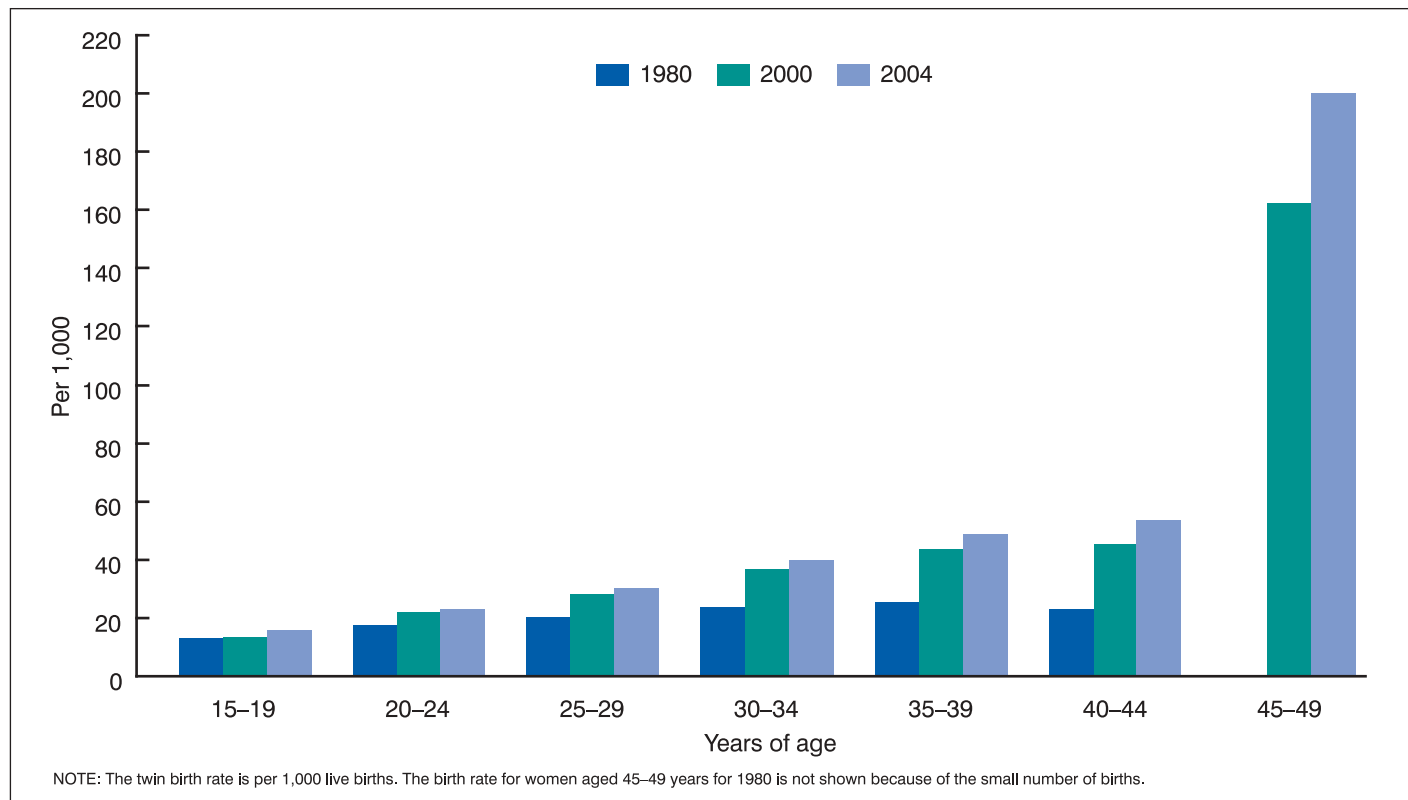


Figure 16. Twin birth rate by age of mother: United States, 1980, 2000, and 2004

Table N. Gestational age and birthweight characteristics by plurality: United States, 2004

Gestational age	Twins	Triplets	Quadruplets	Quintuplets and higher order multiples ¹	Singletons
Number	132,219	6,750	439	86	3,972,558
Percent very preterm ²	11.8	35.9	64.9	81.4	1.6
Percent preterm ³	59.7	93.0	95.9	100.0	10.8
Mean gestational age in weeks (standard deviation). . .	35.2 (3.6)	32.1 (3.9)	29.7 (4.5)	28.4 (2.7)	38.7 (2.4)
Percent very low birthweight ⁴	10.2	33.2	65.1	84.9	1.1
Percent low birthweight ⁵	56.6	94.1	98.4	100.0	6.3
Mean birthweight in grams (standard deviation).	2,333 (634)	1,700 (559)	1,276 (552)	1,103 (383)	3,316 (570)

¹Quintuplets, sextuplets, and higher order multiple births are not differentiated in the national data set.

²Very preterm is less than 32 completed weeks of gestation.

³Preterm is less than 37 completed weeks of gestation.

⁴Very low birthweight is less than 1,500 grams.

⁵Low birthweight is less than 2,500 grams.

References

- Hamilton BE, Martin JA, Ventura SJ, et al. Births: Preliminary data for 2004. National vital statistics reports; vol 54 no 8. Hyattsville, MD: National Center for Health Statistics. 2005.
- National Center for Health Statistics. Natality public-use tape and CD-ROM. Hyattsville, MD: National Center for Health Statistics. Annual products.
- National Center for Health Statistics. Vital statistics of the United States, 2001, volume I, natality. Available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab2001.htm>.
- Martin JA, Hamilton BE, Sutton PD, et al. Births: Final data for 2003. National vital statistics reports; vol 52 no 10. Hyattsville, MD: National Center for Health Statistics. 2005.
- National Center for Health Statistics. 2003 revision of the U.S. Standard Certificate of Live Birth. 2003. Available from: http://www.cdc.gov/nchs/vital_certs_rev.htm.
- National Center for Health Statistics. Report of the Panel to Evaluate the U.S. Standard Certificates and Reports. National Center for Health Statistics. 2000. Available from: http://www.cdc.gov/nchs/data/dvs/panelreport_acc.pdf.
- National Center for Health Statistics. Technical appendix. Vital statistics of the United States, 2003, vol I natality. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Hyattsville, MD: Available from: http://www.cdc.gov/nchs/data/TechApp03_1-09.pdf and included on the CD-ROM titled: Vital Statistics of the United States, vol 1, Natality, 2003.
- Office of Management and Budget. Race and ethnic standards for federal statistics and administrative reporting. Statistical Policy Directive 15. May 12, 1977.
- Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. Federal Register 62FR58781-58790. October 30, 1997. Available from: <http://www.whitehouse.gov/omb/fedreg/ombdir15.html>.
- Ingram DD, Parker JD, Schenker N, et al. United States Census 2000 with bridged race categories. National Center for Health Statistics. Vital Health Stat 2 (135). 2003. Available from: http://www.cdc.gov/nchs/data/series/sr_02/sr02_135.pdf.
- Schenker N, Parker JD. From single-race reporting to multiple-race reporting: Using imputation methods to bridge the transition. Stat Med 22:1571-87. 2003.
- Johnson D. Coding and editing multiple race. Presented at the 2004 Joint Meeting of NAPHSIS and VSCP. Portland, OR: June 6-10, 2004. Available from: <http://www.naphsis.org/events/index.asp?bid=699>.
- Weed JA. Coding and editing multiple race. Presented at the 2004 Joint Meeting of NAPHSIS and VSCP. Portland, OR: June 6-10, 2004. Available from: http://www.cdc.gov/nchs/data/dvs/Multiple_race_docu_5-10-04.pdf.
- Martin JA, Hamilton BE, Sutton PD, et al. Births: Final data for 2002. National vital statistics reports; vol 52 no 10. Hyattsville, MD: National Center for Health Statistics. 2003.
- Menacker F, Martin JA, MacDorman MF, et al. Births to 10-14 year-old mothers, 1990-2002: Trends and health outcomes. National vital statistics reports; vol 53 no 7. Hyattsville, MD: National Center for Health Statistics. 2004.
- National Center for Health Statistics. Postcensal estimates of the resident population of the United States as of July 1, 2004, by year, state and county, age, bridged race, sex, and Hispanic origin (vintage 2004). File pcen_v2004_y04.txt (ASCII). Released September 8, 2005. Available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/datadoc.htm>.
- Elam-Evans LD, Strauss LT, Herndon J, et al. Abortion surveillance—United States, 2000. Surveillance Summaries. MMWR 52(SS-12). 2003.
- Henshaw S. The Alan Guttmacher Institute. Unpublished tabulations. 2004.
- Ventura SJ, Abma JC, Mosher WD, Henshaw S. Estimated pregnancy rates for the United States, 1990-2000: An update. National vital statistics reports; vol 52 no 23. Hyattsville, MD: National Center for Health Statistics. 2004.
- Ventura SJ, Mosher WD, Curtin SC, et al. Trends in pregnancies and pregnancy rates by outcome: Estimates for the United States, 1976-96. National Center for Health Statistics. Vital Health Stat 21(56). 2000.
- Strauss LT, Herndon J, Chang J, et al. Abortion surveillance—United States, 2002. Surveillance Summaries. MMWR 54(SS-7). 2005.
- Strauss LT, Herndon J, Chang J, et al. Abortion surveillance—United States, 2001. Surveillance Summaries. MMWR 53(SS-9). 2004.
- Abma JC, Martinez GM, Mosher WD, Dawson BS. Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2002. National Center for Health Statistics. Vital Health Stat 23(24). 2004.

24. Eaton DK, Kann L, Kinchen S, et al. Youth risk behavior surveillance—United States 2005. Surveillance Summaries. MMWR 55(SS-5). 2006.
25. National Campaign to Prevent Teen Pregnancy. Preventing teen pregnancy: Why care? Available from: <http://www.teenpregnancy.org/whycare/default.asp> (accessed May 22, 2006).
26. Centers for Disease Control and Prevention. Adolescent reproductive health, teen pregnancy. Available from: <http://www.cdc.gov/reproductivehealth/AdolescentReproHealth/index.htm> (accessed May 22, 2006).
27. Hamilton BE, Sutton PD, Ventura SJ. Revised birth and fertility rates for the 1990s and new rates for Hispanic population, 2000 and 2001: United States. National vital statistics reports; vol 51 no 12. Hyattsville, MD: National Center for Health Statistics. 2003. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr51_12.pdf.
28. Reynolds MA, Schieve LA, Martin JA, et al. Trends in multiple births conceived using assisted reproductive technology, United States, 1997–2000. Pediatrics 111(5):1159–66. 2003.
29. Chandra A, Martinez GM, Mosher WD, et al. Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. National Center for Health Statistics. Vital Health Stat 23(25). 2005.
30. Chandra A, Stephen EH. Impaired fecundity in the United States: 1982–1995. Fam Plan Persp 30(1):34–42. 1998.
31. Mathews TJ, Hamilton BE. Mean age of mother, 1970–2000. National vital statistics reports; vol 51 no 1. Hyattsville, MD: National Center for Health Statistics. 2002.
32. Sutton PD, Mathews TJ. Trends in characteristics of births by state: United States, 1990, 1995, and 2000–2002. National vital statistics reports; vol 52 no 19. Hyattsville, MD: National Center for Health Statistics. 2004.
33. Mathews TJ, Hamilton BE. Trend analysis of sex ratio at birth in the United States. National vital statistics reports; vol 53 no 20. Hyattsville, MD: National Center for Health Statistics. 2005.
34. Ventura SJ, Bachrach CA. Nonmarital childbearing in the United States, 1940–99. National vital statistics reports; vol 48 no 16. Hyattsville, MD: National Center for Health Statistics. 2000.
35. Fields J. Unpublished data from the March 2003 current population survey. U.S. Census Bureau. 2003.
36. U.S. Census Bureau. Unpublished data from the March 2004 current population survey. U.S. Census Bureau. 2004.
37. U.S. Census Bureau. Unpublished data from the March 2005 current population survey. U.S. Census Bureau. 2005.
38. U.S. Census Bureau. Years of school completed by people 25 years and over, by age and sex: Selected years 1940 to 2004. Table A–1. Washington: U.S. Department of Commerce. Released March 2005. Available from: <http://www.census.gov/population/socdemo/education/tabA-1.xls>.
39. Dye JL. Fertility of American women: June 2004. Current population reports, P20–555. Washington: U.S. Census Bureau. 2005.
40. Alexander LL, La Rosa JH, Bader H. New dimensions in women's health (2nd ed). Boston, MA: Jones and Bartlett. 2001.
41. Ehrenberg HM, Dierker L, Milluzzi C, Mercer BM. Low maternal weight, failure to thrive in pregnancy, and adverse pregnancy outcomes. Am J Obstet Gynecol 189:1726–30. 2003.
42. Schieve LA, Cogswell ME, Scanlon KS, et al. Prepregnancy body mass index and pregnancy weight gain: Associations with preterm delivery. Obstet Gynecol 96:194–200. 2000.
43. Abrams B, Altman, SL, Pickett KE. Pregnancy weight gain: Still controversial. Am J Clin Nutr 71(5) S:1233–41. 2000.
44. Centers for Disease Control and Prevention. BMI—Body Mass Index: About BMI for Adults. http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm (accessed June 1, 2006).
45. American Academy of Pediatrics and American College of Obstetricians and Gynecologists. Guidelines for perinatal care (4th ed). 1997.
46. Lydakis C, Beevers DG, Beevers M, Lip GYH. Obstetric and neonatal outcome following chronic hypertension in pregnancy among different ethnic groups. QJM 91(12):837–44. 1998.
47. Cunningham FG, Gant NF, Leveno KJ, et al. Eds. Williams obstetrics (21st ed). New York, NY: McGraw-Hill. 2001.
48. Scott JR, DiSaia PJ, Hammond CB, et al. Eds. Danforth's obstetrics and gynecology (8th ed). Philadelphia, PA: Lippincott Williams & Wilkins. 1999.
49. Eaton SC, Kirmeyer SW. Prevalence of type 2 diabetes mellitus in the United States. Research Triangle Park, NC: RTI Health Solutions. 2003.
50. National Center for Health Statistics. Vital statistics of the United States, 1990, vol I, natality. Hyattsville, MD: National Center for Health Statistics. 1994.
51. CDC. Smoking during pregnancy—United States, 1990–2002. MMWR 53(39):911–15. 2004.
52. Phares TM, Morrow B, Lansky A, et al. Surveillance for disparities in maternal health-related behaviors—selected states, Pregnancy Risk Assessment Monitoring System (PRAMS), 2000–2001. MMWR 53(SS-4). 2004.
53. Kharrazi M, Epstein D, Hopkins B, et al. Evaluation of four smoking questions. Public Health Rep 114(1):60–70. 1999.
54. Hooley C, McCoy R. Changing the standards . . . the Vermont experience. In: Proceedings of the 2003 National Association for Public Health Statistics and Information Systems and the Vital Statistics Cooperative Program project directors joint meeting; June 10, 2003.
55. Martin JA, Ventura SJ. Braving the new world: Challenges and rewards of the revised birth data. Presented at annual meeting of the National Association for Public Health Statistics and Information Systems. San Diego, CA. June 8, 2006.
56. U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004. Available from: http://www.cdc.gov/tobacco/sgr/sgr_2004/chapters.htm (accessed June 12, 2006).
57. Miller DP, Villa KF, Hogue SL, Sivapathasundaram D. Birth and first-year costs for mothers and infants attributable to smoking. Nicotine Tob Res 3(1):25–35. 2001.
58. Kleinman JC, Madans JH. The effects of maternal smoking, physical stature, and educational attainment on the incidence of low birth weight. Am J Epidemiol 121(6):843–55. 1985.
59. Ventura SJ, Hamilton BE, Mathews TJ, Chandra A. Trends and variations in smoking during pregnancy and low birth weight: Evidence from the birth certificate, 1990–2000. Pediatrics 111(5):1176–80. 2003.
60. American Academy of Pediatrics and American College of Obstetricians and Gynecologists. Guidelines for prenatal care (4th ed). 1997.
61. Fiscella K. Does prenatal care improve birth outcomes? A critical review. Obstet Gynecol. 85(3):468–79. 1995.
62. Alexander GR, Kotelchuck M. Assessing the role and effectiveness of prenatal care: History, challenges, and directions for future research. Public Health Rep 116:306–16. 2001.
63. U.S. Public Health Service. Caring for our future: The content of prenatal care. Washington: U.S. Department of Health and Human Services. 1989.
64. CDC. Recommendations to improve preconception health and health care—United States. A report of the CDC/ATDSR Preconception care work group and the select panel on preconception care. MMWR 55(RR-6):1–23. 2006.

65. Howell EM. The impact of Medicaid expansions for pregnant women: A synthesis of the evidence. *Med Care Res Rev* 58(1):3–30. 2001.
66. Alexander GR, Kogan MD, Nabukara S. Racial differences in prenatal care use in the United States: Are they decreasing? *Am J Public Health* 92(12):1970–75. 2002.
67. Kotelchuck M. An evaluation of the Kessner adequacy of prenatal care index and a proposed adequacy of prenatal care utilization index. *Am J Public Health* 84 (9):1414–20. 1994.
68. Kogan MD, Martin JA, Alexander GR, et al. The changing pattern of prenatal care utilization in the United States, 1981–1995, using different prenatal care indices. *JAMA* 279(20):1623–8. 1998.
69. Glantz JC. Labor induction rate variation in upstate New York: What is the difference? *Birth* 30 (3):168–74. 2003.
70. Luthy DA, Malmgren JA, Zingheim RW. Cesarean delivery after elective induction in nulliparous women: The physician effect. *Am J Obstet Gynecol* 191:1511–5. 2004.
71. Main EK, Moore DM, Farrell B, et al. Is there a useful cesarean birth measure? Assessment of the nulliparous term vertex singleton birth rate as a tool for obstetric quality improvement. *Am J Obstet Gynecol* 194(6):1644–51. 2006.
72. Smith GM. What are the realistic expectations of tocolytics? *BJOG* 110 (Suppl 20):103–6. 2003.
73. Walker DS, Brooks-Schmunk S, Summers L. Do birth certificate data accurately reflect the number of CNM-attended births? An exploratory study. *J Midwifery Womens Health* 49(5):443–8. 2004.
74. Kozak LJ, Lees KA, DeFrances CJ. National Hospital Discharge Survey. 2003 annual summary with detailed diagnosis and procedure data. National Center for Health Statistics. *Vital Health Stat* 13(180). 2006.
75. Kozak LJ. Unpublished data from the National Hospital Discharge Survey. National Center for Health Statistics. 2006.
76. Lydon-Rochelle M, Holt VL, Easterling TR, Martin DP. First birth cesarean and placental abruption or previa at second birth. *Obstet Gynecol* 97(5) Part 1:765–9. 2001.
77. Minkoff H, Powderly KR, Chervenak F, McCullough LB. Ethical dimensions of elective primary cesarean delivery. *Obstet Gynecol* 103(2): 387–92. 2004.
78. Hale RW, Harer WB. Elective prophylactic cesarean delivery. Editorial. *ACOG Clinical Review* 10(2):1 and 15. 2005.
79. National Institutes of Health, State-of-the-science-conference statement. Cesarean delivery on maternal request. March 27–29, 2006. *Obstet Gynecol* 107(6):1386–97. 2006.
80. U.S. Department of Health and Human Services. Tracking Healthy People 2010. Washington: U.S. Government Printing Office. B16–20. November 2000.
81. Menacker F. Trends in cesarean rates for first births and repeat cesarean rates for low-risk women: United States, 1990–2003. National vital statistics reports; vol 54 no 4. Hyattsville MD: National Center for Health Statistics. 2005.
82. Declercq E, Menacker F, MacDorman MF. Rise in “no indicated risk” primary cesareans in the United States, 1991–2001. *BMJ* 330:71–2. 2005.
83. Zinberg S. Vaginal delivery after previous cesarean delivery: A continuing controversy. *Clin Obstet and Gynecol* 44(3):561–9. 2001.
84. Declercq E, Menacker F, MacDorman MF. Maternal risk profiles and the primary cesarean rate in the United States, 1991–2002. *Am J Public Health* 96(5):867–2. 2006.
85. McMahon MJ, Luther ER, Bowes WA, Olshan AF. Comparison of a trial of labor with an elective second cesarean section. *N Engl J Med* 335:689–95. 1996.
86. Guise JM, McDonagh M, Hashima J, et al. Vaginal births after cesarean (VBAC). Evidence Report/Technology Assessment No. 71 (Prepared by the Oregon Health & Science University Evidence-based Practice Center under Contract No. 209–977-0018). AHRQ Publication No. 03-E018, Rockville, MD: Agency for Healthcare Research and Quality. March 2003.
87. American College of Obstetricians and Gynecologists. Practice bulletin: Vaginal birth after previous cesarean delivery. *Obstet Gynecol* 104:203–11. 2004.
88. Ecker JL, Chen KT, Cohen AP, et al. Increased risk of cesarean delivery with advancing maternal age: indications and associated factors in nulliparous women. *Am J Obstet Gynecol* 185(4):883–7. 2001.
89. CDC. Rates of cesarean delivery among Puerto Rican women—Puerto Rico and the U.S. Mainland, 1992–2002. *MMWR*. 55:68–71. 2006.
90. Mathews TJ, MacDorman MF. Infant mortality statistics from the 2003 period linked birth/infant death data set. National vital statistics reports; vol 54 no16. Hyattsville, MD: National Center for Health Statistics. 2006.
91. Goldenberg RL, Rouse DJ. Prevention of premature birth. *N Engl J Med* 339(5):313–20. 1998.
92. Johnson RB, Williams MA, Hogue CJR, Mattison DR. Overview: New perspectives on the stubborn challenge of preterm birth. *Paediatr Perinat Epidemiol* 15(Suppl.2):3–6. 2001.
93. Management of preterm labor. ACOG Practice Bulletin No. 43. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 101(5):1039–47. 2003.
94. Alexander GR, Tompkins ME, Petersen DJ, et al. Discordance between LMP-based and clinically estimated gestational age: implications for research, programs, and policy. *Public Health Rep* 110(4):395–402. 1995.
95. Zhang J, Bowes WA Jr. Birth-weight-for-gestational-age patterns by race, sex, and parity in the United States population. *Obstet Gynecol* 86(2):200–8. 1995.
96. Vahratian A, Buekens P, Bennett TA, et al. Preterm delivery rates in North Carolina: Are they really declining among non-Hispanic African Americans? *Am J Epidemiol* 159(1):59–63. 2004.
97. Wang ML, Dorer DJ, Fleming MP, Catlin EA. Clinical outcomes of near-term infants. *Pediatrics* 114(2):372–6. 2006.
98. Kramer MS, Demisse K, Yang H, et al. The contribution of mild and moderate preterm birth to infant mortality. *JAMA* 284(7):843–9. 2000.
99. MacDorman MF, Mathews TJ, Martin JA, Malloy MH. Trends and characteristics of induced labour in the United States, 1989–98. *Paediatr Perinat Epidemiol* 16:263–73. 2002.
100. Zhang J, Yancey MK, Henderson CE. U.S. national trends in labor induction, 1989–98. *J Reprod Med* 47(2):120–4. 2002.
101. Redman ME, Gonik B. Cesarean delivery rates at the threshold of viability. *Am J Obstet Gynecol* 187(4):873–6. 2002.
102. Davidoff MJ, Dias T, Damus K, et al. Change in the gestational age distribution among U.S. singleton births: Impact on rates of late preterm birth, 1992 to 2002. *Semin Perinatol* 30(1):8–15. 2006.
103. Ananth CV, Joseph KS, Oyelese Y, et al. Trends in preterm birth and perinatal mortality among singletons: United States, 1989 through 2000. *Obstet Gynecol* 105(5 Pt 1):1084–91. 2005.
104. Langhoff-Roos J, Kesmodel U, Jacobsson B, et al. Spontaneous preterm delivery in primiparous women at low risk in Denmark: population-based study. *BMJ* 332(7547):937–9. 2006.
105. Hack M, Klein NK, Taylor HG. Long-term developmental outcomes of low birthweight infants. In: *The future of children: Low birthweight*. Vol 5(1):19–34. Los Altos, CA: Center for the Future of Children, the David and Lucile Packard Foundation. 1995.
106. Wilson-Costello D, Friedman H, Minich N, et al. Improved survival rates with increased neurodevelopmental disability for extremely low birth-weight infants in the 1990s. *Pediatrics* 115(4):997–1003. 2005.

107. Fanaroff AA, Hack M, Walsh MC. The NICHD neonatal research network: changes in practice and outcomes during the first 15 years. *Semin Perinatol* 27(4):281–7. 2003.
108. Branum AM, Schoendorf KC. Changing patterns of low birthweight and preterm birth in the United States, 1981–98. *Paediatr and Perinat Epidemiol* 16:8–15. 2002.
109. Yang Q, Greenland S, Flanders D. Associations of maternal age- and parity-related factors with trends in low birthweight rates: United States, 1989 through 2000. *Am J Public Health* 96(5):856–61. 2006.
110. Schieve LA, Rasmussen SA, Buck GM, et al. Are children born after assisted reproductive technology at increased risk for adverse health outcomes? *Obstet Gynecol* 103:1154–63. 2004.
111. Helmerhorst FM, Perquin DAM, Donker D, Keirse JNC. Perinatal outcome of singletons and twins after assisted conception: A systematic review of controlled studies. *BMJ* 328:1–5. 2004.
112. Apgar V. A proposal for a new method of evaluation of the newborn infant. *Anesth Analg* 32(4):260–7. July–Aug. 1953.
113. American Academy of Pediatrics, Committee on Fetus and Newborn, and American College of Obstetricians and Gynecologists, Committee on Obstetric Practice. The Apgar score. Policy statement. *Pediatrics* 117(4):1444–7. 2006.
114. Hegyi T, Carone T, Anwar M, et al. The Apgar score and its components in the preterm infant. *Pediatrics* 101:77–81. 1998.
115. Thorngren-Jerneck K, Herbst A. Low 5-minute Apgar score: A population-based register study of 1 million term births. *Obstet Gynecol* 98(1):65–70. 2001.
116. Stoll BJ, Kliegman R. The fetus and neonatal newborn In: Behrman RE, Kliegman RM, Jenson HB, eds. *Nelson textbook of pediatrics* (16th ed). Philadelphia, PA: W.B. Saunders Company. 2000.
117. Mathews TJ. Trends in spina bifida and anencephalus in the United States, 1991–2003. National Center for Health Statistics, Health E-Stats. 2006. Available from: http://www.cdc.gov/nchs/products/pubs/pubd/hestats/spine_anen.htm.
118. CDC. Folate status in women of childbearing age—United States, 1999. *MMWR* 49(42):962–5. 2000.
119. Ray JG, Wyatt PR, Vermeulen M, Meier C, Cole DE. Greater maternal weight and the ongoing risk of neural tube defects after folic acid flour fortification. *Obstet Gynecol* 105(2651):261–5. 2005.
120. Botto LD, Mulinare J, Erickson JD. Occurrence of omphalocele in relation to maternal multivitamin use: A population-based study. *Pediatrics* 109(5):904–8. 2002.
121. Honein JA, Paulozzi LJ, Watkins ML. Maternal smoking and birth defects: Validity of birth data for effect estimation. *Public Health Rep* 116:327–35. 2001.
122. Wyszynski D, Wu T. Use of U.S. birth certificate data to estimate the risk of maternal cigarette smoking for oral clefting. *Cleft Palate—Craniofac J* 39(2):188–92. 2002.
123. Schaefer-Graf UM, Buchanan TA, Xiang A, et al. Patterns of congenital anomalies and relationship to initial maternal fasting glucose levels in pregnancies complicated by type 2 and gestational diabetes. *Am J Obstet Gynecol* 182(2):313–20. 2000.
124. Reefhuis J, Honein MA. Maternal age and non-chromosomal birth defects, Atlanta—1968–2000. Teenager or thirty-something, who is at risk? *Birth Defects Res (Part A)* 70:572–9. 2004.
125. Martin JA, Park MM. Trends in twin and triplet births: 1980–97. National vital statistics reports; vol 47 no 24. Hyattsville, MD: National Center for Health Statistics. 1999.
126. Simmons R, Doyle P, Naconochie N. Dramatic reduction in triplet and higher-order births in England and Wales. *BJOG* 111:856–8. 2004.
127. Kiely JL, Kleinman JC, Kiely M. Triplets and other higher-order multiple births: time trends and infant mortality. *AJDC* 146:862–8. 1992.
128. Wilcox LS, Kiely JL, Melvin CL, Martin MC. Assisted reproductive technologies: Estimates of their contribution to multiple births and newborn hospital days in the United States. *Fertil Steril* 65(2):361–6. 1996.
129. CDC. Contribution of assisted reproductive technology and ovulation-inducing drugs to triplet and higher-order multiple births—United States, 1980–1997. *MMWR* 49(24):535–8. 2000.
130. Reynolds MA, Schieve LA. Trends in embryo transfer practices and multiple gestation for IVF procedures in the USA, 1996–2002. *Human Reprod* 21(3):694–700. 2006.
131. Wright VC, Schieve LA, Reynolds MA, Jeng G. Assisted Reproductive technology surveillance in the United States, 2002. *Surveillance Summaries*. *MMWR* 54(SS02):1–24. 2005.
132. American Society for Reproductive Medicine. Guidelines on number of embryos transferred. A Practice Committee Report—A Committee Opinion (Revised). American Society for Reproductive Medicine. 1999.
133. American Society for Reproductive Medicine. Guidelines on number of embryos transferred. A Practice Committee Report—A Committee Opinion. American Society for Reproductive Medicine. 2004.
134. Jain T, Missmer SA, Hornstein MD. Trends in embryo-transfer practice and in outcomes of the use of assisted reproductive technology in the United States. *N Engl J Med* 350:1639–45. 2004.
135. Templeton A, Morris JK. Reducing the risk of multiple births by transfer of two embryos after in vitro fertilization. *N Engl J Med* 339(9):573–7. 1998.
136. Reynolds MA, Schieve LA, Jeng G, Peterson HB. Does insurance coverage decrease the risk for multiple births associated with assisted reproductive technology? *Fertil Steril* 80(1):16–23. 2003.
137. Mathews TJ, Ventura SJ, Curtin SC, Martin JA. Births of Hispanic origin, 1989–95. Monthly vital statistics report; vol 46 no 6 supp. Hyattsville, MD: National Center for Health Statistics. 1998.
138. National Center for Health Statistics. Technical Appendix. Vital statistics of the United States, 2004, vol I natality. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Hyattsville, MD: (forthcoming).
139. Ventura SJ. Births to unmarried mothers: United States, 1980–92. National Center for Health Statistics. *Vital Health Stat* 21(53). 1995.
140. National Center for Health Statistics. Computer edits for natality data, effective 1993. Instruction manual, part 12. Hyattsville, MD: National Center for Health Statistics. 1995.
141. Alexander GR, Allen MC. Conceptualization, measurement, and use of gestational age. I. Clinical and Public Health Practice. *J Perinatol* 16(1):53–9. 1996.
142. U.S. Census Bureau. Age, sex, race, and Hispanic origin information from the 1990 census: A comparison of census results with results where age and race have been modified. 1990 CPH-L-74. Washington: U.S. Department of Commerce. 1991.
143. U.S. Census Bureau. Census 2000 modified race data summary file. 2002. Available from: <http://www.census.gov/popest/archives/files/MR-CO.txt>. 2002.
144. U.S. Census Bureau. Population estimates for 2004 based on unpublished tabulations prepared by the Housing and Household Economics Statistics Division. 2005.
145. U.S. Census Bureau. Source and accuracy of the data for the March 2001 current population survey microdata file. 2001. Available from: <http://www.bls.census.gov/cps/ads/2001/ssrcacc.htm>.
146. O'Connell M. Personal communication. Washington: U.S. Census Bureau. July 14, 2003.
147. Bailer JC, Ederer F. Significance factors for the ratio of a Poisson variable to its expectations. *Biometrics*. 20:639–43. 1964.
148. Schenker N, Gentleman JF. On judging the significance of differences by examining the overlap between confidence intervals. *Amer Stat* 55:182–6. 2001.

149. National Center for Health Statistics. Guide to completing the facility worksheets for the certificate of live birth and report of fetal death (revised 2006). Available from: <http://www.cdc.gov/nchs/data/dvs/GuidetoCompleteFacilityWks.pdf>.
150. Sutton PD, Mathews TJ. Birth and fertility rates by Hispanic origin subgroups: United States, 1990 and 2000. National Center for Health Statistics. Vital Health Stat 21(57). 2006.
151. Martin JA, Park MM. Trends in twin and triplet births: 1980–97. National vital statistics reports; vol 47 no 24. Hyattsville, Maryland: National Center for Health Statistics. 1999.
152. Menacker F, Curtin SC. Trends in cesarean birth and vaginal birth after previous cesarean, 1991–99. National vital statistics reports; vol 49 no 13. Hyattsville, MD: National Center for Health Statistics. 2001.
153. Curtin SC, Park MM. Trends in the attendant, place, and timing of births, and in the use of obstetric interventions: United States, 1989–97. National vital statistics reports; vol 47 no 27. Hyattsville, MD: National Center for Health Statistics. 1999.
154. Mathews TJ. Smoking during pregnancy during the 1990s. National vital statistics reports; vol 49 no 7. Hyattsville, MD: National Center for Health Statistics. 2001.
155. MacDorman MF, Martin JA, Mathews TJ, et al. Explaining the 2001–02 infant mortality increase: Data from the linked birth/infant death data set. National vital statistics reports; vol 53 no 12. Hyattsville, MD: National Center for Health Statistics. 2005.
156. Kochanek KD, Martin JA. Supplemental analyses of recent trends in infant mortality. National Center for Health Statistics. Health E Stats. 2004. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/infantmort/infantmort.htm>.
157. Hamilton BE. Reproduction rates for 1990–2002 and intrinsic rates for 2000–2001: United States. National vital statistics reports; vol 52 no 17. Hyattsville, MD: National Center for Health Statistics. 2004.
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TABLE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Geographic area:																					
States ¹											11	12	13							20	
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
Years:																					
Current year only		2	3				7				11	12	13	14	15	16	17	18		20	
Trend	1			4	5	6		8	9	10									19		21
Type of entry:																					
Number of births	1	2			5	6					11	12	13	14	15	16	17	18		20	
Rates or other measures	1		3	4	5		7	8	9	10	11			14	15	16	17	18	19	20	21
Characteristics:																					
Abnormal conditions of the newborn																					
Age of father																					21
Age of mother		2	3	4		6	7	8		10								18	19		
Attended at birth																					
Birthweight																					
Complications of labor and/or delivery																					
Congenital anomalies																					
Day of week																	17				
Gestational age																					
Hispanic origin of mother					³ 5	³ 6	³ 7	³ 8	⁴ 9	⁴ 10			³ 13		³ 15			⁵ 18	⁶ 19	⁴ 20	
Live-birth order		2	3			6	7		9	10				14	15						
Method of delivery																	17				
Month of birth																16					
Multiple births																					
Obstetric procedures																					
Place of delivery																					
Prenatal care																					
Race of father																					⁷ 21
Race of mother	² 1	² 2	² 3	² 4	³ 5	³ 6	³ 7	³ 8	⁴ 9	⁴ 10		² 12	³ 13	² 14	³ 15			⁵ 18	⁶ 19	⁴ 20	
Risk factors in this pregnancy																					
Sex of child														14	15						
Teenage mothers											11			14	15						
Unmarried mothers														14	15			18	19	20	
Weight gain during pregnancy																					

TABLE:	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Geographic area: States¹					26				30			33		35	36			39
United States or all reporting areas	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Years: Current year only	22	23	24	25	26	27		29	30	31		33	34	35	36	37		39
Trend							28				32						38	
Type of entry: Number of births.	22			25		27	28	29		31		33	34	35	36	37	38	39
Rates or other measures	22	23	24	25	26		28	29	30	31	32	33	34	35	36	37	38	39
Characteristics: Abnormal conditions of newborn																		
Age of father																		
Age of mother				25				29					34			37		
Attendant at birth		23	24			27												
Birthweight										31	32		34	35	36			
Complications of labor and/or delivery				25														
Congenital anomalies.				25														
Day of week																		
Gestational age	22	23	24							31	32	33						
Hispanic origin of mother	⁴ 22		³ 24	⁴ 25	⁴ 26	⁴ 27	⁴ 28	⁴ 29	⁴ 30	⁴ 31	⁴ 32	⁴ 33	⁴ 34	⁴ 35	⁴ 36	⁴ 37	⁴ 38	
Live-birth order.																		
Method of delivery.		23	24				28	29	30									
Month of birth																		
Multiple births		23	24													37	38	39
Obstetric procedures				25														
Place of delivery.						27												
Prenatal care.					26													
Race of father																		
Race of mother	⁴ 22	² 23	³ 24	⁴ 25	⁴ 26	⁴ 27	⁴ 28	⁴ 29	⁴ 30	⁴ 31	⁴ 32	⁴ 33	⁴ 34	⁴ 35	⁴ 36	⁴ 37	⁴ 38	
Risk factors in this pregnancy.		23	24	25														
Sex of child																		
Teenage mothers																		
Unmarried mothers																		
Weight gain during pregnancy	22	23	24															

¹Includes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas.

²Includes white, black, American Indian or Alaska Native, and Asian or Pacific Islander.

³Includes Mexican, Puerto Rican, Cuban, Central and South American, other and unknown Hispanic, non-Hispanic white, and non-Hispanic black.

⁴Includes non-Hispanic white, non-Hispanic black, and Hispanic.

⁵Includes white, non-Hispanic white, black, non-Hispanic black, American Indian or Alaska Native, Asian or Pacific Islander, and Hispanic.

⁶Includes white, non-Hispanic white, black, American Indian or Alaska Native, Asian or Pacific Islander, and Hispanic.

⁷Includes white and black.

Table 1. Live births, birth rates, and fertility rates, by race: United States, specified years 1940–55 and each year, 1960–2004

[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:															
2004	4,112,052	3,222,928	616,074	43,927	229,123	14.0	13.5	16.0	14.0	16.8	66.3	66.1	67.6	58.9	67.1
2003	4,089,950	3,225,848	599,847	43,052	221,203	14.1	13.6	15.7	13.8	16.8	66.1	66.1	66.3	58.4	66.3
2002	4,021,726	3,174,760	593,691	42,368	210,907	13.9	13.5	15.7	13.8	16.5	64.8	64.8	65.8	58.0	64.1
2001	4,025,933	3,177,626	606,156	41,872	200,279	14.1	13.7	16.3	13.7	16.4	65.3	65.0	67.6	58.1	64.2
2000	4,058,814	3,194,005	622,598	41,668	200,543	14.4	13.9	17.0	14.0	17.1	65.9	65.3	70.0	58.7	65.8
1999	3,959,417	3,132,501	605,970	40,170	180,776	14.2	13.7	16.8	14.2	15.9	64.4	64.0	68.5	59.0	60.9
1998	3,941,553	3,118,727	609,902	40,272	172,652	14.3	13.8	17.1	14.8	15.9	64.3	63.6	69.4	61.3	60.1
1997	3,880,894	3,072,640	599,913	38,572	169,769	14.2	13.7	17.1	14.7	16.2	63.6	62.8	69.0	60.8	61.3
1996	3,891,494	3,093,057	594,781	37,880	165,776	14.4	13.9	17.3	14.9	16.5	64.1	63.3	69.2	61.8	62.3
1995	3,899,589	3,098,885	603,139	37,278	160,287	14.6	14.1	17.8	15.3	16.7	64.6	63.6	71.0	63.0	62.6
1994	3,952,767	3,121,004	636,391	37,740	157,632	15.0	14.3	19.1	16.0	17.1	65.9	64.2	75.9	65.8	63.9
1993	4,000,240	3,149,833	658,875	38,732	152,800	15.4	14.6	20.2	17.0	17.3	67.0	64.9	79.6	69.7	64.3
1992	4,065,014	3,201,678	673,633	39,453	150,250	15.8	15.0	21.1	17.9	17.9	68.4	66.1	82.4	73.1	66.1
1991	4,110,907	3,241,273	682,602	38,841	145,372	16.2	15.3	21.8	18.3	18.3	69.3	66.7	84.8	73.9	67.1
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. ¹For 1960–91 includes births to races not shown separately. For 1992 and later years, unknown race of mother is imputed; see "Technical Notes."

²Includes births to Aleuts and Eskimos.

³Based on 100 percent of births in selected States and on a 50 percent sample of births in all other States; see "Technical Notes."

⁴Based on a 50 percent sample of births.

⁵Based on a 20 to 50 percent sample of births.

⁶Figures by race exclude New Jersey.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." In this table all women (including Hispanic women) are classified only according to their race; see "Technical Notes."

Table 2. Live births by age of mother, live-birth order, and race of mother: United States, 2004

[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	4,112,052	6,781	415,262	18,274	41,860	73,846	117,237	164,045	1,034,454	1,104,485	965,663	475,606	103,679	5,748	374
1st child	1,630,921	6,636	330,147	17,491	38,561	63,783	93,131	117,181	483,752	395,784	279,884	110,418	22,721	1,472	107
2d child	1,319,426	109	70,467	668	2,888	8,781	20,514	37,616	350,561	370,470	341,556	155,638	29,157	1,370	98
3d child	693,932	5	11,025	20	167	792	2,693	7,353	141,967	208,136	200,118	109,881	21,751	983	66
4th child	273,589	—	1,320	6	15	62	269	968	40,870	82,484	83,206	52,306	12,720	642	41
5th child	99,744	—	157	1	2	7	24	123	9,943	28,051	32,151	22,276	6,774	371	21
6th child	39,736	—	20	—	—	1	4	15	2,200	9,640	13,373	10,494	3,753	247	9
7th child	17,856	—	5	—	1	—	1	3	483	3,426	6,164	5,440	2,163	166	9
8th child and over	18,215	—	3	—	—	—	—	3	218	1,732	4,962	6,824	4,007	453	16
Not stated	18,633	31	2,118	88	226	420	601	783	4,460	4,762	4,249	2,329	633	44	7
White	3,222,928	3,725	297,133	11,605	28,347	52,179	84,604	120,398	788,264	880,870	780,368	384,917	82,737	4,611	303
1st child	1,276,937	3,661	239,233	11,128	26,301	45,583	68,274	87,947	378,723	321,275	224,857	89,416	18,483	1,203	86
2d child	1,050,100	49	48,741	403	1,813	5,806	14,116	26,603	270,714	301,900	278,351	126,045	23,103	1,109	88
3d child	549,427	3	6,983	11	93	488	1,666	4,725	102,280	165,579	165,952	90,513	17,274	789	54
4th child	209,194	—	769	5	8	40	159	557	26,356	61,591	67,104	42,648	10,187	504	35
5th child	72,319	—	96	—	2	5	14	75	5,690	18,813	24,407	17,664	5,352	281	16
6th child	27,390	—	11	—	—	—	3	8	1,108	5,675	9,524	7,912	2,969	185	6
7th child	11,972	—	2	—	—	—	1	1	239	1,772	4,097	4,021	1,703	132	6
8th child and over	12,384	—	1	—	—	—	—	1	132	851	2,927	4,904	3,189	372	8
Not stated	13,205	12	1,297	58	130	257	371	481	3,022	3,414	3,149	1,794	477	36	4
Black	616,074	2,827	102,793	6,038	11,847	18,970	28,354	37,584	200,398	147,858	99,083	50,043	12,396	641	35
1st child	233,026	2,755	78,831	5,763	10,739	15,924	21,512	24,893	81,193	36,776	21,540	9,626	2,170	126	9
2d child	177,850	56	19,069	235	956	2,611	5,623	9,644	66,012	45,695	29,945	13,875	3,074	120	4
3d child	108,509	1	3,599	9	65	272	910	2,343	34,216	33,804	22,573	11,488	2,703	119	6
4th child	51,113	—	507	1	7	19	99	381	12,757	17,358	11,926	6,737	1,731	92	5
5th child	22,117	—	56	1	—	2	9	44	3,778	7,730	6,006	3,419	1,064	60	4
6th child	10,077	—	9	—	—	1	1	7	978	3,378	3,067	1,995	602	47	1
7th child	4,769	—	3	—	1	—	—	2	220	1,426	1,675	1,085	335	25	—
8th child and over	4,622	—	1	—	—	—	—	1	78	766	1,634	1,478	617	45	3
Not stated	3,991	15	718	29	79	141	200	269	1,166	925	717	340	100	7	3
American Indian ¹	43,927	139	7,704	368	902	1,396	2,153	2,885	15,130	10,717	6,488	2,994	731	21	3
1st child	15,270	132	5,911	349	818	1,162	1,653	1,929	5,692	2,140	947	377	67	3	1
2d child	12,036	3	1,482	19	75	208	417	763	5,282	3,030	1,543	567	127	1	1
3d child	7,849	1	241	—	4	18	62	157	2,778	2,665	1,434	602	124	4	—
4th child	4,287	—	24	—	—	1	8	15	965	1,563	1,106	500	126	3	—
5th child	2,204	—	3	—	—	—	1	2	269	771	696	373	90	2	—
6th child	1,018	—	—	—	—	—	—	—	58	310	365	216	68	1	—
7th child	516	—	—	—	—	—	—	—	8	111	186	162	46	3	—
8th child and over	475	—	—	—	—	—	—	—	3	60	162	172	73	4	1
Not stated	272	3	43	—	5	7	12	19	75	67	49	25	10	—	—
Asian or Pacific Islander	229,123	90	7,632	263	764	1,301	2,126	3,178	30,662	65,040	79,724	37,652	7,815	475	33
1st child	105,688	88	6,172	251	703	1,114	1,692	2,412	18,144	35,593	32,540	10,999	2,001	140	11
2d child	79,440	1	1,175	11	44	156	358	606	8,553	19,845	31,717	15,151	2,853	140	5
3d child	28,147	—	202	—	5	14	55	128	2,693	6,088	10,159	7,278	1,650	71	6
4th child	8,995	—	20	—	—	2	3	15	792	1,972	3,070	2,421	676	43	1
5th child	3,104	—	2	—	—	—	—	2	206	737	1,042	820	268	28	1
6th child	1,251	—	—	—	—	—	—	—	56	277	417	371	114	14	2
7th child	599	—	—	—	—	—	—	—	16	117	206	172	79	6	3
8th child and over	734	—	1	—	—	—	—	1	5	55	239	270	128	32	4
Not stated	1,165	1	60	1	12	15	18	14	197	356	334	170	46	1	—

— Quantity zero.

¹Includes births of Aleuts and Eskimos.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." 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, 2004

[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. Population estimated as of July 1. 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	Age of mother										
	15–44 years	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	66.3	0.7	41.1	22.1	70.0	101.7	115.5	95.3	45.4	8.9	0.5
1st child	26.4	0.6	32.9	19.8	52.6	47.8	41.6	27.8	10.6	2.0	0.1
2d child	21.4	0.0	7.0	2.0	14.5	34.6	38.9	33.9	14.9	2.5	0.1
3d child	11.2	*	1.1	0.2	2.5	14.0	21.9	19.8	10.5	1.9	0.1
4th child	4.4	*	0.1	0.0	0.3	4.0	8.7	8.3	5.0	1.1	0.1
5th child	1.6	*	0.0	*	0.0	1.0	2.9	3.2	2.1	0.6	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	0.7	0.3	0.0
White	66.1	0.5	37.7	19.5	65.0	99.2	118.6	99.1	46.4	8.9	0.5
1st child	26.3	0.5	30.5	17.6	49.8	47.8	43.4	28.7	10.8	2.0	0.1
2d child	21.6	0.0	6.2	1.7	13.0	34.2	40.8	35.5	15.3	2.5	0.1
3d child	11.3	*	0.9	0.1	2.0	12.9	22.4	21.2	11.0	1.9	0.1
4th child	4.3	*	0.1	0.0	0.2	3.3	8.3	8.6	5.2	1.1	0.1
5th child	1.5	*	0.0	*	0.0	0.7	2.5	3.1	2.1	0.6	0.0
6th and 7th child	0.8	*	*	*	*	0.2	1.0	1.7	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	67.6	1.6	63.3	37.2	104.4	127.7	103.6	67.9	34.0	7.9	0.5
1st child	25.7	1.6	48.9	32.9	74.0	52.0	25.9	14.9	6.6	1.4	0.1
2d child	19.6	0.0	11.8	3.9	24.3	42.3	32.2	20.7	9.5	2.0	0.1
3d child	12.0	*	2.2	0.4	5.2	21.9	23.8	15.6	7.9	1.7	0.1
4th child	5.6	*	0.3	0.0	0.8	8.2	12.2	8.2	4.6	1.1	0.1
5th child	2.4	*	0.0	*	0.1	2.4	5.4	4.1	2.3	0.7	0.0
6th and 7th child	1.6	*	*	*	*	0.8	3.4	3.3	2.1	0.6	0.1
8th child and over	0.5	*	*	*	*	0.0	0.5	1.1	1.0	0.4	0.0
American Indian ²	58.9	0.9	52.5	30.0	87.0	109.7	92.8	58.0	26.8	6.0	0.2
1st child	20.6	0.9	40.5	26.4	62.2	41.5	18.6	8.5	3.4	0.6	*
2d child	16.3	*	10.2	3.4	20.5	38.5	26.4	13.9	5.1	1.1	*
3d child	10.6	*	1.6	0.2	3.8	20.2	23.2	12.9	5.4	1.0	*
4th child	5.8	*	0.2	*	0.4	7.0	13.6	10.0	4.5	1.1	*
5th child	3.0	*	*	*	*	2.0	6.7	6.3	3.4	0.7	*
6th and 7th child	2.1	*	*	*	*	0.5	3.7	5.0	3.4	1.0	*
8th child and over	0.6	*	*	*	*	*	0.5	1.5	1.5	0.6	*
Asian or Pacific Islander	67.1	0.2	17.3	8.9	29.6	59.8	108.6	116.9	62.1	13.6	1.0
1st child	31.1	0.2	14.1	8.0	23.1	35.6	59.8	47.9	18.2	3.5	0.3
2d child	23.4	*	2.7	0.8	5.4	16.8	33.3	46.7	25.1	5.0	0.3
3d child	8.3	*	0.5	*	1.0	5.3	10.2	15.0	12.0	2.9	0.1
4th child	2.6	*	0.0	*	*	1.6	3.3	4.5	4.0	1.2	0.1
5th child	0.9	*	*	*	*	0.4	1.2	1.5	1.4	0.5	0.1
6th and 7th child	0.5	*	*	*	*	0.1	0.7	0.9	0.9	0.3	0.0
8th child and over	0.2	*	*	*	*	*	0.1	0.4	0.4	0.2	0.1

0.0 Quantity more than zero but less than 0.05.

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

¹Birth rates computed by relating births to women aged 45–54 years to women aged 45–49 years.

²Includes births to Aleuts and Eskimos.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." In this table all women (including Hispanic women) are classified only according to their race; see "Technical Notes."

Table 4. Total fertility rates and birth rates, by age of mother: United States, 1970–2004, and by age and race of mother: United States, 1980–2004

[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 census years 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												
2004	.....	2,045.5	0.7	41.1	22.1	70.0	101.7	115.5	95.3	45.4	8.9	0.5
2003	.....	2,042.5	0.6	41.6	22.4	70.7	102.6	115.6	95.1	43.8	8.7	0.5
2002	.....	2,013.0	0.7	43.0	23.2	72.8	103.6	113.6	91.5	41.4	8.3	0.5
2001	.....	2,034.0	0.8	45.3	24.7	76.1	106.2	113.4	91.9	40.6	8.1	0.5
2000	.....	2,056.0	0.9	47.7	26.9	78.1	109.7	113.5	91.2	39.7	8.0	0.5
1999	.....	2,007.5	0.9	48.8	28.2	79.1	107.9	111.2	87.1	37.8	7.4	0.4
1998	.....	1,999.0	1.0	50.3	29.9	80.9	108.4	110.2	85.2	36.9	7.4	0.4
1997	.....	1,971.0	1.1	51.3	31.4	82.1	107.3	108.3	83.0	35.7	7.1	0.4
1996	.....	1,976.0	1.2	53.5	33.3	84.7	107.8	108.6	82.1	34.9	6.8	0.3
1995	.....	1,978.0	1.3	56.0	35.5	87.7	107.5	108.8	81.1	34.0	6.6	0.3
1994	.....	2,001.5	1.4	58.2	37.2	90.2	109.2	111.0	80.4	33.4	6.4	0.3
1993	.....	2,019.5	1.4	59.0	37.5	91.1	111.3	113.2	79.9	32.7	6.1	0.3
1992	.....	2,046.0	1.4	60.3	37.6	93.6	113.7	115.7	79.6	32.3	5.9	0.3
1991	.....	2,062.5	1.4	61.8	38.6	94.0	115.3	117.2	79.2	31.9	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												
2004	.....	2,054.5	0.5	37.7	19.5	65.0	99.2	118.6	99.1	46.4	8.9	0.5
2003	.....	2,061.0	0.5	38.3	19.8	66.2	100.6	119.5	99.3	44.8	8.7	0.5
2002	.....	2,027.5	0.5	39.4	20.5	68.0	101.6	117.4	95.5	42.4	8.2	0.5
2001	.....	2,040.0	0.5	41.2	21.4	70.8	103.7	117.0	95.8	41.3	8.0	0.5
2000	.....	2,051.0	0.6	43.2	23.3	72.3	106.6	116.7	94.6	40.2	7.9	0.4
1999	.....	2,007.5	0.6	44.0	24.4	73.0	105.0	114.9	90.7	38.5	7.4	0.4
1998	.....	1,991.0	0.6	44.9	25.6	74.1	105.4	113.6	88.5	37.5	7.3	0.4
1997	.....	1,955.0	0.7	45.5	26.6	75.0	104.5	111.3	85.7	36.1	6.9	0.3
1996	.....	1,960.5	0.7	47.5	28.0	77.6	105.3	111.7	84.6	35.3	6.7	0.3
1995	.....	1,954.5	0.8	49.5	29.6	80.2	104.7	111.7	83.3	34.2	6.4	0.3
1994	.....	1,957.5	0.8	50.5	30.4	81.2	105.0	113.0	82.2	33.5	6.2	0.3
1993	.....	1,961.5	0.8	50.6	30.0	81.5	106.1	114.7	81.3	32.6	5.9	0.3
1992	.....	1,978.0	0.8	51.4	29.9	83.2	107.7	116.9	80.8	32.1	5.7	0.2
1991	.....	1,988.0	0.8	52.6	30.5	83.3	108.8	118.0	80.2	31.8	5.2	0.2
1990	.....	2,003.0	0.7	50.8	29.5	78.0	109.8	120.7	81.7	31.5	5.2	0.2
1989	.....	1,931.0	0.7	47.9	28.1	72.9	106.9	117.8	78.1	29.7	4.9	0.2
1988	.....	1,856.5	0.6	44.4	26.0	69.6	103.7	114.8	75.4	27.7	4.5	0.2
1987	.....	1,804.5	0.6	42.5	24.6	68.9	102.3	112.3	73.0	25.9	4.1	0.2
1986	.....	1,776.0	0.6	42.3	23.8	70.1	102.7	110.8	70.9	23.9	3.8	0.2
1985	.....	1,787.0	0.6	43.3	24.4	70.4	104.1	112.3	69.9	23.3	3.7	0.2
1984 ³	.....	1,748.5	0.6	42.9	24.3	68.4	102.7	109.8	67.7	22.2	3.6	0.2
1983 ³	.....	1,740.5	0.6	43.9	25.0	68.8	103.8	109.4	65.3	21.3	3.6	0.2
1982 ³	.....	1,767.0	0.6	45.0	25.5	70.8	107.7	111.9	64.0	20.4	3.6	0.2
1981 ³	.....	1,748.0	0.5	44.9	25.4	71.5	108.3	112.3	61.0	19.0	3.4	0.2
1980 ³	.....	1,773.0	0.6	45.4	25.5	73.2	111.1	113.8	61.2	18.8	3.5	0.2

See footnotes at end of table.

Table 4. Total fertility rates and birth rates, by age of mother: United States, 1970–2004, and by age and race of mother: United States, 1980–2004—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 census years and estimated as of July 1 for all other years]

			Age of mother								
Year and race	Total fertility rate	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						
Black											
2004	2,032.5	1.6	63.3	37.2	104.4	127.7	103.6	67.9	34.0	7.9	0.5
2003	1,999.0	1.6	63.8	38.2	103.7	126.1	100.4	66.5	33.2	7.7	0.5
2002	1,991.0	1.8	66.6	40.0	107.6	127.1	99.0	64.4	31.5	7.4	0.4
2001	2,051.0	2.0	71.8	43.9	114.0	133.2	99.2	64.8	31.6	7.2	0.4
2000	2,129.0	2.3	77.4	49.0	118.8	141.3	100.3	65.4	31.5	7.2	0.4
1999	2,082.5	2.5	79.1	50.5	120.6	137.9	97.3	62.7	30.2	6.5	0.3
1998	2,111.5	2.8	83.5	55.4	124.8	138.4	97.5	63.2	30.0	6.6	0.3
1997	2,091.5	3.1	86.3	59.3	127.7	135.2	95.0	62.6	29.3	6.5	0.3
1996	2,088.5	3.5	89.6	63.3	130.5	133.2	94.3	62.0	28.7	6.1	0.3
1995	2,127.5	4.1	94.4	68.5	135.0	133.7	95.6	63.0	28.4	6.0	0.3
1994	2,258.5	4.5	102.9	75.1	146.2	142.9	101.5	65.0	28.7	5.9	0.3
1993	2,351.0	4.5	107.3	78.9	150.2	150.2	106.4	66.6	29.0	5.9	0.3
1992	2,416.0	4.6	111.3	80.5	156.3	156.2	109.7	67.0	28.6	5.6	0.2
1991	2,462.0	4.7	114.8	83.5	157.6	159.7	112.0	67.3	28.2	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
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
American Indian ⁵											
2004	1734.5	0.9	52.5	30.0	87.0	109.7	92.8	58.0	26.8	6.0	0.2
2003	1731.5	1.0	53.1	30.6	87.3	110.0	93.5	57.4	25.4	5.5	0.4
2002	1735.0	0.9	53.8	30.7	89.2	112.6	91.8	56.4	25.4	5.8	0.3
2001	1746.5	1.0	56.3	31.4	94.8	115.0	90.4	55.9	24.7	5.7	0.3
2000	1772.5	1.1	58.3	34.1	97.1	117.2	91.8	55.5	24.6	5.7	0.3
1999	1783.5	1.4	59.9	36.5	98.0	120.7	90.6	53.8	24.3	5.7	0.3
1998	1851.0	1.5	64.7	39.7	106.9	125.1	92.0	56.8	24.6	5.3	*
1997	1834.5	1.5	65.2	41.0	107.1	122.5	91.6	56.0	24.4	5.4	0.3
1996	1855.0	1.6	68.2	42.7	113.3	123.5	91.1	56.5	24.4	5.5	*
1995	1878.5	1.6	72.9	44.6	122.2	123.1	91.6	56.5	24.3	5.5	*
1994	1950.0	1.8	76.4	48.4	123.7	126.5	98.2	56.6	24.8	5.4	0.3
1993	2048.5	1.4	79.8	51.5	126.3	134.2	103.5	59.5	25.5	5.6	*
1992	2135.5	1.6	82.4	52.3	130.5	142.3	107.0	61.0	26.7	5.9	*
1991	2142.5	1.6	84.1	51.9	134.2	143.8	105.6	60.8	26.4	5.8	0.4
1990	2184.5	1.6	81.1	48.5	129.3	148.7	110.3	61.5	27.5	5.9	*
1989	2248.5	1.5	82.7	51.6	128.9	152.4	114.2	64.8	27.4	6.4	*
1988	2155.0	1.7	77.5	49.7	121.1	145.2	110.9	64.5	25.6	5.3	*
1987	2100.5	1.7	77.2	48.8	122.2	140.0	107.9	63.0	24.4	5.6	*
1986	2083.0	1.8	78.1	48.7	125.3	138.8	107.9	60.7	23.8	5.3	*
1985	2129.5	1.7	79.2	47.7	124.1	139.1	109.6	62.6	27.4	6.0	*
1984 ³	2137.5	1.7	81.5	50.7	124.7	142.4	109.2	60.5	26.3	5.6	*
1983 ³	2182.0	1.9	84.2	55.2	121.4	145.5	113.7	58.9	25.5	6.4	*
1982 ³	2215.0	1.4	83.5	52.6	127.6	148.1	115.8	60.9	26.9	6.0	*
1981 ³	2092.5	2.1	78.4	49.7	121.5	141.2	105.6	58.9	25.2	6.6	*
1980 ³	2165.0	1.9	82.2	51.5	129.5	143.7	106.6	61.8	28.1	8.2	*

See footnotes at end of table.

Table 4. Total fertility rates and birth rates, by age of mother: United States, 1970–2004, and by age and race of mother: United States, 1980–2004—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 census years and estimated as of July 1 for all other years]

		Age of mother											
		Total fertility rate	15–19 years					20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years
			10–14 years	Total	15–17 years	18–19 years							
Year and race													
Asian or Pacific Islander													
2004	1,897.5	0.2	17.3	8.9	29.6	59.8	108.6	116.9	62.1	13.6	1.0		
2003	1,873.0	0.2	17.4	8.8	29.8	59.6	108.5	114.6	59.9	13.5	0.9		
2002	1,819.5	0.3	18.3	9.0	31.5	60.4	105.4	109.6	56.5	12.5	0.9		
2001	1,840.0	0.2	19.8	10.3	32.8	59.1	106.4	112.6	56.7	12.3	0.9		
2000	1,892.0	0.3	20.5	11.6	32.6	60.3	108.4	116.5	59.0	12.6	0.8		
1999	1,754.5	0.4	21.4	12.4	33.9	58.9	100.8	104.3	52.9	11.3	0.9		
1998	1,731.5	0.5	22.2	13.8	34.5	59.2	98.7	101.6	51.4	11.8	0.9		
1997	1,757.5	0.5	22.3	14.0	34.9	61.2	101.6	102.5	51.0	11.5	0.9		
1996	1,787.0	0.6	23.5	14.7	36.8	63.5	102.8	104.1	50.2	11.9	0.8		
1995	1,795.5	0.7	25.5	15.6	40.1	64.2	103.7	102.3	50.1	11.8	0.8		
1994	1,834.0	0.7	26.6	16.3	41.3	66.4	108.0	102.2	50.4	11.5	1.0		
1993	1,841.5	0.7	26.5	16.1	41.2	68.1	110.3	101.2	49.4	11.2	0.9		
1992	1,894.5	0.7	26.5	15.4	41.9	71.7	114.6	102.7	50.7	11.1	0.9		
1991	1,928.0	0.8	27.3	16.3	42.2	73.8	118.9	103.3	49.2	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.

¹Beginning 1997, rates computed by relating births to women aged 45–54 years to women aged 45–49 years.

²For 1970–91 includes births to races not shown separately. For 1992 and later years, unknown race of mother is imputed; see “Technical Notes.”

³Based on 100 percent of births in selected States and on a 50 percent sample of births in all other States; see “Technical Notes.”

⁴Based on a 50 percent sample of births.

⁵Includes births to Aleuts and Eskimos.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see “Technical Notes.” In this table all women (including Hispanic women) are classified only according to their race; see “Technical Notes.”

Table 5. Live births, birth rates, and fertility rates by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1989–2004

[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]

Measure and year	All origin ¹	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ²	White	Black
Number										
2004	4,112,052	946,349	677,621	61,221	14,943	143,520	49,044	3,133,125	2,296,683	578,772
2003	4,089,950	912,329	654,504	58,400	14,867	135,586	48,972	3,149,034	2,321,904	576,033
2002	4,021,726	876,642	627,505	57,465	14,232	125,981	51,459	3,119,944	2,298,156	578,335
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										
2004 ⁶	14.0	22.9	24.9	16.1	9.3	22.2	(⁶)	12.5	11.6	15.8
2003 ⁶	14.1	22.9	24.7	15.1	9.9	23.0	(⁶)	12.7	11.8	15.9
2002 ⁶	13.9	22.6	24.2	16.5	10.0	22.4	(⁶)	12.6	11.7	16.1
2001 ⁶	14.1	23.0	24.8	17.8	10.3	21.8	(⁶)	12.8	11.8	16.6
2000 ⁶	14.4	23.1	25.0	18.1	9.7	21.8	(⁶)	13.2	12.2	17.3
1999 ⁶	14.2	22.5	24.2	18.0	9.4	21.7	(⁶)	13.0	12.1	17.1
1998 ⁶	14.3	22.7	24.6	17.9	9.7	21.7	(⁶)	13.2	12.2	17.5
1997 ⁶	14.2	23.0	25.3	17.2	10.0	21.3	(⁶)	13.1	12.2	17.4
1996 ⁶	14.4	23.8	26.2	17.2	10.6	22.5	(⁶)	13.3	12.3	17.6
1995 ⁶	14.6	24.1	25.8	19.0	10.8	24.2	(⁶)	13.5	12.5	18.2
1994 ⁶	15.0	24.7	26.1	20.8	10.7	24.9	(⁶)	13.9	12.8	19.5
1993 ⁶	15.4	25.4	26.8	21.5	10.5	26.3	(⁶)	14.3	13.1	20.7
1992 ^{6,7}	15.8	26.1	27.4	22.9	10.1	27.5	(⁶)	14.8	13.4	21.6
1991 ^{6,7}	16.2	26.5	27.6	23.3	9.8	28.3	(⁶)	15.2	13.9	22.4
1990 ^{4,6}	16.7	26.7	28.7	21.6	10.9	27.5	(⁶)	15.7	14.4	23.0
1989 ^{5,6}	16.3	26.2	25.7	23.7	10.0	28.3	(⁶)	15.4	14.2	22.8
Fertility rate										
2004 ⁶	66.3	97.8	106.8	68.4	53.2	89.3	(⁶)	60.5	58.4	67.0
2003 ⁶	66.1	96.9	105.5	61.6	61.7	91.2	(⁶)	60.5	58.5	67.1
2002 ⁶	64.8	94.4	102.8	65.4	59.0	86.1	(⁶)	59.6	57.4	67.4
2001 ⁶	65.3	96.0	105.7	72.2	56.7	82.7	(⁶)	60.1	57.7	69.1
2000 ⁶	65.9	95.9	105.1	73.5	49.3	85.1	(⁶)	61.1	58.5	71.4
1999 ⁶	64.4	93.0	101.5	71.1	47.0	84.8	(⁶)	60.0	57.7	69.9
1998 ⁶	64.3	93.2	103.2	69.7	46.5	83.5	(⁶)	60.0	57.6	70.9
1997 ⁶	63.6	94.2	106.6	65.8	53.1	80.6	(⁶)	59.3	56.8	70.3
1996 ⁶	64.1	97.5	110.7	66.5	55.1	84.2	(⁶)	59.6	57.1	70.7
1995 ⁶	64.6	98.8	109.9	71.3	52.2	89.1	(⁶)	60.2	57.5	72.8
1994 ⁶	65.9	100.7	109.9	78.2	53.6	93.2	(⁶)	61.6	58.2	77.5
1993 ⁶	67.0	103.3	110.9	79.8	53.9	101.5	(⁶)	62.7	58.9	81.5
1992 ^{6,7}	68.4	106.1	113.3	87.9	49.4	104.7	(⁶)	64.2	60.0	84.5
1991 ^{6,7}	69.3	106.9	114.9	87.9	47.6	105.5	(⁶)	65.2	60.9	87.0
1990 ^{4,6}	71.0	107.7	118.9	82.9	52.6	102.7	(⁶)	67.1	62.8	89.0
1989 ^{5,6}	69.2	104.9	106.6	86.6	49.8	95.8	(⁶)	65.7	60.5	84.8

¹Includes origin not stated.

²Includes races other than white and black.

³Excludes data for New Hampshire, which did not report Hispanic origin.

⁴Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.

⁵Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

⁶Rates for the Central and South American population includes other and unknown Hispanic.

⁷Rates 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. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. 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." Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Table 6. Live births by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 2004

[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	Age of mother														
	All ages	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	946,349	2,356	133,044	6,969	15,881	25,839	37,159	47,196	279,746	254,358	177,762	81,021	17,265	764	33
1st child	338,736	2,308	102,720	6,598	14,482	21,727	28,176	31,737	119,445	65,349	33,989	12,402	2,393	121	9
2d child	288,730	37	25,105	322	1,260	3,616	7,646	12,261	100,786	87,257	51,949	19,909	3,562	119	6
3d child	183,929	3	4,082	8	73	335	1,052	2,614	42,682	62,645	48,972	21,560	3,849	129	7
4th child	81,237	—	496	2	5	36	113	340	12,219	25,984	25,548	13,754	3,096	133	7
5th child	30,600	—	67	—	1	5	9	52	2,853	8,454	10,278	7,004	1,859	82	3
6th child	11,513	—	8	—	—	—	3	5	607	2,582	3,925	3,213	1,114	63	1
7th child	4,726	—	2	—	—	—	1	1	144	850	1,553	1,527	611	39	—
8th child and over	3,583	—	—	—	—	—	—	—	57	386	973	1,377	715	75	—
Not stated	3,295	8	564	39	60	120	159	186	953	851	575	275	66	3	—
Mexican															
Total	677,621	1,798	101,625	5,381	12,290	19,932	28,419	35,603	207,535	182,306	121,408	51,985	10,497	453	14
1st child	232,512	1,763	77,720	5,100	11,164	16,653	21,301	23,502	85,076	41,570	18,943	6,247	1,129	61	3
2d child	203,589	30	19,789	245	1,014	2,884	6,060	9,586	76,372	62,387	32,596	10,657	1,709	47	2
3d child	137,421	2	3,269	8	62	279	836	2,084	32,999	48,040	36,401	14,381	2,256	69	4
4th child	62,828	—	392	2	3	30	100	257	9,542	20,277	20,059	10,366	2,109	81	2
5th child	23,850	—	53	—	1	1	9	42	2,276	6,564	8,084	5,438	1,377	56	2
6th child	8,966	—	8	—	—	—	3	5	483	2,007	3,069	2,494	857	47	1
7th child	3,675	—	1	—	—	—	—	1	112	644	1,222	1,201	463	32	—
8th child and over	2,771	—	—	—	—	—	—	—	47	296	736	1,068	565	59	—
Not stated	2,009	3	393	26	46	85	110	126	628	521	298	133	32	1	—
Puerto Rican															
Total	61,221	183	10,581	543	1,378	2,043	2,900	3,717	19,552	15,235	9,917	4,728	967	55	3
1st child	23,695	180	8,265	508	1,267	1,729	2,251	2,510	7,824	3,963	2,343	921	187	9	3
2d child	18,962	1	1,895	33	102	274	551	935	7,075	5,062	3,258	1,409	248	14	—
3d child	10,750	—	332	—	4	26	84	218	3,234	3,543	2,267	1,155	207	12	—
4th child	4,535	—	38	—	1	2	5	30	1,002	1,654	1,074	615	147	5	—
5th child	1,735	—	2	—	—	—	—	2	244	607	507	295	76	4	—
6th child	731	—	—	—	—	—	—	—	70	224	226	165	43	3	—
7th child	277	—	—	—	—	—	—	—	16	79	93	59	28	2	—
8th child and over	259	—	—	—	—	—	—	—	5	40	93	88	27	6	—
Not stated	277	2	49	2	4	12	9	22	82	63	56	21	4	—	—
Cuban															
Total	14,943	13	1,155	53	93	197	351	461	2,758	3,875	4,341	2,243	530	28	—
1st child	6,989	13	982	49	84	176	305	368	1,677	1,895	1,649	626	138	9	—
2d child	5,238	—	151	4	7	19	43	78	767	1,349	1,834	949	183	5	—
3d child	1,885	—	14	—	—	1	2	11	232	447	626	442	118	6	—
4th child	502	—	1	—	—	—	—	1	54	113	143	140	46	5	—
5th child	167	—	1	—	—	—	—	1	12	36	46	46	24	2	—
6th child	46	—	—	—	—	—	—	—	1	10	13	13	8	1	—
7th child	22	—	—	—	—	—	—	—	—	1	7	9	5	—	—
8th child and over	17	—	—	—	—	—	—	—	1	7	—	6	3	—	—
Not stated	77	—	6	—	2	1	1	2	14	17	23	12	5	—	—
Central and South American															
Total	143,520	204	11,896	526	1,190	2,133	3,380	4,667	35,073	40,624	33,399	17,829	4,298	183	14
1st child	56,267	198	9,766	503	1,114	1,859	2,772	3,518	18,571	14,356	8,874	3,715	755	31	1
2d child	45,800	3	1,792	18	70	243	525	936	11,364	14,400	11,459	5,583	1,152	43	4
3d child	25,402	—	252	—	4	17	62	169	3,919	7,841	7,730	4,571	1,053	33	3
4th child	9,774	—	30	—	—	3	2	25	899	2,735	3,261	2,141	666	37	5
5th child	3,482	—	3	—	—	1	—	2	154	825	1,237	946	302	14	1
6th child	1,299	—	—	—	—	—	—	—	24	213	452	433	165	12	—
7th child	535	—	—	—	—	—	—	—	6	65	163	204	93	4	—
8th child and over	386	—	—	—	—	—	—	—	3	22	92	163	99	7	—
Not stated	575	3	53	5	2	10	19	17	133	167	131	73	13	2	—

See footnotes at end of table.

Table 6. Live births by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 2004—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	Age of mother														
	All ages	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							
Other and unknown															
Hispanic	49,044	158	7,787	466	930	1,534	2,109	2,748	14,828	12,318	8,697	4,236	973	45	2
1st child	19,273	154	5,987	438	853	1,310	1,547	1,839	6,297	3,565	2,180	893	184	11	2
2d child	15,141	3	1,478	22	67	196	467	726	5,208	4,059	2,802	1,311	270	10	—
3d child	8,471	1	215	—	3	12	68	132	2,298	2,774	1,948	1,011	215	9	—
4th child	3,598	—	35	—	1	1	6	27	722	1,205	1,011	492	128	5	—
5th child	1,366	—	8	—	—	3	—	5	167	422	404	279	80	6	—
6th child	471	—	—	—	—	—	—	—	29	128	165	108	41	—	—
7th child	217	—	1	—	—	—	1	—	10	61	68	54	22	1	—
8th child and over	150	—	—	—	—	—	—	—	1	21	52	52	21	3	—
Not stated	357	—	63	6	6	12	20	19	96	83	67	36	12	—	—
Non-Hispanic															
Total ¹	3,133,125	4,396	279,393	11,191	25,687	47,505	79,271	115,739	747,379	841,592	779,789	390,137	85,277	4,855	307
1st child	1,279,647	4,300	225,318	10,791	23,824	41,653	64,339	84,711	361,015	327,345	243,335	96,873	20,044	1,327	90
2d child	1,021,378	72	44,912	341	1,615	5,111	12,745	25,100	247,544	280,683	287,063	134,474	25,316	1,226	88
3d child	505,051	2	6,867	12	94	449	1,623	4,689	98,341	144,066	149,762	87,418	17,706	835	54
4th child	190,311	—	820	4	9	26	155	626	28,340	55,912	57,057	38,154	9,508	493	27
5th child	68,354	—	90	1	1	2	15	71	7,025	19,393	21,595	15,106	4,850	280	15
6th child	27,848	—	11	—	—	1	1	9	1,576	6,965	9,319	7,186	2,607	177	7
7th child	12,949	—	3	—	1	—	—	2	334	2,549	4,546	3,863	1,525	120	9
8th child and over	14,417	—	2	—	—	—	—	2	159	1,330	3,943	5,354	3,245	368	16
Not stated	13,170	22	1,370	42	143	263	393	529	3,045	3,349	3,169	1,709	476	29	1
White	2,296,683	1,477	168,795	4,908	13,055	27,258	48,740	74,834	517,148	631,726	604,040	304,085	65,389	3,772	251
1st child	946,010	1,457	140,319	4,794	12,380	24,658	41,097	57,390	263,223	256,701	190,429	76,777	15,964	1,066	74
2d child	767,723	14	24,458	93	589	2,305	6,736	14,735	173,016	216,726	226,786	106,106	19,558	981	78
3d child	369,821	1	3,039	3	25	164	658	2,189	60,969	104,546	117,868	69,247	13,460	647	44
4th child	129,847	—	299	3	3	7	50	236	14,528	36,329	42,092	29,079	7,133	363	24
5th child	42,475	—	34	—	1	—	5	28	2,940	10,616	14,368	10,800	3,511	195	11
6th child	16,140	—	3	—	—	—	—	3	522	3,176	5,699	4,754	1,862	119	5
7th child	7,346	—	—	—	—	—	—	—	98	949	2,580	2,528	1,097	88	6
8th child and over	8,832	—	—	—	—	—	—	—	74	479	1,988	3,530	2,462	291	8
Not stated	8,489	5	643	15	57	124	194	253	1,778	2,204	2,230	1,264	342	22	1
Black	578,772	2,729	97,290	5,753	11,240	17,927	26,778	35,592	188,761	138,093	92,646	46,945	11,676	607	25
1st child	218,584	2,658	74,497	5,489	10,172	15,036	20,299	23,501	75,813	34,117	20,223	9,077	2,071	120	8
2d child	166,674	55	18,128	226	925	2,482	5,321	9,174	62,170	42,345	27,959	13,035	2,867	111	4
3d child	101,861	1	3,452	9	61	260	871	2,251	32,555	31,608	20,949	10,641	2,538	113	4
4th child	48,341	—	485	1	6	17	96	365	12,256	16,419	11,127	6,352	1,614	86	2
5th child	21,059	—	52	1	—	2	9	40	3,654	7,410	5,658	3,211	1,012	59	3
6th child	9,643	—	8	—	—	1	1	6	952	3,253	2,914	1,896	574	45	1
7th child	4,581	—	3	—	1	—	—	2	212	1,391	1,606	1,033	312	24	—
8th child and over	4,468	—	1	—	—	—	—	1	77	748	1,583	1,414	599	43	3
Not stated	3,561	15	664	27	75	129	181	252	1,072	802	627	286	89	6	—

— Quantity zero.

¹Includes races other than white and black.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. 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." Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Table 7. 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, 2004

[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. Populations estimated as of July 1. 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	Age of mother										
	15–44 years ¹	10–14 years	15–19 years			20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years ²
			Total	15–17 years	18–19 years						
Hispanic											
Total	97.8	1.3	82.6	49.7	133.5	165.3	145.6	104.1	52.9	12.4	0.7
1st child	35.1	1.3	64.0	43.9	95.2	70.8	37.5	20.0	8.1	1.7	0.1
2d child	29.9	0.0	15.7	5.3	31.6	59.8	50.1	30.5	13.0	2.6	0.1
3d child	19.1	*	2.5	0.4	5.8	25.3	36.0	28.8	14.1	2.8	0.1
4th child	8.4	*	0.3	0.0	0.7	7.2	14.9	15.0	9.0	2.2	0.1
5th child	3.2	*	0.0	*	0.1	1.7	4.9	6.0	4.6	1.3	0.1
6th and 7th child	1.7	*	*	*	*	0.4	2.0	3.2	3.1	1.2	0.1
8th child and over	0.4	*	*	*	*	0.0	0.2	0.6	0.9	0.5	0.1
Mexican	106.8	1.4	95.5	58.4	152.4	180.0	153.5	106.2	54.3	12.6	0.7
1st child	36.8	1.4	73.3	51.3	107.0	74.0	35.1	16.6	6.5	1.4	0.1
2d child	32.2	0.0	18.7	6.5	37.4	66.5	52.7	28.6	11.2	2.0	0.1
3d child	21.7	*	3.1	0.5	7.0	28.7	40.6	31.9	15.0	2.7	0.1
4th child	9.9	*	0.4	0.1	0.9	8.3	17.1	17.6	10.8	2.5	0.1
5th child	3.8	*	0.0	*	0.1	2.0	5.5	7.1	5.7	1.7	0.1
6th and 7th child	2.0	*	*	*	*	0.5	2.2	3.8	3.9	1.6	0.1
8th child and over	0.4	*	*	*	*	0.0	0.3	0.6	1.1	0.7	0.1
Puerto Rican	68.4	0.9	62.6	38.9	*	139.1	102.2	66.4	32.8	6.8	0.5
1st child	26.6	0.9	49.1	34.5	*	55.9	26.7	15.8	6.4	1.3	*
2d child	21.3	*	11.3	4.0	*	50.5	34.1	21.9	9.8	1.7	*
3d child	12.1	*	2.0	0.3	*	23.1	23.9	15.3	8.0	1.5	*
4th child	5.1	*	0.2	*	*	7.2	11.1	7.2	4.3	1.0	*
5th child	1.9	*	*	*	*	1.7	4.1	3.4	2.1	0.5	*
6th and 7th child	1.1	*	*	*	*	0.6	2.0	2.1	1.6	0.5	*
8th child and over	0.3	*	*	*	*	*	0.3	0.6	0.6	0.2	*
Cuban	53.2	*	*	*	*	*	*	*	*	*	*
1st child	25.0	*	*	*	*	*	*	*	*	*	*
2d child	18.8	*	*	*	*	*	*	*	*	*	*
3d child	6.8	*	*	*	*	*	*	*	*	*	*
4th child	1.8	*	*	*	*	*	*	*	*	*	*
5th child	0.6	*	*	*	*	*	*	*	*	*	*
6th and 7th child	0.2	*	*	*	*	*	*	*	*	*	*
8th child and over	*	*	*	*	*	*	*	*	*	*	*
Other Hispanic ³	89.3	1.1	57.7	32.7	96.4	136.2	144.4	114.2	60.0	15.2	0.8
1st child	35.2	1.1	46.5	29.5	72.7	68.2	49.1	30.1	12.6	2.7	0.1
2d child	28.4	*	9.6	3.0	20.0	45.4	50.6	38.9	18.8	4.1	0.2
3d child	15.8	*	1.4	0.2	3.2	17.0	29.1	26.4	15.3	3.7	0.1
4th child	6.2	*	0.2	*	0.4	4.4	10.8	11.6	7.2	2.3	0.1
5th child	2.3	*	*	*	*	0.9	3.4	4.5	3.3	1.1	0.1
6th and 7th child	1.2	*	*	*	*	0.2	1.3	2.3	2.2	0.9	*
8th child and over	0.2	*	*	*	*	*	0.1	0.4	0.6	0.3	*
Non-Hispanic ⁴											
Total ⁵	60.5	0.5	33.3	16.7	58.1	89.0	108.7	93.6	44.1	8.5	0.5
1st child	24.8	0.5	27.0	15.2	44.6	43.2	42.5	29.3	11.0	2.0	0.1
2d child	19.8	0.0	5.4	1.4	11.3	29.6	36.4	34.5	15.2	2.5	0.1
3d child	9.8	*	0.8	0.1	1.9	11.8	18.7	18.0	9.9	1.8	0.1
4th child	3.7	*	0.1	0.0	0.2	3.4	7.3	6.9	4.3	0.9	0.1
5th child	1.3	*	0.0	*	0.0	0.8	2.5	2.6	1.7	0.5	0.0
6th and 7th child	0.8	*	*	*	*	0.2	1.2	1.7	1.3	0.4	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.5	0.6	0.3	0.0

See footnotes at end of table.

Table 7. 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, 2004—Con.

[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. Populations estimated as of July 1. 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	Age of mother										
	15–44 years ¹	10–14 years	15–19 years			20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years ²
			Total	15–17 years	18–19 years						
Non-Hispanic ⁴ —Con.											
White	58.4	0.2	26.7	12.0	48.7	81.9	110.0	97.1	44.8	8.2	0.5
1st child	24.1	0.2	22.3	11.1	38.9	41.8	44.8	30.7	11.4	2.0	0.1
2d child	19.6	*	3.9	0.8	8.5	27.5	37.8	36.5	15.7	2.5	0.1
3d child	9.4	*	0.5	0.1	1.1	9.7	18.3	19.0	10.2	1.7	0.1
4th child	3.3	*	0.0	*	0.1	2.3	6.4	6.8	4.3	0.9	0.1
5th child	1.1	*	0.0	*	0.0	0.5	1.9	2.3	1.6	0.4	0.0
6th and 7th child	0.6	*	*	*	*	0.1	0.7	1.3	1.1	0.4	0.0
8th child and over	0.2	*	*	*	*	0.0	0.1	0.3	0.5	0.3	0.0
Black	67.0	1.6	63.1	37.1	103.9	126.9	103.0	67.4	33.7	7.8	0.5
1st child	25.5	1.6	48.6	32.8	73.4	51.3	25.6	14.8	6.6	1.4	0.1
2d child	19.4	0.0	11.8	3.9	24.3	42.0	31.7	20.5	9.4	1.9	0.1
3d child	11.9	*	2.3	0.4	5.2	22.0	23.7	15.3	7.7	1.7	0.1
4th child	5.6	*	0.3	0.0	0.8	8.3	12.3	8.1	4.6	1.1	0.1
5th child	2.5	*	0.0	*	0.1	2.5	5.6	4.2	2.3	0.7	0.0
6th and 7th child	1.7	*	*	*	*	0.8	3.5	3.3	2.1	0.6	0.1
8th child and over	0.5	*	*	*	*	0.1	0.6	1.2	1.0	0.4	0.0

0.0 Quantity more than zero but less than 0.05.

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator or, for the Hispanic subgroups, fewer than 75,000 women in the denominator; see "Technical Notes." These guidelines for denominator size follow the suggestions of the U.S. Census Bureau.

¹Fertility rates computed by relating total births, regardless of age of mother, to women aged 15–44 years.

²Birth rates computed by relating births to women aged 45–54 years to women aged 45–49 years.

³Includes Central and South American and other and unknown Hispanic.

⁴Includes origin not stated.

⁵Includes races other than white and black.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. 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." Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Table 8. 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, 1989–2004

[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 group. Population enumerated as of April 1 for census years 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]

				Age of mother								
Year and origin or race of mother	Total fertility rate	Fertility rate ¹	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												
2004	2,045.5	66.3	0.7	41.1	22.1	70.0	101.7	115.5	95.3	45.4	8.9	0.5
2003	2,042.5	66.1	0.6	41.6	22.4	70.7	102.6	115.6	95.1	43.8	8.7	0.5
2002	2,013.0	64.8	0.7	43.0	23.2	72.8	103.6	113.6	91.5	41.4	8.3	0.5
2001	2,034.0	65.3	0.8	45.3	24.7	76.1	106.2	113.4	91.9	40.6	8.1	0.5
2000	2,056.0	65.9	0.9	47.7	26.9	78.1	109.7	113.5	91.2	39.7	8.0	0.5
1999	2,007.5	64.4	0.9	48.8	28.2	79.1	107.9	111.2	87.1	37.8	7.4	0.4
1998	1,999.0	64.3	1.0	50.3	29.9	80.9	108.4	110.2	85.2	36.9	7.4	0.4
1997	1,971.0	63.6	1.1	51.3	31.4	82.1	107.3	108.3	83.0	35.7	7.1	0.4
1996	1,976.0	64.1	1.2	53.5	33.3	84.7	107.8	108.6	82.1	34.9	6.8	0.3
1995	1,978.0	64.6	1.3	56.0	35.5	87.7	107.5	108.8	81.1	34.0	6.6	0.3
1994	2,001.5	65.9	1.4	58.2	37.2	90.2	109.2	111.0	80.4	33.4	6.4	0.3
1993	2,019.5	67.0	1.4	59.0	37.5	91.1	111.3	113.2	79.9	32.7	6.1	0.3
1992	2,046.0	68.4	1.4	60.3	37.6	93.6	113.7	115.7	79.6	32.3	5.9	0.3
1991	2,062.5	69.3	1.4	61.8	38.6	94.0	115.3	117.2	79.2	31.9	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												
2004	2,824.5	97.8	1.3	82.6	49.7	133.5	165.3	145.6	104.1	52.9	12.4	0.7
2003	2,785.5	96.9	1.3	82.3	49.7	132.0	163.4	144.4	102.0	50.8	12.2	0.7
2002	2,718.0	94.4	1.4	83.4	50.7	133.0	164.3	139.4	95.1	47.8	11.5	0.7
2001	2,748.5	96.0	1.6	86.4	52.8	135.5	163.5	140.4	97.6	47.9	11.6	0.7
2000	2,730.0	95.9	1.7	87.3	55.5	132.6	161.3	139.9	97.1	46.6	11.5	0.6
1999	2,649.0	93.0	1.9	86.8	56.9	129.5	157.3	135.8	92.3	44.5	10.6	0.6
1998	2,652.5	93.2	1.9	87.9	58.5	131.5	159.3	136.1	90.5	43.4	10.8	0.6
1997	2,680.5	94.2	2.1	89.6	61.1	132.4	162.6	137.5	89.6	43.4	10.7	0.6
1996	2,772.0	97.5	2.4	94.6	64.2	140.0	170.2	140.7	91.3	43.9	10.7	0.6
1995	2,798.5	98.8	2.6	99.3	68.3	145.4	171.9	140.4	90.5	43.7	10.7	0.6
1994	2,839.0	100.7	2.6	101.3	69.9	147.5	175.7	142.4	91.1	43.4	10.7	0.6
1993	2,894.5	103.3	2.6	101.8	68.5	151.1	180.0	146.0	93.2	44.1	10.6	0.6
1992 ³	2,957.5	106.1	2.5	103.3	68.9	153.9	185.2	148.8	94.8	45.3	11.0	0.6
1991 ³	2,963.5	106.9	2.4	104.6	69.2	155.5	184.6	150.0	95.1	44.7	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												
2004	3,021.0	106.8	1.4	95.5	58.4	152.4	180.0	153.5	106.2	54.3	12.6	0.7
2003	2,957.5	105.5	1.5	93.2	56.9	148.8	176.9	151.5	104.7	50.2	12.8	0.7
2002	2,879.5	102.8	1.5	94.5	58.6	147.5	176.9	144.5	97.9	47.5	12.3	0.8
2001	2,928.5	105.7	1.7	95.4	59.3	147.0	177.0	146.4	101.9	50.0	12.6	0.7
2000	2,906.5	105.1	1.9	95.4	60.6	146.7	174.9	144.7	102.3	49.2	12.2	0.7
1999	2,823.0	101.5	2.1	94.3	60.8	145.6	170.8	141.4	97.4	47.2	10.7	0.7
1998	2,878.0	103.2	2.1	96.4	62.9	149.2	176.5	147.4	94.9	46.9	10.8	0.6
1997	2,957.0	106.6	2.3	103.4	71.3	151.6	180.9	150.0	95.3	47.4	11.5	0.6
1996	3,052.0	110.7	2.6	112.2	77.7	161.6	185.3	154.7	96.5	46.4	12.0	0.7
1995	3,033.5	109.9	2.7	115.9	79.1	170.7	190.4	146.6	93.0	45.5	11.9	0.7
1994	3,024.0	109.9	2.7	109.2	73.6	163.3	189.1	153.6	92.5	45.3	11.7	0.7
1993	3,041.5	110.9	2.5	103.6	68.4	156.6	187.9	159.5	97.2	45.5	11.3	0.8
1992 ³	3,107.0	113.3	2.4	105.1	---	---	196.6	160.2	97.1	47.4	11.8	0.8
1991 ³	3,103.5	114.9	2.5	108.3	70.0	164.7	192.4	156.1	99.7	49.1	11.9	0.7
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

See footnotes at end of table.

Table 8. 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, 1989–2004—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 group. Population enumerated as of April 1 for census years 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]

				Age of mother								
Year and origin or race of mother	Total fertility rate	Fertility rate ¹	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						
Puerto Rican												
2004	2,056.5	68.4	0.9	62.6	38.9	*	139.1	102.2	66.4	32.8	6.8	0.5
2003	1,841.0	61.6	1.0	60.8	35.9	*	127.9	86.6	55.6	29.5	6.4	0.4
2002	1,947.5	65.4	1.4	61.4	39.7	*	136.5	90.6	61.5	31.3	6.3	0.5
2001	2,165.0	72.2	1.7	82.2	*	*	147.2	93.6	70.5	30.7	6.7	0.4
2000	2,178.5	73.5	1.7	82.9	54.7	120.4	149.5	101.6	61.1	32.0	6.6	0.3
1999	2,104.5	71.1	1.6	74.0	49.4	*	146.0	106.5	58.0	27.3	7.2	0.3
1998	2,043.5	69.7	1.8	76.2	51.7	*	146.7	88.7	61.9	25.8	7.2	0.4
1997	1,931.5	65.8	1.7	68.9	45.0	*	136.0	92.9	54.1	26.1	6.2	0.4
1996	1,965.0	66.5	1.9	76.5	48.6	*	133.7	95.6	54.3	25.2	5.6	*
1995	2,078.0	71.3	2.9	82.8	57.3	*	138.1	97.9	61.2	26.9	5.5	0.3
1994	2,341.5	78.2	3.1	99.6	68.8	*	169.0	103.8	59.5	27.5	5.6	0.2
1993	2,416.0	79.8	3.1	104.9	70.1	*	184.6	102.8	54.4	26.7	6.2	*
1992 ³	2,568.5	87.9	3.4	106.5	---	---	199.1	102.6	65.3	29.9	6.6	*
1991 ³	2,573.5	87.9	2.7	111.0	*	*	193.3	108.9	68.1	23.9	6.5	*
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	*
Cuban												
2004	1,732.5	53.2	*	*	*	*	*	*	*	*	*	*
2003	2,059.5	61.7	*	*	*	*	*	*	*	*	*	*
2002	1,940.5	59.0	*	*	*	*	*	*	*	*	*	*
2001	1,792.5	56.7	*	*	*	*	*	*	*	*	*	*
2000	1,528.0	49.3	*	23.5	14.2	43.4	64.2	104.0	68.1	37.3	7.9	*
1999	1,388.5	47.0	*	*	*	*	*	*	*	*	*	*
1998	1,402.5	46.5	*	*	*	*	*	*	*	*	*	*
1997	1,619.5	53.1	*	*	*	*	*	*	*	*	*	*
1996	1,617.0	55.1	*	*	*	*	*	*	*	*	*	*
1995	1,584.0	52.2	*	*	*	*	*	*	*	*	*	*
1994	1,587.0	53.6	*	*	*	*	*	*	*	*	*	*
1993	1,570.0	53.9	*	*	*	*	*	*	*	*	*	*
1992 ³	1,453.5	49.4	*	*	---	---	*	*	*	*	*	*
1991 ³	1,352.5	47.6	*	*	*	*	*	*	*	*	*	*
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	*	*	---	---	*	*	*	*	*	*
Other Hispanic ⁶												
2004	2,648.0	89.3	1.1	57.7	32.7	96.4	136.2	144.4	114.2	60.0	15.2	0.8
2003	2,733.0	91.2	1.0	60.4	36.4	93.1	142.2	152.8	112.3	63.2	13.9	0.8
2002	2,610.5	86.1	1.1	63.0	34.7	110.3	143.3	147.2	98.4	56.1	12.2	0.8
2001	2,519.5	82.7	1.1	65.3	35.6	115.2	136.0	143.3	95.4	50.3	11.6	0.9
2000	2,563.5	85.1	1.2	69.9	44.4	102.0	133.2	143.9	103.6	47.7	12.5	0.7
1999	2,517.0	84.8	1.5	75.5	53.1	100.5	130.2	138.4	98.3	46.5	12.3	0.7
1998	2,448.5	83.5	1.8	75.0	53.3	100.3	122.7	133.6	97.8	45.4	12.8	0.6
1997	2,376.5	80.6	1.8	66.4	44.5	98.0	129.3	125.8	95.6	43.9	11.8	0.7
1996	2,516.5	84.2	2.2	64.8	43.4	95.6	149.6	127.9	98.0	49.1	11.0	0.7
1995	2,629.5	89.1	2.3	72.1	51.3	99.4	144.3	147.7	97.9	49.4	11.6	0.6
1994	2,693.0	93.2	2.5	82.6	62.7	105.0	151.2	137.0	104.4	48.4	11.9	0.6
1993	2,914.5	101.5	2.6	102.0	74.7	134.6	167.5	139.4	106.7	51.7	12.5	0.5
1992 ³	2,989.0	104.7	2.4	108.2	---	---	168.0	151.9	104.4	49.9	12.5	0.5
1991 ³	3,064.5	105.5	2.2	100.7	67.3	145.6	184.1	164.5	100.2	49.2	11.4	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

See footnotes at end of table.

Table 8. 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, 1989–2004—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 group. Population enumerated as of April 1 for census years 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 or 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						
Non-Hispanic ⁷												
Total ⁸												
2004	1,891.0	60.5	0.5	33.3	16.7	58.1	89.0	108.7	93.6	44.1	8.5	0.5
2003	1,897.5	60.5	0.5	34.1	17.3	59.4	90.5	109.2	93.8	42.6	8.3	0.5
2002	1,877.0	59.6	0.6	35.5	18.2	61.8	91.8	107.9	90.8	40.4	7.9	0.5
2001	1,898.5	60.1	0.6	37.9	19.6	65.2	94.9	107.7	90.9	39.5	7.7	0.5
2000	1,931.5	61.1	0.7	40.7	21.9	68.2	99.5	108.4	90.2	38.8	7.6	0.4
1999	1,894.0	60.0	0.8	42.2	23.3	70.2	98.4	106.7	86.2	37.0	7.1	0.4
1998	1,887.5	60.0	0.8	44.0	25.2	72.4	98.9	105.8	84.4	36.2	7.0	0.4
1997	1,853.0	59.3	0.9	45.0	26.7	73.7	97.4	103.5	82.0	34.8	6.7	0.3
1996	1,852.0	59.6	1.0	47.0	28.4	75.8	97.3	103.6	80.8	33.9	6.5	0.3
1995	1,856.5	60.2	1.1	49.3	30.5	78.6	97.4	104.1	79.9	33.0	6.2	0.3
1994	1,883.5	61.6	1.2	51.7	32.3	81.4	99.5	106.5	79.1	32.4	6.0	0.3
1993	1,901.5	62.7	1.2	52.7	32.9	82.3	101.7	108.7	78.4	31.6	5.7	0.3
1992 ³	1,929.0	64.2	1.2	54.3	33.2	85.3	104.3	111.4	77.9	31.1	5.4	0.2
1991 ³	1,953.0	65.2	1.3	56.1	34.4	86.1	106.5	113.1	77.5	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												
2004	1,847.0	58.4	0.2	26.7	12.0	48.7	81.9	110.0	97.1	44.8	8.2	0.5
2003	1,856.5	58.5	0.2	27.4	12.4	50.0	83.5	110.8	97.6	43.2	8.1	0.5
2002	1,828.5	57.4	0.2	28.5	13.1	51.9	84.3	109.3	94.4	40.9	7.6	0.5
2001	1,843.0	57.7	0.3	30.3	14.0	54.8	87.1	108.9	94.3	39.8	7.5	0.4
2000	1,866.0	58.5	0.3	32.6	15.8	57.5	91.2	109.4	93.2	38.8	7.3	0.4
1999	1,838.5	57.7	0.3	34.1	17.1	59.4	90.6	108.6	89.5	37.3	6.9	0.4
1998	1,825.0	57.6	0.3	35.3	18.3	60.9	91.2	107.4	87.2	36.4	6.8	0.4
1997	1,785.5	56.8	0.4	36.0	19.3	62.1	90.0	104.8	84.3	34.8	6.5	0.3
1996	1,781.0	57.1	0.4	37.6	20.6	64.0	90.1	104.9	82.8	33.9	6.2	0.3
1995	1,777.5	57.5	0.4	39.3	22.0	66.2	90.2	105.1	81.5	32.8	5.9	0.3
1994	1,782.5	58.2	0.5	40.4	22.7	67.6	90.9	106.6	80.2	32.0	5.7	0.2
1993	1,786.0	58.9	0.5	40.7	22.7	67.7	92.2	108.2	79.0	31.0	5.4	0.2
1992 ³	1,803.5	60.0	0.5	41.7	22.7	69.8	93.9	110.6	78.3	30.4	5.1	0.2
1991 ³	1,822.5	60.9	0.5	43.4	23.6	70.6	95.7	112.1	77.7	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												
2004	2,020.0	67.0	1.6	63.1	37.1	103.9	126.9	103.0	67.4	33.7	7.8	0.5
2003	2,027.5	67.1	1.6	64.7	38.7	105.3	128.1	102.1	67.4	33.4	7.7	0.5
2002	2,047.0	67.4	1.9	68.3	41.0	110.3	131.0	102.1	66.1	32.1	7.5	0.4
2001	2,104.5	69.1	2.1	73.5	44.9	116.7	137.2	102.1	66.2	32.1	7.3	0.4
2000	2,178.5	71.4	2.4	79.2	50.1	121.9	145.4	102.8	66.5	31.8	7.2	0.4
1999	2,134.0	69.9	2.6	81.0	51.7	123.9	142.1	99.8	63.9	30.6	6.5	0.3
1998	2,164.0	70.9	2.9	85.7	56.8	128.2	142.5	99.9	64.4	30.4	6.7	0.3
1997	2,137.5	70.3	3.2	88.3	60.7	131.0	138.8	97.2	63.6	29.6	6.5	0.3
1996	2,140.0	70.7	3.6	91.9	64.8	134.1	137.0	96.7	63.2	29.1	6.2	0.3
1995	2,186.5	72.8	4.2	97.2	70.4	139.2	137.8	98.5	64.4	28.8	6.1	0.3
1994	2,314.5	77.5	4.6	105.7	77.0	150.4	146.8	104.1	66.3	29.1	6.0	0.3
1993	2,412.5	81.5	4.6	110.5	81.1	154.6	154.5	109.2	68.1	29.4	5.9	0.3
1992 ³	2,482.5	84.5	4.8	114.7	82.9	161.1	160.8	112.8	68.4	29.1	5.7	0.2
1991 ³	2,532.0	87.0	4.9	118.2	86.1	162.2	164.8	115.1	68.9	28.7	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 or, for the Hispanic subgroups, fewer than 50 women for census years and 75,000 women for noncensus years in the denominator; see "Technical Notes." These guidelines for denominator size follow the suggestions of the U.S. Census Bureau.

¹Fertility rates computed by relating total births, regardless of age of mother, to women 15–44 years.

²Beginning 1997, rates computed by relating births to women aged 45–54 years to women aged 45–49 years.

³Excludes data for New Hampshire, which did not report Hispanic origin.

⁴Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.

⁵Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

⁶Includes Central and South American and other and unknown Hispanic.

⁷Includes origin not stated.

⁸Includes races other than white and black.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. 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." Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Table 9. Fertility rates and birth rates by live-birth order and by race and Hispanic origin of mother: United States, 1980–2004

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

Year and race and Hispanic origin of mother	Fertility rate	Live-birth order						
		1	2	3	4	5	6 and 7	8 and over
All races ^{1,2}								
2004	66.3	26.4	21.4	11.2	4.4	1.6	0.9	0.3
2003	66.1	26.5	21.4	11.1	4.3	1.6	0.9	0.3
2002	64.8	25.8	21.1	10.9	4.3	1.5	0.9	0.3
2001	65.3	26.0	21.3	11.0	4.3	1.6	0.9	0.3
2000	65.9	26.5	21.4	11.0	4.2	1.6	0.9	0.3
1999	64.4	26.0	21.0	10.7	4.1	1.5	0.9	0.3
1998	64.3	25.9	21.0	10.6	4.1	1.5	0.9	0.3
1997	63.6	25.9	20.7	10.4	4.0	1.5	0.9	0.3
1996	64.1	26.3	20.7	10.4	4.0	1.5	0.9	0.3
1995	64.6	26.9	20.7	10.3	4.0	1.5	0.9	0.3
1994	65.9	27.1	21.2	10.6	4.1	1.6	0.9	0.3
1993	67.0	27.3	21.7	10.9	4.3	1.6	1.0	0.3
1992	68.4	27.6	22.2	11.2	4.4	1.7	1.0	0.3
1991	69.3	28.2	22.3	11.4	4.4	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 ³	65.5	27.4	21.7	10.1	3.7	1.4	0.9	0.3
1983 ³	65.7	27.8	21.5	10.1	3.7	1.4	0.9	0.3
1982 ³	67.3	28.6	22.0	10.2	3.8	1.4	0.9	0.3
1981 ³	67.3	29.0	21.6	10.1	3.8	1.5	0.9	0.4
1980 ³	68.4	29.5	21.8	10.3	3.9	1.5	1.0	0.4
Non-Hispanic white ^{2,4}								
2004	58.4	24.1	19.6	9.4	3.3	1.1	0.6	0.2
2003	58.5	24.3	19.7	9.4	3.3	1.1	0.6	0.2
2002	57.4	23.5	19.5	9.3	3.3	1.1	0.6	0.2
2001	57.7	23.6	19.7	9.3	3.3	1.1	0.6	0.2
2000	58.5	24.2	19.8	9.4	3.3	1.1	0.6	0.2
1999	57.7	24.0	19.6	9.2	3.2	1.0	0.6	0.2
1998	57.6	23.8	19.7	9.2	3.1	1.0	0.6	0.2
1997	56.8	23.8	19.3	8.9	3.0	1.0	0.5	0.2
1996	57.1	24.1	19.3	8.9	3.0	1.0	0.5	0.2
1995	57.5	24.5	19.3	8.9	3.0	1.0	0.5	0.2
1994	58.2	24.6	19.7	9.1	3.1	1.0	0.5	0.2
1993	58.9	24.8	20.1	9.2	3.1	1.0	0.5	0.2
1992 ⁵	60.0	25.1	20.5	9.5	3.2	1.0	0.5	0.2
1991 ⁵	60.9	25.8	20.6	9.6	3.2	1.0	0.5	0.2
1990 ⁶	62.8	26.7	21.2	9.9	3.3	1.1	0.5	0.2
Non-Hispanic black ^{2,4}								
2004	67.0	25.5	19.4	11.9	5.6	2.5	1.7	0.5
2003	67.1	25.4	19.6	11.9	5.6	2.5	1.6	0.5
2002	67.4	25.3	19.7	12.0	5.6	2.5	1.7	0.5
2001	69.1	25.9	20.4	12.4	5.8	2.5	1.7	0.6
2000	71.4	26.7	21.2	12.8	5.9	2.6	1.8	0.6
1999	69.9	26.4	20.8	12.3	5.7	2.5	1.7	0.6
1998	70.9	27.0	21.0	12.3	5.7	2.6	1.8	0.6
1997	70.3	27.2	20.6	12.0	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	72.8	28.9	20.9	12.1	5.8	2.7	1.9	0.6
1994	77.5	30.0	22.4	13.2	6.3	2.9	2.0	0.6
1993	81.5	30.5	23.6	14.3	7.0	3.2	2.2	0.7
1992 ⁵	84.5	31.1	24.8	15.2	7.3	3.4	2.2	0.6
1991 ⁵	87.0	32.1	25.5	15.7	7.5	3.4	2.2	0.6
1990 ⁶	89.0	33.2	26.3	16.0	7.6	3.3	2.0	0.6

See footnotes at end of table.

Table 9. Fertility rates and birth rates by live-birth order and by race and Hispanic origin of mother: United States, 1980–2004—Con.

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

Year and race and Hispanic origin of mother	Fertility rate	Live-birth order						
		1	2	3	4	5	6 and 7	8 and over
Hispanic ⁷								
2004	97.8	35.1	29.9	19.1	8.4	3.2	1.7	0.4
2003	96.9	35.2	29.9	18.7	8.1	3.1	1.6	0.4
2002	94.4	34.6	29.0	17.9	7.9	3.0	1.6	0.4
2001	96.0	35.4	29.5	18.1	7.9	3.0	1.7	0.4
2000	95.9	35.8	29.2	18.0	7.7	3.0	1.7	0.4
1999	93.0	34.6	28.5	17.3	7.5	2.9	1.7	0.4
1998	93.2	34.8	28.5	17.2	7.6	3.0	1.7	0.4
1997	94.2	35.6	28.6	17.1	7.6	3.0	1.8	0.5
1996	97.5	37.2	29.4	17.4	7.8	3.2	1.9	0.5
1995	98.8	38.4	29.3	17.4	7.8	3.3	2.0	0.6
1994	100.7	39.0	29.7	17.6	8.2	3.4	2.1	0.6
1993	103.3	39.3	30.4	18.3	8.6	3.7	2.3	0.6
1992 ⁵	106.1	40.1	30.9	19.0	9.1	3.9	2.5	0.7
1991 ⁵	106.9	40.8	30.6	19.2	9.2	3.9	2.5	0.7
1990 ⁶	107.7	40.7	30.9	19.5	9.3	4.0	2.6	0.8

¹Includes races other than white and black.

²Includes origin not stated.

³Based on 100 percent of births in selected States and on a 50 percent sample of births in all other States; see "Technical Notes."

⁴Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

⁵Excludes data for New Hampshire, which did not report Hispanic origin.

⁶Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.

⁷Includes all persons of Hispanic origin of any race.

Table 10. Mean age of mother, by live-birth order and race and Hispanic origin of mother: United States, 1980–2004

[Mean age at birth is the arithmetic average of the age of mothers at the time of the birth, computed directly from the frequency of births by age of mother and live birth order. Live-birth order refers to number of children born alive to mother]

Year and race and Hispanic origin of mother	Total	Live-birth order							Unknown or not stated
		1	2	3	4	5	6 and 7	8 and over	
All races ¹									
2004	27.5	25.2	28.0	29.4	30.4	31.4	32.9	35.9	27.6
2003	27.4	25.2	28.0	29.3	30.4	31.4	33.0	35.8	27.9
2002	27.3	25.1	27.9	29.2	30.3	31.4	32.9	35.9	27.7
2001	27.3	25.0	27.8	29.2	30.3	31.4	32.9	35.9	27.0
2000	27.2	24.9	27.7	29.2	30.3	31.4	32.9	35.8	27.4
1995	26.9	24.5	27.5	29.1	30.1	31.2	32.6	35.4	27.1
1990	26.4	24.2	26.9	28.3	29.4	30.6	32.1	35.1	27.4
1985	25.8	23.7	26.3	27.9	29.3	30.6	32.5	35.7	26.1
1980 ²	25.0	22.7	25.4	27.3	29.0	30.6	32.7	36.0	23.9
Non-Hispanic white ³									
2004	28.2	26.2	28.8	30.2	31.2	32.2	33.8	36.9	28.7
2003	28.2	26.2	28.8	30.1	31.2	32.3	33.9	37.0	28.8
2002	28.2	26.1	28.7	30.1	31.2	32.3	33.9	37.1	28.6
2001	28.1	26.0	28.6	30.1	31.3	32.4	33.9	37.0	28.2
2000	28.0	25.9	28.6	30.0	31.3	32.4	34.0	37.0	28.9
1995	27.6	25.4	28.3	29.9	31.2	32.4	33.9	36.7	28.5
1990 ⁴	27.1	25.0	27.6	29.1	30.3	31.6	33.2	36.2	28.5
Non-Hispanic black ³									
2004	25.6	22.7	25.9	27.5	28.6	29.8	31.2	34.1	25.7
2003	25.6	22.7	25.9	27.5	28.6	29.7	31.3	34.0	26.3
2002	25.4	22.6	25.8	27.3	28.5	29.6	31.2	34.1	26.5
2001	25.3	22.4	25.7	27.2	28.3	29.6	31.2	34.1	26.4
2000	25.2	22.3	25.5	27.1	28.2	29.5	31.0	33.9	26.0
1995	24.8	21.9	25.3	27.0	28.0	29.3	30.8	33.2	25.4
1990 ⁴	24.4	21.7	24.6	26.3	27.4	28.7	30.3	33.3	26.0
Hispanic ⁵									
2004	26.2	23.1	26.2	28.5	30.1	31.5	33.1	35.5	25.8
2003	26.1	23.1	26.1	28.4	30.0	31.4	33.1	35.4	25.8
2002	26.0	23.0	26.0	28.3	29.9	31.4	33.1	35.7	25.7
2001	25.9	22.8	25.9	28.2	29.9	31.4	33.1	35.7	24.4
2000	25.7	22.7	25.8	28.1	29.8	31.3	33.0	35.5	24.2
1995	25.4	22.4	25.5	27.8	29.6	31.1	32.8	35.5	24.2
1990 ⁴	25.3	22.4	25.2	27.4	29.1	30.6	32.3	35.3	26.1

¹Includes races other than white and black and origin not stated.

²Based on 100 percent of births in selected States and on a 50 percent sample of births in all other States; see "Technical Notes."

³Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

⁴Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.

⁵Includes all persons of Hispanic origin of any race.

Table 11. 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, 2004

[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. Populations estimated as of July 1]

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	4,112,052	14.0	66.3	2,045.5	41.1	22.1	70.0
Alabama	59,510	13.1	62.4	1,906.5	52.4	29.1	86.5
Alaska	10,338	15.8	74.4	2,422.0	38.9	17.2	71.9
Arizona	93,663	16.3	79.5	2,384.5	60.1	35.6	98.4
Arkansas	38,573	14.0	68.3	2,073.5	60.3	30.7	104.1
California	544,843	15.2	70.4	2,150.5	39.5	21.2	67.9
Colorado	68,503	14.9	68.8	2,090.0	43.9	25.1	73.0
Connecticut	42,095	12.0	58.8	1,904.5	24.4	12.8	42.4
Delaware	11,369	13.7	63.8	1,973.0	43.5	25.5	70.0
District of Columbia	7,933	14.3	58.2	1,735.5	66.7	42.4	102.7
Florida	218,053	12.5	64.1	2,020.0	42.4	22.1	73.8
Georgia	138,849	15.7	70.1	2,145.5	53.4	29.3	90.8
Hawaii	18,281	14.5	74.0	2,301.5	36.1	18.5	61.8
Idaho	22,532	16.2	77.3	2,336.5	38.6	16.6	70.5
Illinois	180,778	14.2	66.7	2,039.0	40.2	22.8	66.6
Indiana	87,142	14.0	67.0	2,059.5	43.5	20.9	78.1
Iowa	38,438	13.0	63.8	1,981.5	31.6	15.1	54.5
Kansas	39,669	14.5	69.8	2,140.0	40.7	20.7	69.2
Kentucky	55,720	13.4	63.6	1,960.0	49.2	23.9	86.6
Louisiana	65,369	14.5	66.7	2,002.0	56.2	30.2	93.1
Maine	13,944	10.6	52.4	1,752.0	24.3	10.6	44.4
Maryland	74,628	13.4	62.3	1,978.0	32.4	18.0	54.9
Massachusetts	78,484	12.2	56.5	1,719.5	22.3	11.7	38.3
Michigan	129,776	12.8	61.4	1,926.5	34.1	17.7	59.2
Minnesota	70,624	13.8	64.5	2,029.0	26.7	13.6	45.5
Mississippi	42,827	14.8	68.3	2,033.5	61.9	33.9	102.6
Missouri	77,765	13.5	64.3	1,986.0	43.4	22.0	74.6
Montana	11,519	12.4	62.7	1,996.0	35.8	17.7	60.9
Nebraska	26,332	15.1	72.6	2,225.0	35.9	18.2	60.5
Nevada	35,200	15.1	72.6	2,216.0	51.1	27.7	88.4
New Hampshire	14,565	11.2	53.4	1,792.5	18.2	7.8	34.4
New Jersey	115,253	13.2	64.2	2,040.0	24.1	12.5	42.7
New Mexico	28,384	14.9	71.9	2,199.5	60.8	38.3	93.5
New York	249,947	13.0	60.7	1,863.0	26.9	14.2	46.1
North Carolina	119,847	14.0	66.0	2,027.5	48.8	26.1	84.5
North Dakota	8,189	12.9	63.2	1,948.5	27.2	11.1	48.2
Ohio	148,954	13.0	62.7	1,957.0	38.5	19.2	67.2
Oklahoma	51,306	14.6	70.3	2,107.0	55.6	29.8	91.9
Oregon	45,678	12.7	61.8	1,871.0	33.3	16.3	59.1
Pennsylvania	144,748	11.7	58.0	1,848.0	30.5	16.6	51.6
Rhode Island	12,779	11.8	55.0	1,711.0	32.9	17.1	56.7
South Carolina	56,590	13.5	63.6	1,946.0	52.1	28.8	87.8
South Dakota	11,338	14.7	72.4	2,260.0	38.5	17.4	68.8
Tennessee	79,642	13.5	63.4	1,957.5	52.1	26.7	89.5
Texas	381,293	17.0	77.3	2,335.5	62.6	37.1	101.1
Utah	50,670	21.2	92.3	2,544.5	34.0	15.5	60.2
Vermont	6,599	10.6	52.1	1,720.5	20.9	8.2	40.1
Virginia	103,933	13.9	65.0	2,026.5	35.2	17.5	61.8
Washington	81,747	13.2	61.7	1,907.5	31.3	15.7	54.1
West Virginia	20,880	11.5	58.3	1,795.5	43.8	21.4	76.4
Wisconsin	70,146	12.7	60.7	1,927.5	30.2	15.1	51.9
Wyoming	6,807	13.4	66.5	2,050.0	42.7	19.4	74.4
Puerto Rico	51,127	13.1	59.9	1,772.5	61.7	41.5	92.0
Virgin Islands	1,574	14.5	69.7	2,253.5	52.7	24.4	115.2
Guam	3,410	20.5	91.9	2,779.5	62.6	37.1	103.1
American Samoa	1,714	29.6	132.4	4,140.0	45.8	20.2	91.5
Northern Marianas	1,355	17.3	43.6	1,229.0	39.3	26.0	55.7

¹Excludes data for the territories.

Table 12. Live births by race of mother: United States, each state and territory, 2004

[By place of residence]

State	Number				
	All races	White	Black	American Indian or Alaska Native ¹	Asian or Pacific Islander
United States ²	4,112,052	3,222,928	616,074	43,927	229,123
Alabama	59,510	40,525	18,043	179	763
Alaska	10,338	6,586	397	2,590	765
Arizona	93,663	81,163	3,429	6,273	2,798
Arkansas	38,573	30,343	7,387	245	598
California	544,843	441,330	32,049	2,976	68,488
Colorado	68,503	62,497	2,930	597	2,479
Connecticut	42,095	34,450	5,279	250	2,116
Delaware	11,369	7,974	2,907	33	455
District of Columbia	7,933	2,301	5,394	9	229
Florida	218,053	157,719	52,756	741	6,837
Georgia	138,849	89,767	44,003	275	4,804
Hawaii	18,281	5,179	573	67	12,462
Idaho	22,532	21,714	110	399	309
Illinois	180,778	140,332	31,031	299	9,116
Indiana	87,142	75,847	9,634	117	1,544
Iowa	38,438	35,724	1,478	251	985
Kansas	39,669	35,172	2,842	499	1,156
Kentucky	55,720	49,869	4,924	99	828
Louisiana	65,369	37,126	26,721	426	1,096
Maine	13,944	13,381	225	116	222
Maryland	74,628	43,939	25,715	169	4,805
Massachusetts	78,484	63,965	8,710	164	5,645
Michigan	129,776	101,745	22,613	710	4,708
Minnesota	70,624	57,987	6,624	1,546	4,467
Mississippi	42,827	23,526	18,520	315	466
Missouri	77,765	64,135	11,456	383	1,791
Montana	11,519	9,822	53	1,519	125
Nebraska	26,332	23,704	1,573	449	606
Nevada	35,200	29,044	2,964	531	2,661
New Hampshire	14,565	13,766	256	24	519
New Jersey	115,253	84,397	19,794	174	10,888
New Mexico	28,384	23,852	502	3,620	410
New York	249,947	178,145	49,544	692	21,566
North Carolina	119,847	87,414	27,618	1,577	3,238
North Dakota	8,189	7,017	96	975	101
Ohio	148,954	121,351	23,875	311	3,417
Oklahoma	51,306	40,064	4,706	5,402	1,134
Oregon	45,678	41,234	1,061	874	2,509
Pennsylvania	144,748	115,995	22,797	332	5,624
Rhode Island	12,779	10,871	1,197	165	546
South Carolina	56,590	35,788	19,613	219	970
South Dakota	11,338	9,198	147	1,873	120
Tennessee	79,642	60,406	17,403	162	1,671
Texas	381,293	324,638	42,341	863	13,451
Utah	50,670	48,015	435	689	1,531
Vermont	6,599	6,416	59	12	112
Virginia	103,933	73,966	22,906	151	6,910
Washington	81,747	67,165	4,056	2,138	8,388
West Virginia	20,880	20,018	672	19	171
Wisconsin	70,146	59,988	6,601	1,110	2,447
Wyoming	6,807	6,358	55	318	76
Puerto Rico	51,127	46,399	4,702	---	---
Virgin Islands	1,574	383	1,161	5	25
Guam	3,410	272	32	6	3,100
American Samoa	1,714	4	—	—	1,710
Northern Marianas	1,355	20	—	—	1,335

--- Data not available.

— Quantity zero.

¹Includes births to Aleuts and Eskimos.²Excludes data for the territories.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." In this table all women (including Hispanic women) are classified only according to their race; see "Technical Notes."

Table 13. Live births by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, each state and territory, 2004

[By place of residence]

State	All origins	Origin of mother									
		Hispanic						Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ¹	White	Black	Not stated
United States ²	4,112,052	946,349	677,621	61,221	14,943	143,520	49,044	3,133,125	2,296,683	578,772	32,578
Alabama	59,510	3,364	2,504	103	22	339	396	56,098	37,209	17,972	48
Alaska	10,338	877	327	72	10	62	406	8,266	5,130	300	1,195
Arizona	93,663	41,422	38,910	300	53	884	1,275	50,490	39,632	2,821	1,751
Arkansas	38,573	3,508	2,924	33	6	515	30	34,951	26,797	7,343	114
California	544,843	275,201	240,669	2,025	688	26,586	5,233	261,830	162,716	30,478	7,812
Colorado	68,503	21,740	17,374	280	69	730	3,287	46,751	41,192	2,799	12
Connecticut	42,095	7,600	1,000	4,149	67	2,145	239	34,367	27,132	4,910	128
Delaware	11,369	1,523	861	285	8	354	15	9,772	6,442	2,852	74
District of Columbia	7,933	998	123	15	6	819	35	6,902	2,007	4,691	33
Florida	218,053	58,528	14,609	9,993	10,571	21,695	1,660	158,919	105,218	47,019	606
Georgia	138,849	20,112	15,744	644	145	3,405	174	116,538	68,603	43,154	2,199
Hawaii	18,281	2,680	493	732	14	108	1,333	15,571	4,319	483	30
Idaho	22,532	3,241	2,779	2	—	6	454	19,006	18,296	90	285
Illinois	180,778	42,655	36,096	2,616	195	1,737	2,011	138,022	97,915	30,732	101
Indiana	87,142	7,244	6,318	253	24	536	113	79,550	68,352	9,579	348
Iowa	38,438	2,835	2,245	50	7	423	110	35,498	32,859	1,459	105
Kansas	39,669	5,474	4,538	97	25	325	489	33,651	29,275	2,764	544
Kentucky	55,720	2,195	1,548	116	102	214	215	53,488	47,894	4,740	37
Louisiana	65,369	1,952	852	108	75	113	804	63,299	35,198	26,625	118
Maine	13,944	180	33	29	4	43	71	13,694	13,143	217	70
Maryland	74,628	7,634	1,624	416	75	5,144	375	66,921	38,069	24,152	73
Massachusetts	78,484	9,839	518	4,299	67	4,728	227	68,088	55,662	6,713	557
Michigan	129,776	7,827	6,390	410	70	513	444	118,411	91,117	22,240	3,538
Minnesota	70,624	5,336	4,024	120	28	776	388	64,297	53,344	5,569	991
Mississippi	42,827	1,108	725	28	12	87	256	41,682	22,419	18,491	37
Missouri	77,765	3,845	2,885	119	46	284	511	73,841	60,455	11,278	79
Montana	11,519	373	182	13	2	24	152	10,967	9,303	47	179
Nebraska	26,332	3,450	2,712	36	12	515	175	22,214	19,657	1,536	668
Nevada	35,200	13,054	10,855	274	197	1,252	476	21,782	15,994	2,807	364
New Hampshire	14,565	463	125	132	7	154	45	13,596	12,881	190	506
New Jersey	115,253	27,323	5,931	6,742	757	13,686	207	87,772	59,953	16,936	158
New Mexico	28,384	15,158	7,427	78	43	132	7,478	13,224	8,856	451	2
New York	249,947	56,834	10,748	14,328	499	26,799	4,460	192,439	128,426	42,437	674
North Carolina	119,847	17,295	13,078	744	135	3,173	165	102,457	70,256	27,430	95
North Dakota	8,189	167	103	9	3	15	37	7,791	6,633	91	231
Ohio	148,954	5,719	3,143	1,197	54	848	477	142,476	116,343	22,572	759
Oklahoma	51,306	6,007	5,519	129	19	276	64	45,140	34,201	4,628	159
Oregon	45,678	8,850	8,123	103	38	379	207	36,669	32,449	1,024	159
Pennsylvania	144,748	11,588	2,592	6,029	165	1,700	1,102	131,404	106,894	19,225	1,756
Rhode Island	12,779	2,430	178	680	12	1,460	100	8,584	6,933	1,010	1,765
South Carolina	56,590	4,335	3,032	250	35	672	346	52,176	32,811	18,311	79
South Dakota	11,338	395	252	16	6	83	38	10,933	8,862	140	10
Tennessee	79,642	5,838	4,128	219	37	807	647	73,681	56,330	15,741	123
Texas	381,293	188,214	167,648	1,131	312	10,392	8,731	192,026	136,303	41,664	1,053
Utah	50,670	7,179	5,347	92	24	745	971	43,209	40,702	390	282
Vermont	6,599	75	18	23	6	15	13	6,449	6,270	57	75
Virginia	103,933	11,690	3,327	691	92	6,812	768	92,104	62,988	22,280	139
Washington	81,747	14,255	11,723	309	57	624	1,542	65,143	53,500	3,108	2,349
West Virginia	20,880	151	73	10	5	31	32	20,685	19,831	669	44
Wisconsin	70,146	5,888	4,612	684	37	345	210	64,214	54,239	6,503	44
Wyoming	6,807	700	632	8	—	10	50	6,087	5,673	54	20
Puerto Rico	51,127	---	---	---	---	---	---	---	---	---	51,127
Virgin Islands	1,574	349	1	81	1	113	153	1,157	118	1,010	68
Guam	3,410	51	22	15	—	7	7	3,309	237	28	50
American Samoa	1,714	---	---	---	---	---	---	---	---	---	1,714
Northern Marianas	1,355	---	---	---	---	---	---	---	---	---	1,355

— Quantity zero.

--- Data not available.

¹Includes races other than white and black.²Excludes data for the territories.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data in 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race; see "Technical Notes."

Table 14. Total number of births, rates (birth, fertility, and total fertility), and percentage of births with selected demographic characteristics, by race of mother: United States, 2004

[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. Populations estimated as of July 1. Mean age at first birth is the arithmetic average of the age of mothers at the time of the birth, computed directly from the frequency of first births by age of mother]

Characteristic	All races	White	Black	American Indian or Alaska Native ¹	Asian or Pacific Islander
Number					
Births	4,112,052	3,222,928	616,074	43,927	229,123
Rate					
Birth rate	14.0	13.5	16.0	14.0	16.8
Fertility rate	66.3	66.1	67.6	58.9	67.1
Total fertility rate	2,045.5	2,054.5	2,032.5	1,734.5	1,897.5
Sex ratio ²	1,048	1,050	1,039	1,030	1,058
Percent					
All births					
Births to mothers under 20 years	10.3	9.3	17.1	17.9	3.4
4th- and higher-order births	11.0	10.4	15.1	19.5	6.4
Births to unmarried mothers	35.8	30.5	68.8	62.3	15.5
Mothers born in the 50 states and DC	75.8	78.0	84.4	94.7	17.3
Mean					
Age of mother at first birth	25.2	25.4	22.7	21.8	28.4

¹Includes births to Aleuts and Eskimos.

²Male live births per 1,000 female live births.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." In this table all women (including Hispanic women) are classified only according to their race; see "Technical Notes."

Table 15. Total number of births, rates (birth, fertility, and total fertility), and percentage of births with selected demographic characteristics, by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 2004

[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. Populations estimated as of July 1. Mean age at first birth is the arithmetic average of the age of mothers at the time of the birth, computed directly from the frequency of first births by age of mother]

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	4,112,052	946,349	677,621	61,221	14,943	143,520	49,044	3,133,125	2,296,683	578,772
Rate										
Birth rate ³	14.0	22.9	24.9	16.1	9.3	22.2	(3)	12.5	11.6	15.8
Fertility rate ³	66.3	97.8	106.8	68.4	53.2	89.3	(3)	60.5	58.4	67.0
Total fertility rate ³	2,045.5	2,824.5	3,021.0	2,056.5	1,732.5	2,648.0	(3)	1,891.0	1,847.0	2,020.0
Sex ratio ⁴	1,048	1,042	1,039	1,056	1,082	1,046	1,048	1,050	1,053	1,038
Percent										
All births										
Births to mothers under 20 years	10.3	14.3	15.3	17.6	7.8	8.4	16.2	9.1	7.4	17.3
4th- and higher-order births	11.0	14.0	15.1	12.4	5.1	10.8	11.9	10.1	8.9	15.3
Births to unmarried mothers.	35.8	46.4	45.2	61.0	33.2	47.6	46.6	32.5	24.5	69.3
Mothers born in the 50 states and DC	75.8	36.8	36.4	67.4	47.1	12.7	73.4	87.5	94.2	87.4
Mean										
Age of mother at first birth	25.2	23.1	22.5	22.8	26.8	25.2	23.3	25.8	26.2	22.7

¹Includes origin not stated.

²Includes races other than white and black.

³Rates for Central and South American include other and unknown Hispanic.

⁴Male live births per 1,000 female live births.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. 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." Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Table 16. Live births and observed and seasonally adjusted birth and fertility rates, by month: United States, 2004

[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. Monthly populations estimated as of the first of each month]

Month	Number	Observed		Seasonally adjusted ¹	
		Birth rate	Fertility rate	Birth rate	Fertility rate
Total	4,112,052	14.0	66.3	...	...
January	332,907	13.4	63.3	14.0	66.1
February	315,821	13.6	64.3	13.9	65.7
March	346,348	13.9	65.8	14.2	67.3
April	333,335	13.8	65.4	14.1	66.6
May	337,651	13.6	64.1	13.6	64.4
June	344,881	14.3	67.7	14.4	68.0
July	359,426	14.4	68.2	13.9	65.7
August	355,408	14.2	67.4	13.7	65.0
September	356,033	14.7	69.8	14.0	66.3
October	348,466	13.9	66.1	13.9	65.7
November	335,704	13.9	65.8	14.3	67.8
December	346,072	13.8	65.6	14.1	67.2

... Category not applicable.

¹The 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).

Table 17. Live births by day of week and index of occurrence by method of delivery: United States, 2004

Day of week and race of mother	Average number of births	Index of occurrence ¹				
		Total ²	Vaginal	Method of delivery		
				Cesarean		
				Total	Primary	Repeat
Total	11,235	100.0	100.0	100.0	100.0	100.0
Sunday	7,501	66.8	74.4	48.6	58.2	32.7
Monday	11,715	104.3	101.5	110.9	101.4	126.7
Tuesday	13,045	116.1	112.7	124.3	120.4	130.5
Wednesday	12,858	114.4	111.7	121.0	119.0	124.4
Thursday	12,638	112.5	110.4	117.4	115.9	119.8
Friday	12,345	109.9	106.0	119.3	114.3	127.6
Saturday	8,496	75.6	83.0	57.8	70.3	37.3

¹Index 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.

²Includes method of delivery not stated.

Table 18. Number, birth rate, and percentage of births to unmarried women by age, race, and Hispanic origin of mother: United States, 2004

Measure and age of mother	All races ¹	White		Black		American Indian or Alaska Native ^{2,3}	Asian or Pacific Islander ²	Hispanic ⁴
		Total ²	Non-Hispanic	Total ²	Non-Hispanic			
Number								
All ages	1,470,189	983,459	562,539	423,950	400,980	27,376	35,404	439,541
Under 15 years	6,603	3,573	1,425	2,811	2,715	136	83	2,254
15–19 years	342,188	230,758	131,620	98,828	93,940	6,854	5,748	103,258
15 years.	17,416	10,803	4,656	6,012	5,733	357	244	6,410
16 years.	38,310	25,050	11,728	11,721	11,140	863	676	13,884
17 years.	65,222	44,208	23,630	18,626	17,662	1,305	1,083	21,398
18 years.	96,935	66,077	38,798	27,349	25,950	1,904	1,605	28,398
19 years.	124,305	84,620	52,808	35,120	33,455	2,425	2,140	33,168
20–24 years	566,381	379,427	231,090	164,645	156,394	10,627	11,682	155,010
25–29 years	307,576	203,848	109,471	89,601	84,359	5,506	8,621	98,681
30–34 years	155,275	103,586	53,222	43,259	40,372	2,685	5,745	52,760
35–39 years	72,194	48,614	27,303	19,647	18,367	1,235	2,698	22,183
40 years and over	19,972	13,653	8,408	5,159	4,833	333	827	5,395
Rate per 1,000 unmarried women in specified group								
15–44 years ⁵	46.1	41.6	29.4	67.2	---	---	23.6	95.7
15–19 years	34.7	30.1	21.2	61.7	---	---	13.3	67.9
15–17 years	20.1	17.1	10.7	37.0	---	---	7.7	43.3
18–19 years	57.7	50.4	37.5	100.9	---	---	21.6	110.1
20–24 years	72.5	64.1	48.0	119.8	---	---	27.9	138.6
25–29 years	68.6	63.9	43.3	91.8	---	---	33.2	143.4
30–34 years	47.0	45.7	29.6	52.0	---	---	35.4	109.6
35–39 years	23.5	22.6	15.6	25.8	---	---	20.7	56.8
40–44 years ⁶	6.0	5.6	4.1	6.8	---	---	8.6	13.8
Percent of births to unmarried women								
All ages	35.8	30.5	24.5	68.8	69.3	62.3	15.5	46.4
Under 15 years	97.4	95.9	96.5	99.4	99.5	97.8	92.2	95.7
15–19 years	82.4	77.7	78.0	96.1	96.6	89.0	75.3	77.6
15 years.	95.3	93.1	94.9	99.6	99.7	97.0	92.8	92.0
16 years.	91.5	88.4	89.8	98.9	99.1	95.7	88.5	87.4
17 years.	88.3	84.7	86.7	98.2	98.5	93.5	83.2	82.8
18 years.	82.7	78.1	79.6	96.5	96.9	88.4	75.5	76.4
19 years.	75.8	70.3	70.6	93.4	94.0	84.1	67.3	70.3
20–24 years	54.8	48.1	44.7	82.2	82.9	70.2	38.1	55.4
25–29 years	27.8	23.1	17.3	60.6	61.1	51.4	13.3	38.8
30–34 years	16.1	13.3	8.8	43.7	43.6	41.4	7.2	29.7
35–39 years	15.2	12.6	9.0	39.3	39.1	41.2	7.2	27.4
40 years and over	18.2	15.6	12.1	39.5	39.3	44.1	9.9	29.9

---Data not available.

¹Includes races other than white and black and origin not stated.²Race and Hispanic origin are reported separately on the birth certificate. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see "Technical Notes." Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."³Includes births to Aleuts and Eskimos.⁴Includes all persons of Hispanic origin of any race.⁵Birth rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15–44 years.⁶Birth rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40–44 years.

NOTES: For the 48 states and the District of Columbia, marital status is reported in the birth registration process; for Michigan and New York, mother's marital status is inferred; see "Technical Notes." Rates cannot be computed for unmarried non-Hispanic black women or for American Indian women because the necessary populations are not available.

Table 19. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980–2004, and by age, race, and Hispanic origin of mother: United States, 1980–2004

[Rates are live births to unmarried women per 1,000 unmarried women. Populations estimated as of July 1 for all years]

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									
2004 ⁴	46.1	34.7	20.1	57.7	72.5	68.6	47.0	23.5	6.0
2003 ⁴	44.9	34.8	20.3	57.6	71.2	65.7	44.0	22.3	5.8
2002 ⁴	43.7	35.4	20.8	58.6	70.5	61.5	40.8	20.8	5.4
2001 ⁴	43.8	37.0	22.0	60.6	71.3	59.5	40.4	20.4	5.3
2000 ⁴	44.1	39.0	23.9	62.2	72.2	58.5	39.3	19.7	5.0
1999 ⁴	43.3	39.7	25.0	62.3	70.8	56.9	38.1	19.0	4.6
1998 ⁴	43.3	40.9	26.5	63.6	70.4	55.4	38.1	18.7	4.6
1997 ⁴	42.9	41.4	27.7	63.9	68.9	53.4	37.9	18.7	4.6
1996 ⁴	43.8	42.2	28.5	64.9	68.9	54.5	40.2	19.9	4.8
1995 ⁴	44.3	43.8	30.1	66.5	68.7	54.3	38.9	19.3	4.7
1994 ⁴	46.2	45.8	31.7	69.1	70.9	57.4	39.6	19.7	4.7
1993 ⁴	44.8	44.0	30.3	66.2	68.5	55.9	38.0	18.9	4.4
1992 ⁴	44.9	44.2	30.2	66.7	67.9	55.6	37.6	18.8	4.1
1991 ⁴	45.0	44.6	30.8	65.4	67.8	56.0	37.9	17.9	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									
2004 ⁴	41.6	30.1	17.1	50.4	64.1	63.9	45.7	22.6	5.6
2003 ⁴	40.4	30.1	17.2	50.4	63.0	60.8	42.0	21.2	5.5
2002 ⁴	38.9	30.4	17.5	51.0	61.6	56.8	38.3	19.4	5.0
2001 ⁴	38.5	31.3	18.1	52.1	61.8	54.6	37.2	18.6	4.9
2000 ⁴	38.2	32.7	19.7	53.1	61.7	52.9	35.9	17.9	4.5
1999 ⁴	37.4	33.2	20.6	52.9	60.2	50.8	34.9	17.4	4.1
1998 ⁴	36.9	33.6	21.5	53.1	59.5	48.6	34.1	16.9	4.1
1997 ⁴	36.3	33.6	22.0	52.9	57.9	47.0	33.6	16.6	3.9
1996 ⁴	37.0	34.0	22.3	53.5	57.9	48.1	35.4	17.7	4.3
1995 ⁴	37.0	35.0	23.3	54.7	57.2	47.4	33.7	16.8	4.2
1994 ⁴	37.8	35.8	23.9	55.8	57.5	48.6	33.8	17.2	4.3
1993 ⁴	35.6	33.3	21.9	52.0	53.8	46.0	31.9	16.3	3.9
1992 ⁴	35.0	32.7	21.4	51.2	52.4	44.8	31.3	16.1	3.6
1991 ⁴	34.5	32.7	21.7	49.4	51.4	44.3	30.9	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

See footnotes at end of table.

Table 19. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980–2004, and by age, race, and Hispanic origin of mother: United States, 1980–2004—Con.

[Rates are live births to unmarried women per 1,000 unmarried women. Populations estimated as of July 1 for all years]

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					
Non-Hispanic white									
2004 ⁴	29.4	21.2	10.7	37.5	48.0	43.3	29.6	15.6	4.1
2003 ⁴	28.6	21.5	11.0	37.9	47.2	40.8	27.8	14.7	4.1
2002 ⁴	27.8	22.1	11.5	38.8	46.1	38.5	26.0	13.5	3.7
2001 ⁴	27.8	23.1	12.1	40.3	46.4	37.5	25.4	13.2	3.6
2000 ⁴	28.0	24.7	13.6	42.1	47.0	36.9	24.8	12.9	3.3
1999 ⁴	27.9	25.6	14.6	42.7	46.3	36.2	24.8	13.0	3.1
1998 ⁴	27.9	26.2	15.5	43.1	46.3	35.4	25.0	13.1	3.1
1997 ⁴	27.5	26.4	16.2	43.3	44.8	34.4	24.9	12.7	2.9
1996 ⁴	28.2	27.0	16.9	43.9	44.5	35.0	26.4	13.8	3.3
1995 ⁴	28.1	27.7	17.6	44.6	43.9	34.4	25.1	12.9	3.2
1994 ⁴	28.4	28.1	17.9	45.0	43.8	34.7	24.6	12.8	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	---
Black total									
2004 ⁴	67.2	61.7	37.0	100.9	119.8	91.8	52.0	25.8	6.8
2003 ⁴	66.3	62.2	38.1	100.4	118.0	90.4	51.2	25.3	6.5
2002 ⁴	66.2	64.8	39.9	104.1	119.2	85.9	49.9	24.9	6.3
2001 ⁴	68.1	69.9	43.8	110.2	122.8	84.1	51.1	25.4	6.3
2000 ⁴	70.5	75.0	48.3	115.0	129.0	85.9	50.2	25.4	6.3
1999 ⁴	69.7	76.5	50.0	115.8	126.8	85.5	49.0	24.2	5.8
1998 ⁴	71.6	81.5	55.0	121.5	127.8	86.5	50.5	24.3	6.0
1997 ⁴	71.5	84.5	59.0	124.8	124.2	81.4	51.0	24.3	6.5
1996 ⁴	72.8	87.5	62.6	127.2	122.6	81.2	53.4	25.2	6.1
1995 ⁴	74.5	91.2	67.4	129.2	124.6	82.3	53.3	25.3	6.0
1994 ⁴	80.8	99.3	73.9	139.6	135.2	91.3	56.5	26.0	5.9
1993 ⁴	83.0	101.2	75.9	140.0	139.9	92.8	56.7	25.7	5.8
1992 ⁴	85.7	104.8	77.2	146.4	142.6	96.8	57.3	25.6	5.4
1991 ⁴	89.0	107.8	79.9	147.7	146.4	100.0	59.8	25.5	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
Asian or Pacific Islander total									
2004 ⁴	23.6	13.3	7.7	21.6	27.9	33.2	35.4	20.7	8.6
2003 ⁴	22.2	13.1	7.5	21.4	26.6	30.7	31.5	19.8	7.9
2002 ⁴	21.3	13.4	7.5	22.2	26.5	27.5	28.6	18.7	6.8
2001 ⁴	21.2	14.6	8.7	23.0	25.2	26.7	29.4	19.7	6.3
2000 ⁴	20.9	15.2	9.6	23.2	24.2	25.4	29.7	18.4	6.9

See footnotes at end of table.

Table 19. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980–2004, and by age, race, and Hispanic origin of mother: United States, 1980–2004—Con.

[Rates are live births to unmarried women per 1,000 unmarried women. Populations estimated as of July 1 for all years]

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					
Hispanic ⁹									
2004 ⁴	95.7	67.9	43.3	110.1	138.6	143.4	109.6	56.8	13.8
2003 ⁴	92.2	66.6	43.0	107.0	133.7	136.0	99.2	54.7	13.3
2002 ⁴	87.9	66.1	43.0	105.3	131.4	123.1	88.1	51.3	12.6
2001 ⁴	87.8	67.1	44.2	104.3	132.3	120.7	91.4	49.7	12.2
2000 ⁴	87.3	68.5	47.0	102.2	130.5	121.6	89.4	46.1	12.2
1999 ⁴	84.9	68.6	48.7	99.9	126.1	119.6	84.2	42.4	11.2
1998 ⁴	82.8	69.3	49.8	101.2	120.6	115.9	78.2	38.8	12.0
1997 ⁴	83.2	69.2	50.7	100.6	122.8	114.8	78.8	40.5	12.1
1996 ⁴	86.2	69.3	49.7	102.3	131.6	122.0	84.6	41.2	12.3
1995 ⁴	88.8	73.2	52.8	108.6	135.8	122.3	84.1	42.2	12.1
1994 ⁴	95.8	77.7	55.7	115.4	144.5	131.7	91.2	47.4	13.9
1993 ⁴	91.4	71.1	49.6	108.8	134.3	130.4	87.8	47.1	14.1
1992 ⁴	92.8	70.3	49.2	106.6	138.2	133.4	89.9	47.8	14.6
1991 ⁴	92.5	71.0	49.5	107.5	134.2	135.1	88.2	47.6	14.1
1990 ^{4,8}	89.6	65.9	45.9	98.9	129.8	131.7	88.1	50.8	13.7

--- Data not available.

¹Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15–44 years.²Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40–44 years.³Includes races other than white, black, and Asian or Pacific Islander.⁴Data for states in which marital status was not reported have been inferred and included with data from the remaining states; see "Technical Notes."⁵Based on 100 percent of births in selected states and on a 50 percent sample of births in all other states; see "Technical Notes."⁶Births 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."⁷Based on a 50 percent sample of births.⁸Rates for 1990 based on data for 48 states and the District of Columbia that reported Hispanic origin on the birth certificate. Rate shown for 1990 for ages 35–39 years are based on births to unmarried women aged 35–44 years.⁹Includes all persons of Hispanic origin of any race.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Persons of Hispanic origin may be of any race. Fifteen states reported multiple-race data for 2004. The multiple-race data are bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." Rates cannot be computed for unmarried non-Hispanic black women or for American Indian women because the necessary populations are not available.

Table 20. Number and percentage of births to unmarried women, by race and Hispanic origin of mother: United States, each state and territory, 2004

[By place of residence]

State	Births to unmarried women				Percent unmarried			
	All races ¹	Non-Hispanic		Hispanic ³	All races ¹	Non-Hispanic		Hispanic ³
		White ²	Black ²			White ²	Black ²	
United States ⁴	1,470,189	562,539	400,980	439,541	35.8	24.5	69.3	46.4
Alabama	21,566	7,858	12,692	843	36.2	21.1	70.6	25.1
Alaska	3,577	1,149	118	306	34.6	22.4	39.3	34.9
Arizona	39,525	9,969	1,726	22,387	42.2	25.2	61.2	54.0
Arkansas	14,978	7,607	5,652	1,486	38.8	28.4	77.0	42.4
California	187,582	33,345	19,298	122,528	34.4	20.5	63.3	44.5
Colorado	18,837	7,787	1,479	9,052	27.5	18.9	52.8	41.6
Connecticut	12,891	4,624	3,274	4,727	30.6	17.0	66.7	62.2
Delaware	4,811	1,797	2,030	885	42.3	27.9	71.2	58.1
District of Columbia	4,436	126	3,634	628	55.9	6.3	77.5	62.9
Florida	90,254	31,948	31,705	25,224	41.4	30.4	67.4	43.1
Georgia	54,362	15,495	28,702	9,099	39.2	22.6	66.5	45.2
Hawaii	6,098	1,021	137	1,196	33.4	23.6	28.4	44.6
Idaho	5,099	3,512	34	1,207	22.6	19.2	37.8	37.2
Illinois	65,560	21,600	23,821	19,383	36.3	22.1	77.5	45.4
Indiana	33,828	22,182	7,464	3,819	38.8	32.5	77.9	52.7
Iowa	11,913	9,219	1,064	1,259	31.0	28.1	72.9	44.4
Kansas	13,100	8,126	1,967	2,477	33.0	27.8	71.2	45.3
Kentucky	19,500	14,688	3,586	1,074	35.0	30.7	75.7	48.9
Louisiana	32,117	10,446	20,419	794	49.1	29.7	76.7	40.7
Maine	4,748	4,464	77	57	34.1	34.0	35.5	31.7
Maryland	26,652	8,088	14,397	3,736	35.7	21.2	59.6	48.9
Massachusetts	22,392	11,353	3,835	6,205	28.5	20.4	57.1	63.1
Michigan	46,280	24,242	16,455	3,579	35.7	26.6	74.0	45.7
Minnesota	20,488	11,970	3,213	2,754	29.0	22.4	57.7	51.6
Mississippi	20,705	5,714	14,177	519	48.3	25.5	76.7	46.8
Missouri	28,741	17,797	8,689	1,828	37.0	29.4	77.0	47.5
Montana	3,951	2,584	24	152	34.3	27.8	51.1	40.8
Nebraska	7,954	4,760	1,068	1,516	30.2	24.2	69.5	43.9
Nevada	13,978	4,690	1,932	6,234	39.7	29.3	68.8	47.8
New Hampshire	3,852	3,338	76	187	26.4	25.9	40.0	40.4
New Jersey	34,643	8,165	10,977	14,870	30.1	13.6	64.8	54.4
New Mexico	13,865	2,505	245	8,455	48.8	28.3	54.3	55.8
New York	94,380	26,527	28,542	35,001	37.8	20.7	67.3	61.6
North Carolina	44,178	15,464	18,670	8,671	36.9	22.0	68.1	50.1
North Dakota	2,449	1,521	24	59	29.9	22.9	26.4	35.3
Ohio	55,663	34,635	17,152	2,998	37.4	29.8	76.0	52.4
Oklahoma	19,714	10,713	3,318	2,768	38.4	31.3	71.7	46.1
Oregon	14,850	9,333	670	3,935	32.5	28.8	65.4	44.5
Pennsylvania	50,983	27,755	14,376	7,074	35.2	26.0	74.8	61.0
Rhode Island	4,763	1,869	647	1,474	37.3	27.0	64.1	60.7
South Carolina	23,725	8,166	13,407	1,900	41.9	24.9	73.2	43.8
South Dakota	3,977	2,254	59	185	35.1	25.4	42.1	46.8
Tennessee	30,419	15,505	11,704	2,851	38.2	27.5	74.4	48.8
Texas	137,432	32,197	26,746	76,581	36.0	23.6	64.2	40.7
Utah	8,843	5,110	178	2,907	17.5	12.6	45.6	40.5
Vermont	2,132	2,039	28	26	32.3	32.5	49.1	34.7
Virginia	32,203	12,582	13,913	5,142	31.0	20.0	62.4	44.0
Washington	24,818	13,737	1,715	6,293	30.4	25.7	55.2	44.1
West Virginia	7,272	6,661	513	52	34.8	33.6	76.7	34.4
Wisconsin	21,947	12,722	5,326	2,815	31.3	23.5	81.9	47.8
Wyoming	2,158	1,580	25	343	31.7	27.9	46.3	49.0
Puerto Rico	28,261	---	---	---	55.3	---	---	---
Virgin Islands	1,078	34	748	249	68.5	28.8	74.1	71.3
Guam	1,932	38	6	13	56.7	16.0	*	*
American Samoa	627	---	---	---	36.6	---	---	---
Northern Marianas	760	---	---	---	56.1	---	---	---

--- Data not available.

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

¹Includes races other than white and black and origin not stated.²Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."³Includes all persons of Hispanic origin of any race.⁴Excludes data for the territories.

Table 21. Birth rates by age and race of father: United States, 1980–2004

[Rates are live births per 1,000 men in specified group. Populations enumerated as of April 1 for 1980, 1990, and 2000, and estimated as of July 1 for all other years. Figures for age of father not stated are distributed]

Year and race of father	Age of father									
	15–54 years ¹	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 races³										
2004	48.8	17.0	72.4	104.9	102.5	61.7	23.9	7.7	2.4	0.3
2003	48.9	16.9	73.5	105.7	102.2	60.2	23.4	7.6	2.5	0.3
2002	48.4	17.4	75.6	105.0	99.1	57.7	22.6	7.4	2.4	0.3
2001	49.0	18.5	78.5	105.8	99.6	57.0	22.3	7.3	2.4	0.3
2000	50.0	19.8	82.1	106.5	99.5	56.3	22.2	7.3	2.5	0.3
1999	49.2	20.6	81.1	105.3	95.9	53.9	21.1	7.0	2.4	0.3
1998	49.6	21.3	82.3	104.4	94.4	53.1	21.0	7.1	2.5	0.3
1997	49.4	21.9	82.1	102.6	92.0	51.5	20.7	7.0	2.5	0.3
1996	50.2	22.7	83.4	102.8	91.3	51.1	20.5	6.9	2.5	0.3
1995	51.0	23.9	83.9	103.2	90.7	50.4	20.3	7.0	2.5	0.3
1994	52.4	24.6	85.6	105.3	91.1	50.5	20.3	7.2	2.6	0.3
1993	53.7	24.4	86.0	108.1	91.7	50.7	20.2	7.3	2.7	0.4
1992	55.3	24.4	87.1	111.1	93.0	51.1	20.4	7.3	2.7	0.4
1991	56.8	24.7	87.9	113.5	94.3	51.6	20.2	7.4	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										
2004	46.7	14.3	67.7	105.0	102.5	60.2	22.2	6.8	2.0	0.2
2003	47.1	14.3	69.2	106.1	102.8	58.9	21.9	6.7	2.1	0.3
2002	46.4	14.8	70.8	104.8	99.4	56.4	21.0	6.6	2.0	0.3
2001	46.9	15.5	73.1	105.4	99.9	55.7	20.8	6.5	2.0	0.3
2000	47.6	16.6	75.8	105.4	99.5	54.7	20.7	6.5	2.1	0.3
1999	46.9	17.3	74.7	104.1	96.2	52.7	19.8	6.3	2.1	0.3
1998	47.1	17.7	75.6	102.7	94.3	51.9	19.6	6.3	2.1	0.3
1997	46.8	18.0	75.3	100.9	91.7	50.2	19.3	6.2	2.1	0.3
1996	47.7	18.7	76.7	101.4	91.1	49.9	19.2	6.1	2.1	0.2
1995	48.4	19.4	77.0	101.7	90.4	49.1	19.1	6.2	2.1	0.2
1994	49.3	19.5	77.4	103.1	90.4	48.9	18.9	6.3	2.2	0.3
1993	50.3	18.9	77.2	105.5	90.7	48.9	18.7	6.4	2.2	0.2
1992	51.8	18.8	77.8	108.2	91.9	49.1	18.8	6.4	2.2	0.3
1991	53.1	19.0	78.4	110.2	92.8	49.6	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

See footnotes at end of table.

Table 21. Birth rates by age and race of father: United States, 1980–2004—Con.

[Rates are live births per 1,000 men in specified group. Populations enumerated as of April 1 for 1980, 1990, and 2000, and estimated as of July 1 for all other years. Figures for age of father not stated are distributed]

Year and race of father	Age of father									
	15–54 years ¹	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
Black										
2004	61.7	32.7	111.6	122.7	98.7	61.8	30.4	12.7	4.9	0.8
2003	61.0	32.5	111.9	122.3	96.2	59.9	29.6	12.4	4.9	0.9
2002	61.2	33.3	116.2	123.6	94.0	57.8	28.5	12.0	4.7	0.9
2001	63.3	36.5	124.5	125.9	95.6	57.1	28.2	11.8	4.7	1.0
2000	66.2	39.6	135.5	131.0	95.2	56.9	28.4	11.7	5.0	1.0
1999	65.4	41.0	133.8	129.6	91.6	54.3	26.5	11.2	4.9	1.0
1998	66.8	42.8	137.0	130.3	90.9	54.0	26.7	11.6	5.0	1.0
1997	66.7	45.1	136.3	126.3	88.8	52.6	26.1	11.4	5.2	1.0
1996	67.2	46.7	137.6	123.9	87.0	51.8	25.7	11.3	5.3	1.1
1995	69.1	49.9	139.2	123.9	87.7	52.0	25.7	11.9	5.4	1.1
1994	74.0	54.1	149.1	129.6	91.4	53.8	26.4	12.8	5.8	1.1
1993	77.6	56.2	152.7	134.2	94.0	56.3	27.7	13.4	6.3	1.3
1992	80.4	57.0	157.1	138.6	95.8	56.7	28.4	13.7	6.1	1.4
1991	83.0	57.8	158.5	142.0	99.2	58.5	29.4	14.1	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

¹Rates computed by relating total births, regardless of age of father, to men aged 15–54 years.

²Rates computed by relating births of fathers under 20 years of age to men aged 15–19 years.

³Includes races other than white and black.

⁴Based on 100 percent of births in selected states and on a 50 percent sample of births in all other states; see "Technical Notes."

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." 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 14 percent of births in 2004.

Table 22. Number of live births and percent distribution, by weight gain of mother during pregnancy, according to period of gestation, race, and Hispanic origin of mother: Total of 49 reporting states and the District of Columbia, 2004

Period of gestation ¹ and race and Hispanic origin of mother	All births	Weight gain during pregnancy								
		Less than 16 pounds	16–20 pounds	21–25 pounds	26–30 pounds	31–35 pounds	36–40 pounds	41–45 pounds	46 pounds or more	Not stated
All gestation periods ²		Number								
All races ³	3,567,209	437,198	356,676	446,736	575,542	452,771	416,190	232,651	440,616	208,829
Non-Hispanic white ⁴	2,133,967	218,604	186,930	262,509	353,304	295,225	271,462	157,324	296,047	92,562
Non-Hispanic black ⁴	548,294	96,550	63,632	65,193	77,981	54,996	54,031	29,595	66,105	40,211
Hispanic ⁵	671,148	99,009	83,467	89,779	107,002	74,356	66,645	33,663	59,802	57,425
Under 34 weeks										
All races ³	131,658	32,914	18,168	15,731	16,525	10,415	9,393	4,779	10,590	13,143
Non-Hispanic white ⁴	65,696	13,867	8,653	8,223	8,910	6,035	5,444	2,933	6,626	5,005
Non-Hispanic black ⁴	35,853	11,263	5,081	3,796	3,944	2,265	2,051	1,007	2,335	4,111
Hispanic ⁵	23,265	6,182	3,460	2,810	2,797	1,628	1,451	652	1,263	3,022
34–36 weeks										
All races ³	322,540	46,920	36,437	41,462	49,701	35,731	33,161	18,574	39,490	21,064
Non-Hispanic white ⁴	181,912	21,773	17,996	23,420	28,766	22,225	20,576	12,241	25,930	8,985
Non-Hispanic black ⁴	62,909	12,306	8,203	7,625	8,849	5,637	5,498	2,902	6,911	4,978
Hispanic ⁵	59,959	10,516	8,058	7,943	9,168	5,824	5,366	2,567	5,081	5,436
37–39 weeks										
All races ³	1,870,770	223,492	188,611	240,851	310,366	243,406	219,514	120,625	221,212	102,693
Non-Hispanic white ⁴	1,134,521	114,637	100,873	143,286	192,792	160,198	144,652	81,896	149,320	46,867
Non-Hispanic black ⁴	278,435	46,914	32,200	34,073	40,714	29,108	28,076	15,413	33,210	18,727
Hispanic ⁵	343,688	49,926	43,246	47,303	56,151	38,850	34,130	16,980	29,335	27,767
40 weeks and over										
All races ³	1,236,189	133,192	113,151	148,395	198,555	162,901	153,852	88,501	168,998	68,644
Non-Hispanic white ⁴	749,228	68,057	59,276	87,437	122,624	106,609	100,650	60,155	113,992	30,428
Non-Hispanic black ⁴	169,784	25,853	18,067	19,638	24,398	17,940	18,358	10,245	23,578	11,707
Hispanic ⁵	242,945	32,235	28,627	31,655	38,806	27,958	25,634	13,430	24,063	20,537
All gestation periods ²		Percent distribution								
All races ³	100.0	13.0	10.6	13.3	17.1	13.5	12.4	6.9	13.1	...
Non-Hispanic white ⁴	100.0	10.7	9.2	12.9	17.3	14.5	13.3	7.7	14.5	...
Non-Hispanic black ⁴	100.0	19.0	12.5	12.8	15.3	10.8	10.6	5.8	13.0	...
Hispanic ⁵	100.0	16.1	13.6	14.6	17.4	12.1	10.9	5.5	9.7	...
Under 34 weeks										
All races ³	100.0	27.8	15.3	13.3	13.9	8.8	7.9	4.0	8.9	...
Non-Hispanic white ⁴	100.0	22.8	14.3	13.5	14.7	9.9	9.0	4.8	10.9	...
Non-Hispanic black ⁴	100.0	35.5	16.0	12.0	12.4	7.1	6.5	3.2	7.4	...
Hispanic ⁵	100.0	30.5	17.1	13.9	13.8	8.0	7.2	3.2	6.2	...
34–36 weeks										
All races ³	100.0	15.6	12.1	13.8	16.5	11.9	11.0	6.2	13.1	...
Non-Hispanic white ⁴	100.0	12.6	10.4	13.5	16.6	12.9	11.9	7.1	15.0	...
Non-Hispanic black ⁴	100.0	21.2	14.2	13.2	15.3	9.7	9.5	5.0	11.9	...
Hispanic ⁵	100.0	19.3	14.8	14.6	16.8	10.7	9.8	4.7	9.3	...
37–39 weeks										
All races ³	100.0	12.6	10.7	13.6	17.6	13.8	12.4	6.8	12.5	...
Non-Hispanic white ⁴	100.0	10.5	9.3	13.2	17.7	14.7	13.3	7.5	13.7	...
Non-Hispanic black ⁴	100.0	18.1	12.4	13.1	15.7	11.2	10.8	5.9	12.8	...
Hispanic ⁵	100.0	15.8	13.7	15.0	17.8	12.3	10.8	5.4	9.3	...
40 weeks and over										
All races ³	100.0	11.4	9.7	12.7	17.0	14.0	13.2	7.6	14.5	...
Non-Hispanic white ⁴	100.0	9.5	8.2	12.2	17.1	14.8	14.0	8.4	15.9	...
Non-Hispanic black ⁴	100.0	16.4	11.4	12.4	15.4	11.3	11.6	6.5	14.9	...
Hispanic ⁵	100.0	14.5	12.9	14.2	17.4	12.6	11.5	6.0	10.8	...

... Category not applicable.

¹Expressed in completed weeks.²Includes births with period of gestation not stated.³Includes races other than white and black and origin not stated.⁴Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁵Includes 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. Percentage of births with selected medical or health characteristics, by race of mother: United States, 2004

Characteristic	All races	White	Black	American Indian or Alaska Native ¹	Asian or Pacific Islander
All births					
Mother					
Diabetes during pregnancy	3.6	3.4	3.4	5.6	5.8
Weight gain of less than 16 lb ²	13.0	11.9	18.8	17.5	10.1
CNM delivery ³	7.5	7.6	7.1	17.6	6.0
Cesarean delivery.	29.1	28.8	30.8	25.1	28.4
Infant					
Gestational age					
Very preterm ⁴	2.0	1.7	4.0	2.2	1.5
Preterm ⁵	12.5	11.6	17.7	13.7	10.5
Birthweight					
Very low birthweight ⁶	1.5	1.2	3.1	1.3	1.1
Low birthweight ⁷	8.1	7.1	13.4	7.5	7.9
4,000 grams or more ⁸	8.5	9.4	4.8	10.5	5.2
Twin birth ⁹	32.2	32.1	35.1	24.7	26.5
Triplet/+ birth ¹⁰	176.9	196.3	98.2	50.1	140.5

¹Includes births to Aleuts and Eskimos.²Excludes data for California, which did not report weight gain on the birth certificate.³Births delivered by certified nurse midwives.⁴Born prior to 32 completed weeks of gestation.⁵Born prior to 37 completed weeks of gestation.⁶Birthweight of less than 1,500 grams (3 lb 4 oz).⁷Birthweight of less than 2,500 grams (5 lb 8 oz).⁸Equivalent to 8 lb 14 oz.⁹Live births in twin deliveries per 1,000 live births.¹⁰Live births in triplet and other higher-order multiple deliveries per 100,000 live births.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes." In this table all women (including Hispanic women) are classified only according to their race; see "Technical Notes."

Table 24. Percentage of births with selected medical or health characteristics, by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 2004

Characteristic	All origins ¹	Origin of mother								
		Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ²	White	Black
All births										
Mother										
Diabetes during pregnancy	3.6	3.5	3.3	4.4	3.5	3.6	3.6	3.6	3.4	3.4
Weight gain of less than 16 lb ³	13.0	16.1	17.9	13.3	9.0	12.9	14.4	12.3	10.7	19.0
CNM delivery ⁴	7.5	9.0	8.7	10.1	4.2	9.5	11.7	7.0	7.0	6.9
Cesarean delivery	29.1	28.0	27.1	29.8	43.4	30.1	26.7	29.4	29.2	31.0
Infant										
Gestational age										
Very preterm ⁵	2.0	1.8	1.7	2.6	1.7	1.7	1.9	2.1	1.6	4.1
Preterm ⁶	12.5	12.0	11.8	14.0	12.8	11.7	12.6	12.6	11.5	17.9
Birthweight.										
Very low birthweight ⁷	1.5	1.2	1.1	2.0	1.3	1.2	1.3	1.6	1.2	3.1
Low birthweight ⁸	8.1	6.8	6.4	9.8	7.7	6.7	7.8	8.5	7.2	13.7
4,000 grams or more ⁹	8.5	7.9	8.1	6.4	8.2	7.8	6.7	8.7	10.0	4.6
Twin births ¹⁰	32.2	21.5	19.9	28.7	37.6	23.6	23.5	35.3	36.3	35.6
Triplet/+ births ¹¹	176.9	76.4	71.3	168.2	*	66.2	48.9	207.0	243.4	99.7

¹Includes origin not stated.²Includes races other than white and black.³Excludes data for California, which did not report weight gain on the birth certificate.⁴Births delivered by certified nurse midwives.⁵Born prior to 32 completed weeks of gestation.⁶Born prior to 37 completed weeks of gestation.⁷Birthweight of less than 1,500 grams (3 lb 4 oz).⁸Birthweight of less than 2,500 grams (5 lb 8 oz).⁹Equivalent to 8 lb 14 oz.¹⁰Live births in twin deliveries per 1,000 live births.¹¹Live births in triplet and other higher order multiple deliveries per 100,000 live births.

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. 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." Fifteen states reported multiple-race data for 2004. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

Table 25. Number and rate of live births to mothers with selected risk factors during pregnancy, obstetric procedures, characteristics of labor and delivery, and congenital anomalies, by age and race and Hispanic origin of mother: United States, 2004

[Rates are number of live births with specified risk factors complications, or procedures per 1,000 live births in specified group; congenital anomalies are per 100,000 live births]

Risk factor, characteristic, procedure, and anomaly	All births ¹	Factor reported	All ages	Under 20 years	20–24 years	25–29 years	30–34 years	35–39 years	40–54 years	Not stated ²
All Races³										
Risk factors in this pregnancy										
Diabetes	4,112,052	146,435	35.8	11.2	20.4	34.1	46.9	61.8	80.9	17,761
Hypertension, pregnancy-associated	4,112,052	155,246	37.9	41.4	37.2	37.4	36.1	38.7	48.8	17,761
Hypertension, chronic	4,112,052	39,380	9.6	3.5	5.7	8.7	11.8	17.4	26.7	17,761
Obstetric procedures/Characteristics of labor and/or delivery										
Induction of labor	4,112,052	870,019	212.0	212.6	218.4	219.8	207.7	194.0	186.6	8,181
Tocolysis	4,112,052	81,391	19.8	22.1	21.2	19.7	18.7	17.9	18.4	10,544
Meconium, moderate/heavy	4,112,052	198,250	48.3	54.8	49.7	47.5	46.2	46.3	47.8	11,576
Breech/Malpresentation	4,112,052	170,141	41.6	29.5	33.5	40.4	47.8	54.7	65.3	21,111
Precipitous labor	4,112,052	78,516	19.2	13.0	17.8	19.3	21.1	22.8	22.0	16,266
Congenital Anomalies ⁴										
Anencephaly	4,083,668	441	10.9	9.6	11.1	10.3	11.7	10.2	*	20,748
Meningomyelocele/Spina bifida	4,083,668	786	19.3	21.2	21.0	19.5	16.8	18.3	22.1	20,748
Omphalocele/Gastroschisis	4,083,668	1,116	27.5	72.4	37.0	20.7	13.3	13.2	21.2	20,748
Cleft lip/palate	4,083,668	3,156	77.7	80.6	88.0	74.9	71.4	73.9	69.1	20,748
Down syndrome	4,083,668	1,946	47.9	26.9	25.7	26.2	40.7	110.3	348.3	20,748
Non-Hispanic white⁵										
Risk factors in this pregnancy										
Diabetes	2,296,683	78,502	34.3	13.0	21.5	31.7	41.0	52.6	67.9	9,022
Hypertension, pregnancy-associated	2,296,683	99,142	43.3	48.3	44.8	44.5	40.2	40.6	49.4	9,022
Hypertension, chronic	2,296,683	22,666	9.9	3.7	6.1	9.1	11.5	15.5	22.2	9,022
Obstetric procedures/Characteristics of labor and/or delivery										
Induction of labor	2,296,683	582,296	254.0	278.9	274.7	265.8	239.7	219.4	208.8	4,608
Tocolysis	2,296,683	49,956	21.8	26.9	24.1	21.6	20.3	19.1	19.5	6,200
Meconium, moderate/heavy	2,296,683	97,370	42.5	46.3	42.7	41.5	42.0	42.7	44.7	6,635
Breech/Malpresentation	2,296,683	108,390	47.4	35.8	38.6	45.6	52.4	58.2	69.1	12,286
Precipitous labor	2,296,683	46,660	20.4	13.2	17.9	20.0	22.4	24.8	24.3	9,833
Congenital Anomalies ⁴										
Anencephaly	2,287,827	240	10.5	*	11.1	9.7	12.0	10.0	*	11,737
Meningomyelocele/Spina bifida	2,287,827	462	20.3	21.3	23.2	20.9	17.9	17.2	*	11,737
Omphalocele	2,287,827	619	27.2	98.4	39.5	20.9	11.2	12.6	*	11,737
Cleft lip/palate	2,287,827	2,076	91.2	115.6	116.2	85.7	77.5	77.3	75.7	11,737
Down syndrome	2,287,827	1,270	55.8	32.0	28.3	28.7	44.4	120.7	379.8	11,737
Non-Hispanic black⁵										
Risk factors in this pregnancy										
Diabetes	578,772	19,383	33.6	9.8	19.8	36.8	54.9	72.9	93.7	2,449
Hypertension, pregnancy-associated	578,772	24,347	42.2	44.7	38.4	40.4	43.9	50.2	59.1	2,449
Hypertension, chronic	578,772	10,657	18.5	5.2	9.5	17.9	30.3	48.1	69.1	2,449
Obstetric procedures/Characteristics of labor and/or delivery										
Induction of labor	578,772	107,405	185.8	192.9	187.4	186.4	183.2	171.2	174.2	835
Tocolysis	578,772	12,642	21.9	21.9	22.2	22.3	21.7	20.3	19.7	1,086
Meconium, moderate/heavy	578,772	36,659	63.5	66.4	60.7	63.1	65.4	65.5	64.8	1,345
Breech/Malpresentation	578,772	21,250	36.9	25.8	30.9	37.8	46.4	55.5	64.9	2,730
Precipitous labor	578,772	11,747	20.4	15.1	20.5	22.1	22.0	22.9	19.7	1,818

See footnotes at end of table.

Table 25. Number and rate of live births to mothers with selected risk factors during pregnancy, obstetric procedures, characteristics of labor and delivery, and congenital anomalies, by age and race and Hispanic origin of mother: United States, 2004—Con.

[Rates are number of live births with specified risk factors complications, or procedures per 1,000 live births in specified group; congenital anomalies are per 100,000 live births]

Risk factor, characteristic, procedure, and anomaly	All births ¹	Factor reported	All ages	Under 20 years	20–24 years	25–29 years	30–34 years	35–39 years	40–54 years	Not stated ²
Congenital Anomalies⁴										
Anencephaly	578,321	62	10.8	*	*	*	*	*	*	2,723
Meningomyelocele/Spina bifida	578,321	105	18.2	*	17.6	21.1	*	*	*	2,723
Omphalocele	578,321	206	35.8	43.2	34.1	34.2	33.7	*	*	2,723
Cleft lip/palate	578,321	245	42.6	46.2	34.6	44.4	45.6	47.1	*	2,723
Down syndrome	578,321	158	27.4	*	14.4	14.6	27.1	62.2	335.7	2,723
Hispanic⁶										
Risk factors in this pregnancy										
Diabetes	946,349	32,521	34.5	9.3	17.7	33.7	54.2	77.4	108.3	4,074
Hypertension, pregnancy-associated	946,349	24,268	25.8	30.5	23.7	23.1	25.5	30.5	42.2	4,074
Hypertension, chronic	946,349	4,192	4.4	2.0	2.6	3.8	5.9	10.1	19.9	4,074
Obstetric procedures/Characteristics of labor and/or delivery										
Induction of labor	946,349	135,181	143.0	148.8	144.5	141.6	140.9	138.5	138.8	1,175
Tocolysis	946,349	14,176	15.0	16.2	15.6	14.8	14.0	14.1	14.5	1,523
Meconium, moderate/heavy	946,349	50,081	53.0	56.5	55.1	52.7	49.7	49.0	48.7	1,635
Breech/Malpresentation	946,349	29,536	31.3	24.5	26.3	30.6	37.0	45.0	54.8	3,611
Precipitous labor	946,349	14,200	15.0	10.6	15.0	16.2	16.5	15.6	15.5	2,360
Congenital Anomalies⁴										
Anencephaly	931,191	103	11.1	*	12.1	11.2	*	*	*	3,163
Meningomyelocele/Spina bifida	931,191	183	19.7	25.8	20.8	16.0	17.7	*	*	3,163
Omphalocele	931,191	230	24.8	55.3	32.9	16.0	13.1	*	*	3,163
Cleft lip/palate	931,191	603	65.0	58.3	68.0	65.2	60.6	80.2	*	3,163
Down syndrome	931,191	405	43.6	25.0	29.2	28.0	41.1	117.8	315.0	3,163

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

¹Total number of births to residents of areas reporting specified obstetric procedures.²No response reported for specific item.³Includes races not shown.⁴Excludes data for New Mexico, which did not report congenital anomalies.⁵Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁶Includes all persons of Hispanic origin of any race.

Table 26(a). Percentage of mothers beginning prenatal care in the first trimester and percentage of mothers with late or no prenatal care, by race and Hispanic origin of mother: Idaho, Kentucky, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington, 2004

State	Percent beginning care in first trimester				Percent late or no care			
	All races ²	Non-Hispanic		Hispanic ⁴	All races ²	Non-Hispanic		Hispanic ⁴
		White ³	Black ³			White ³	Black ³	
Total of reporting area	72.9	78.0	58.9	56.5	6.2	4.5	11.4	11.0
Idaho	71.6	74.9	70.6	55.6	5.7	4.5	*	11.0
Kentucky	74.5	76.0	68.6	56.4	5.4	4.8	8.9	11.0
New York (excluding New York City).	77.2	82.3	61.3	61.0	4.4	3.1	9.6	7.3
Pennsylvania	73.2	78.4	55.9	56.4	6.7	5.1	12.7	10.8
South Carolina	68.0	75.5	60.1	46.8	7.5	5.0	10.0	15.6
Tennessee	69.8	76.8	54.2	40.8	8.2	5.1	14.5	23.8
Washington	71.4	75.1	66.0	61.0	6.1	4.8	8.8	8.9

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

¹Care beginning in third trimester.

²Includes races other than white and black and origin not stated.

³Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. All of the states shown in this table reported multiple-race data for 2004. These multiple-race data were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."

⁴Includes all persons of Hispanic origin of any race.

NOTE: Excludes data for Florida and New Hampshire, which implemented the 2003 Revision of the U.S. Certificate of Live Birth after January 1, 2004. Also excludes the 41 states, New York City, and the District of Columbia for which data are based on the 1989 Revision of the U.S. Certificate of Live Birth; see "Technical Notes." Prenatal care data based on the 1989 Revision of the U.S. Certificate of Live Birth are not comparable with those based on the 2003 Revision of the U.S. Certificate of Live Birth.

Table 26(b). Percentage of mothers beginning prenatal care in the first trimester and percentage of mothers with late or no prenatal care, by race and Hispanic origin of mother: 41 states, New York City, and the District of Columbia, 2004

[By place of residence]

State	Percent beginning care in first trimester				Percent late ¹ or no care			
	All races ²	Non-Hispanic		Hispanic ⁴	All races ²	Non-Hispanic		Hispanic ⁴
		White ³	Black ³			White ³	Black ³	
Total of reporting areas ⁵	83.9	88.9	76.5	77.5	3.6	2.2	5.7	5.4
Alabama	84.0	90.1	77.2	53.4	3.7	1.7	4.5	21.2
Alaska	80.7	85.4	85.2	78.1	4.5	3.5	*	5.7
Arizona	76.3	87.2	77.8	67.1	7.5	3.1	6.9	11.1
Arkansas	82.3	85.4	76.1	71.7	4.4	3.2	6.9	8.3
California	87.1	90.7	83.5	85.0	2.6	1.9	3.5	3.1
Colorado	80.2	86.2	72.0	69.7	4.5	2.8	6.8	7.3
Connecticut	87.2	92.3	77.4	75.6	1.9	1.2	4.5	3.1
Delaware	85.1	90.0	81.7	69.5	3.6	2.0	4.3	9.9
District of Columbia	77.8	91.8	72.8	68.6	6.0	2.2	8.0	5.9
Georgia	83.9	90.3	79.4	70.6	4.0	2.3	5.0	8.6
Hawaii	81.8	85.2	87.4	80.2	3.7	3.0	*	3.0
Illinois	85.5	90.8	74.2	80.3	2.7	1.5	6.3	3.1
Indiana	80.8	84.3	68.5	62.6	4.0	2.9	7.6	8.9
Iowa	88.4	90.0	76.3	76.6	2.2	1.9	5.3	4.4
Kansas	86.5	89.8	78.3	72.7	2.6	1.8	4.8	5.8
Louisiana	85.5	91.5	77.4	84.3	2.9	1.4	5.0	3.1
Maine	88.5	88.9	80.2	77.8	1.6	1.6	*	*
Maryland	82.3	90.2	74.7	64.1	3.9	1.9	6.4	7.2
Massachusetts	89.6	92.2	80.4	82.3	2.2	1.5	5.5	3.6
Michigan	85.9	89.8	71.9	78.6	3.0	2.0	7.1	4.4
Minnesota	86.3	90.4	74.0	69.9	2.3	1.4	5.2	5.2
Mississippi	84.4	90.6	77.6	77.6	2.7	1.4	4.0	7.4
Missouri	88.2	90.2	80.4	80.0	2.3	1.8	4.8	3.3
Montana	83.2	86.4	93.6	80.2	2.9	1.9	*	*
Nebraska	82.9	86.0	72.5	70.9	3.3	2.5	5.8	6.5
Nevada	75.0	83.8	68.8	64.6	7.3	4.3	10.6	10.5
New Jersey	79.1	88.4	63.3	66.5	4.7	2.3	10.6	6.9
New Mexico	69.4	76.5	66.9	67.6	8.3	5.5	7.1	9.1
New York City	79.9	88.3	74.1	78.1	4.9	2.1	7.6	5.4
North Carolina	84.0	90.4	76.5	69.9	2.9	1.5	4.7	5.6
North Dakota	85.7	88.7	81.1	78.8	2.8	1.9	*	*
Ohio	87.8	89.9	78.6	79.0	2.4	1.9	4.9	4.2
Oklahoma	78.1	82.3	72.2	64.6	4.7	3.7	6.4	7.2
Oregon	80.5	84.0	73.6	69.3	4.1	3.3	6.8	6.2
Rhode Island	90.0	92.5	82.4	87.5	1.5	1.0	3.3	2.1
South Dakota	77.9	83.4	63.6	63.2	4.0	1.9	*	9.6
Texas	81.8	88.2	78.4	77.3	4.5	2.6	5.3	5.9
Utah	80.0	83.7	60.5	64.6	4.5	3.4	17.3	8.5
Vermont	90.0	90.4	71.7	76.8	1.5	1.4	*	*
Virginia	85.6	90.5	79.0	71.8	3.4	1.9	5.0	7.3
West Virginia	86.0	86.4	76.2	77.2	2.1	2.0	5.3	*
Wisconsin	85.3	88.7	76.9	72.0	2.9	2.3	5.1	5.1
Wyoming	85.2	87.0	83.3	79.3	3.1	2.6	*	4.2
Puerto Rico	83.4	---	---	---	2.4	---	---	---
Virgin Islands	64.0	77.1	62.6	60.7	9.1	*	8.0	13.8
Guam	60.4	86.0	74.1	74.5	13.5	*	*	*
American Samoa	---	---	---	---	---	---	---	---
Northern Marianas	33.3	---	---	---	27.6	---	---	---

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

--- Data not available.

¹Care beginning in 3d trimester.²Includes races other than white and black and origin not stated.³Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004; six of these states are shown in this table. The multiple-race data for these states are bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁴Includes all persons of Hispanic origin of any race.⁵Excludes data for the territories.

NOTE: Excludes data for Florida, Idaho, Kentucky, New Hampshire, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington, which implemented the 2003 Revision of the U.S. Certificate of Live Birth; see "Technical Notes." Prenatal care data based on the 2003 Revision of the U.S. Certificate of Live Birth are not comparable with those based on the 1989 Revision of the U.S. Certificate of Live Birth.

Table 27. Number of live births by attendant, place of delivery, and race and Hispanic origin of mother: United States, 2004

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	4,112,052	3,757,438	3,571,457	185,981	325,899	308,113	17,786	19,711	9,004
In hospital ²	4,075,709	3,753,571	3,568,141	185,430	302,856	298,603	4,253	10,868	8,414
Not in hospital	35,578	3,669	3,127	542	22,662	9,483	13,179	8,681	566
Freestanding birthing center	9,620	867	584	283	8,567	5,645	2,922	176	10
Clinic or doctor's office	469	245	231	14	129	74	55	94	1
Residence.	23,150	1,972	1,752	220	13,571	3,591	9,980	7,213	394
Other	2,339	585	560	25	395	173	222	1,198	161
Not specified	765	198	189	9	381	27	354	162	24
Non-Hispanic white ³									
Total	2,296,683	2,104,840	1,981,228	123,612	174,145	160,027	14,118	11,521	6,177
In hospital ²	2,268,513	2,102,336	1,979,223	123,113	154,712	152,196	2,516	5,536	5,929
Not in hospital	27,525	2,352	1,862	490	19,069	7,811	11,258	5,861	243
Freestanding birthing center	7,625	831	549	282	6,642	4,501	2,141	143	9
Clinic or doctor's office	326	182	174	8	91	52	39	53	—
Residence.	18,286	1,112	924	188	12,019	3,145	8,874	4,960	195
Other	1,288	227	215	12	317	113	204	705	39
Not specified	645	152	143	9	364	20	344	124	5
Non-Hispanic black ³									
Total	578,772	534,069	516,143	17,926	40,615	39,809	806	2,603	1,485
In hospital ²	576,122	533,330	515,426	17,904	39,969	39,401	568	1,470	1,353
Not in hospital	2,594	715	693	22	636	402	234	1,112	131
Freestanding birthing center	378	8	8	—	361	251	110	8	1
Clinic or doctor's office	20	14	13	1	6	4	2	—	—
Residence.	1,737	497	484	13	246	127	119	915	79
Other	459	196	188	8	23	20	3	189	51
Not specified	56	24	24	—	10	6	4	21	1
Hispanic ⁴									
Total	946,349	854,335	819,370	34,965	87,136	85,030	2,106	4,102	776
In hospital ²	942,741	853,956	819,013	34,943	85,051	84,188	863	3,060	674
Not in hospital	3,589	373	351	22	2,083	842	1,241	1,032	101
Freestanding birthing center	1,314	24	23	1	1,273	673	600	17	—
Clinic or doctor's office	46	18	15	3	19	9	10	9	—
Residence.	1,827	220	206	14	756	133	623	785	66
Other	402	111	107	4	35	27	8	221	35
Not specified	19	6	6	—	2	—	2	10	1

— Quantity zero.

¹Includes races other than white and black and origin not stated.²Includes births occurring en route to or on arrival at hospital.³Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁴Includes all persons of Hispanic origin of any race.

Table 28. 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, 1989–2004

Year and race and Hispanic origin of mother	Births by method of delivery							Cesarean delivery rate		Rate of vaginal birth after previous cesarean ⁵
	All births	Vaginal		Cesarean			Not stated	Total ³	Primary ⁴	
		Total ¹	After previous cesarean	Total ²	Primary	Repeat				
All races ⁶										
2004	4,112,052	2,903,341	45,838	1,190,210	740,296	449,846	18,501	29.1	20.6	9.2
2003	4,089,950	2,949,853	51,602	1,119,388	684,484	434,699	20,709	27.5	19.1	10.6
2002	4,021,726	2,958,423	59,248	1,043,846	634,426	409,420	19,457	26.1	18.0	12.6
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 ⁷	4,110,563	3,111,421	84,299	914,096	575,066	339,030	85,046	22.7	16.0	19.9
1989 ⁸	3,798,734	2,793,463	71,019	826,955	521,873	305,082	178,316	22.8	16.1	18.9
Non-Hispanic white ⁹										
2004	2,296,683	1,617,994	24,776	667,836	425,558	242,226	10,853	29.2	21.1	9.3
2003	2,321,904	1,671,414	28,751	637,482	398,368	238,990	13,008	27.6	19.5	10.7
2002	2,298,156	1,687,144	33,440	598,682	370,339	228,343	12,330	26.2	18.3	12.8
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 ¹⁰	2,527,207	1,916,414	63,828	566,788	352,470	214,318	44,005	22.8	16.0	22.9
1991 ¹⁰	2,589,878	1,941,726	60,174	587,802	368,721	219,081	60,350	23.2	16.4	21.5
1990 ^{7,11}	2,626,500	1,972,754	55,952	603,467	378,508	224,959	50,279	23.4	16.5	19.9
1989 ^{8,12}	2,526,367	1,806,753	47,559	556,585	349,858	206,727	163,029	23.6	16.6	18.7
Non-Hispanic black ⁹										
2004	578,772	397,877	7,308	178,461	113,202	65,248	2,434	31.0	22.5	10.1
2003	576,033	405,671	8,109	167,506	103,694	63,802	2,856	29.2	20.7	11.3
2002	578,335	416,516	9,317	159,297	98,245	61,052	2,522	27.7	19.4	13.2
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 ¹⁰	657,450	502,669	14,950	143,153	91,086	52,067	11,628	22.2	15.7	22.3
1991 ¹⁰	666,758	507,522	13,847	142,417	90,664	51,753	16,819	21.9	15.5	21.1
1990 ^{7,11}	661,701	503,720	13,157	142,838	91,175	51,663	15,143	22.1	15.7	20.3
1989 ^{8,12}	611,269	440,310	10,726	125,290	81,177	44,113	45,669	22.2	15.9	19.6

See footnotes at end of table.

Table 28. 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, 1989–2004—Con.

Year and race and Hispanic origin of mother	Births by method of delivery							Cesarean delivery rate		Rate of vaginal birth after previous cesarean ⁵
	All births	Vaginal		Cesarean			Not stated	Total ³	Primary ⁴	
		Total ¹	After previous cesarean	Total ²	Primary	Repeat				
Hispanic ¹³										
2004	946,349	679,118	10,418	263,454	148,667	114,785	3,777	28.0	18.2	8.3
2003	912,329	667,656	11,153	241,159	134,231	106,912	3,514	26.5	17.0	9.4
2002	876,642	653,516	12,610	219,777	122,603	97,174	3,349	25.2	16.1	11.5
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 ¹⁰	643,271	494,338	13,111	133,369	81,211	52,158	15,564	21.2	14.4	20.1
1991 ¹⁰	623,085	472,126	11,615	129,752	80,228	49,524	21,207	21.6	14.8	19.0
1990 ^{7,11}	595,073	458,242	10,395	122,969	76,027	46,942	13,862	21.2	14.5	18.1
1989 ^{8,12}	532,249	385,462	8,549	105,268	64,905	40,363	41,519	21.5	14.7	17.5

¹For 2003 and 2004 includes unknown type of vaginal delivery; see "Technical Notes."²For 2003 and 2004 includes unknown type of cesarean delivery; see "Technical Notes."³Percent of all live births by cesarean delivery.⁴Number of primary cesareans per 100 live births to women who have not had a previous cesarean.⁵Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.⁶Includes races other than white and black and origin not stated.⁷Excludes data for Oklahoma, which did not report method of delivery on the birth certificate.⁸Excludes data for Louisiana, Maryland, Nebraska, Nevada, and Oklahoma, which did not report method of delivery on the birth certificate.⁹Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."¹⁰Excludes data for New Hampshire, which did not report Hispanic origin.¹¹Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.¹²Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.¹³Includes all persons of Hispanic origin of any race.

Table 29. 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, 2004

Age and race and Hispanic origin of mother	Births by method of delivery							Cesarean delivery rate		Rate of vaginal birth after previous cesarean ⁵
	All births	Vaginal		Cesarean			Not stated	Total ³	Primary ⁴	
		Total ¹	After previous cesarean	Total ²	Primary	Repeat				
All races ⁶	4,112,052	2,903,341	45,838	1,190,210	740,316	449,846	18,501	29.1	20.6	9.2
Under 20 years	422,043	334,480	1,016	86,042	75,344	10,689	1,521	20.5	18.4	8.7
20–24 years	1,034,454	780,452	7,894	249,867	167,633	82,216	4,135	24.3	17.8	8.8
25–29 years	1,104,485	793,450	12,707	306,069	188,096	117,964	4,966	27.8	19.4	9.7
30–34 years	965,663	643,434	13,896	317,542	181,453	136,082	4,687	33.0	22.4	9.3
35–39 years	475,606	290,945	8,393	182,160	99,409	82,747	2,501	38.5	26.0	9.2
40–54 years	109,801	60,580	1,932	48,530	28,381	20,148	691	44.5	32.6	8.8
Non-Hispanic white ⁷	2,296,683	1,617,994	24,776	667,836	425,576	242,226	10,853	29.2	21.1	9.3
Under 20 years	170,272	134,749	265	34,839	31,316	3,518	684	20.5	18.9	7.0
20–24 years	517,148	391,486	3,134	123,470	86,377	37,079	2,192	24.0	18.2	7.8
25–29 years	631,726	457,120	6,252	171,666	111,704	59,956	2,940	27.3	19.9	9.4
30–34 years	604,040	406,347	8,343	194,671	115,033	79,633	3,022	32.4	22.4	9.5
35–39 years	304,085	189,135	5,474	113,346	63,212	50,131	1,604	37.5	25.6	9.8
40–54 years	69,412	39,157	1,308	29,844	17,934	11,909	411	43.3	32.2	9.9
Non-Hispanic black ⁷	578,772	397,877	7,308	178,461	113,202	65,248	2,434	31.0	22.5	10.1
Under 20 years	100,019	77,119	340	22,568	19,620	2,944	332	22.6	20.4	10.4
20–24 years	188,761	136,355	1,898	51,703	33,736	17,963	703	27.5	20.1	9.6
25–29 years	138,093	94,209	2,257	43,261	25,140	18,118	623	31.5	21.5	11.1
30–34 years	92,646	57,656	1,625	34,546	19,702	14,844	444	37.5	26.0	9.9
35–39 years	46,945	26,300	977	20,387	11,451	8,936	258	43.7	31.1	9.9
40–54 years	12,308	6,238	211	5,996	3,553	2,443	74	49.0	37.1	8.0
Hispanic ⁸	946,349	679,118	10,418	263,454	148,667	114,785	3,777	28.0	18.2	8.3
Under 20 years	135,400	109,043	369	25,922	22,009	3,913	435	19.2	16.8	8.6
20–24 years	279,746	213,943	2,478	64,797	40,437	24,360	1,006	23.2	16.1	9.2
25–29 years	254,358	182,305	3,356	71,011	36,893	34,118	1,042	28.0	17.1	9.0
30–34 years	177,762	116,054	2,708	60,909	29,338	31,570	799	34.4	20.6	7.9
35–39 years	81,021	48,091	1,249	32,545	15,708	16,836	385	40.4	25.1	6.9
40–54 years	18,062	9,682	258	8,270	4,282	3,988	110	46.1	31.2	6.1

¹Includes unknown type of vaginal delivery; see "Technical Notes."²Includes unknown type of cesarean delivery; see "Technical Notes."³Percent of all live births by cesarean delivery.⁴Number of primary cesareans per 100 live births to women who have not had a previous cesarean.⁵Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.⁶Includes races other than white and black and origin not stated.⁷Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁸Includes all persons of Hispanic origin of any race.

Table 30. Rates of cesarean delivery and vaginal birth after previous cesarean delivery, by race and Hispanic origin of mother: United States, each state and territory, 2004

[By place of residence]

State	Cesarean delivery rate ¹				Rate of vaginal births after previous cesarean ²			
	All races ³	Non-Hispanic		Hispanic ⁵	All races ³	Non-Hispanic		Hispanic ⁵
		White ⁴	Black ⁴			White ⁴	Black ⁴	
United States ⁶	29.1	29.2	31.0	28.0	9.2	9.3	10.1	8.3
Alabama	31.3	31.8	31.9	24.2	5.8	5.8	5.2	8.5
Alaska	20.9	23.2	24.7	21.9	19.2	12.8	*	*
Arizona	23.3	25.5	26.2	21.6	7.4	7.2	*	6.0
Arkansas	31.0	31.4	33.2	24.9	8.3	6.8	7.9	18.4
California	29.3	29.9	33.5	28.6	5.4	5.8	5.7	5.0
Colorado	23.8	24.7	25.0	21.9	13.0	12.1	16.0	13.6
Connecticut	30.1	30.8	31.8	27.1	9.8	9.2	10.8	10.4
Delaware	30.3	31.0	31.3	26.1	11.3	10.4	10.6	14.5
District of Columbia	30.2	31.5	30.9	25.1	7.0	*	7.3	*
Florida	33.2	32.0	32.9	35.7	7.2	7.3	8.9	5.6
Georgia	29.2	30.0	30.5	23.5	7.1	6.6	6.4	9.5
Hawaii	24.2	23.5	23.4	24.7	13.5	14.4	*	10.1
Idaho	22.2	21.9	27.8	23.3	18.7	18.1	*	20.8
Illinois	27.5	28.4	27.8	25.0	11.3	10.6	11.5	12.1
Indiana	27.0	26.9	28.6	25.9	8.2	7.9	8.5	10.2
Iowa	26.3	26.3	27.4	26.7	9.9	9.7	11.1	10.1
Kansas	28.1	28.4	30.3	25.4	7.1	7.1	*	7.4
Kentucky	32.1	32.4	30.3	28.2	9.1	8.4	13.4	15.9
Louisiana	32.2	33.1	31.0	33.4	4.2	2.9	5.9	*
Maine	27.7	27.6	24.0	31.8	6.4	6.5	*	*
Maryland	30.4	29.9	32.8	25.8	12.1	11.8	11.9	13.0
Massachusetts	30.9	31.8	32.2	26.7	11.0	9.9	12.0	14.4
Michigan	27.9	28.0	28.2	25.9	9.5	9.3	9.5	11.7
Minnesota	24.3	25.2	25.0	22.0	11.6	9.6	20.4	17.6
Mississippi	33.1	34.0	32.7	24.6	5.2	4.2	5.8	*
Missouri	28.9	29.2	28.3	25.5	10.1	9.5	11.7	12.3
Montana	25.6	24.6	*	30.9	11.8	13.3	*	*
Nebraska	29.1	30.0	26.5	26.0	7.8	7.1	11.8	10.2
Nevada	29.4	31.4	33.6	25.3	6.3	5.2	5.1	8.4
New Hampshire	27.0	27.2	27.5	29.1	11.2	11.3	*	*
New Jersey	34.9	35.4	35.6	33.7	11.4	10.8	16.3	9.8
New Mexico	21.3	23.0	23.8	21.4	15.8	14.0	*	14.5
New York	30.5	31.2	31.9	29.4	14.5	14.3	15.2	14.3
North Carolina	28.4	29.3	30.1	22.4	9.9	8.2	10.5	15.1
North Dakota	25.2	25.0	26.7	27.4	11.3	11.6	*	*
Ohio	26.9	26.8	27.5	26.3	11.5	10.8	14.8	11.2
Oklahoma	30.9	31.4	32.2	27.2	5.1	4.8	4.4	6.6
Oregon	26.5	26.7	32.2	24.9	11.2	9.4	*	16.5
Pennsylvania	27.6	27.9	27.5	25.7	17.7	16.3	24.2	17.8
Rhode Island	28.8	31.1	26.8	25.8	11.6	10.2	19.0	14.0
South Carolina	31.5	31.8	32.2	27.0	11.5	9.4	13.0	16.9
South Dakota	25.5	25.7	25.4	22.3	15.0	15.3	*	*
Tennessee	30.2	31.0	29.3	25.5	12.5	10.5	18.4	15.0
Texas	31.4	32.6	34.4	29.9	5.8	4.8	5.0	6.5
Utah	20.4	19.7	20.9	23.9	19.2	19.1	*	19.7
Vermont	24.1	24.1	*	*	18.3	17.8	*	*
Virginia	30.3	30.2	31.1	27.3	7.8	7.6	8.9	7.2
Washington	27.3	27.2	32.9	25.7	14.4	13.8	13.2	16.9
West Virginia	33.3	33.3	32.6	31.1	6.3	6.4	*	*
Wisconsin	22.7	23.3	20.5	21.3	13.7	13.2	17.0	13.7
Wyoming	24.4	23.7	*	28.4	8.8	9.3	*	*

See footnotes at end of table.

Table 30. Rates of cesarean delivery and vaginal birth after previous cesarean delivery, by race and Hispanic origin of mother: United States, each state and territory, 2004—Con.

[By place of residence]

State	Cesarean delivery rate ¹				Rate of vaginal births after previous cesarean ²			
	All races ³	Non-Hispanic		Hispanic ⁵	All races ³	Non-Hispanic		Hispanic ⁵
		White ⁴	Black ⁴			White ⁴	Black ⁴	
Puerto Rico	47.7	*	---	*	---	---	*	*
Virgin Islands	25.1	29.1	24.2	26.7	22.6	*	22.0	*
Guam	27.0	25.1	*	*	12.1	*	*	*
American Samoa	---	---	---	---	---	---	---	---
Northern Marianas	21.1	*	---	*	---	---	*	*

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

--- Data not available.

¹Percent of all live births by cesarean delivery.²Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.³Includes races other than white and black and origin not stated.⁴Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁵Includes all persons of Hispanic origin of any race.⁶Excludes data for the territories.

NOTE: Data for states which implemented the 2003 Revision of the U.S. Standard Certificate of Live Birth in 2003 or 2004 show higher-than-expected VBAC rates. These discontinuities are likely due to wording and formatting changes to the method of delivery item on the 2003 Revision of the U.S. Standard Certificate of Live Birth. Changes in VBAC deliveries for states which have implemented the revised certificates should be interpreted with caution; see "Technical Notes."

Table 31. Live births by birthweight and percentage very low and low birthweight, by period of gestation and race and Hispanic origin of mother: United States, 2004

Birthweight ¹ and race and Hispanic origin of mother		Period of gestation ²										
		Preterm						Term				Postterm
		All births	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	Not stated
Number												
All races ³	4,112,052	508,356	30,670	50,975	238,531	188,180	3,308,179	2,130,486	800,506	377,187	252,543	42,974
Less than 500 grams	6,282	6,077	5,833	226	16	2	16	11	1	4	5	184
500–999 grams	23,433	22,770	16,895	5,239	594	42	206	137	38	31	31	426
1,000–1,499 grams	30,925	28,678	3,992	16,643	7,492	551	1,548	1,105	274	169	239	460
1,500–1,999 grams	65,691	54,845	960	12,511	35,863	5,511	9,202	7,577	1,076	549	822	822
2,000–2,499 grams	205,441	107,375	604	4,461	69,709	32,601	90,703	76,014	10,134	4,555	5,058	2,305
2,500–2,999 grams	729,675	136,253	1,043	4,279	61,056	69,875	552,206	425,101	89,843	37,262	33,643	7,573
3,000–3,499 grams	1,573,189	101,935	–	5,034	41,626	55,275	1,356,914	904,398	314,963	137,553	98,438	15,902
3,500–3,999 grams	1,124,630	39,463	–	2,438	17,495	19,530	990,267	563,402	286,500	140,365	83,773	11,127
4,000–4,499 grams	299,081	7,708	–	–	3,758	3,950	262,732	131,238	83,748	47,746	25,617	3,024
4,500–4,999 grams	44,889	1,191	–	–	549	642	38,885	18,481	12,432	7,972	4,332	481
5,000 grams or more	5,007	183	–	–	93	90	4,265	2,278	1,150	837	466	93
Not stated	3,809	1,878	1,343	144	280	111	1,235	744	347	144	119	577
Percent												
Very low birthweight ⁴	1.5	11.4	91.1	43.5	3.4	0.3	0.1	0.1	0.0	0.1	0.1	2.5
Low birthweight ⁵	8.1	43.4	96.4	76.9	47.7	20.6	3.1	4.0	1.4	1.4	2.4	9.9
Number												
Non-Hispanic white ⁶	2,296,683	262,643	12,655	24,590	122,586	102,812	1,883,739	1,211,397	456,217	216,125	138,455	11,844
Less than 500 grams	2,404	2,357	2,258	92	6	1	11	8	1	2	2	34
500–999 grams	9,988	9,778	7,004	2,482	275	17	100	64	17	19	14	96
1,000–1,499 grams	15,136	14,212	1,773	8,381	3,782	276	688	488	130	70	108	128
1,500–1,999 grams	33,891	28,866	370	6,653	18,990	2,853	4,394	3,622	495	277	381	250
2,000–2,499 grams	103,852	57,548	258	1,935	38,216	17,139	43,281	36,543	4,609	2,129	2,402	621
2,500–2,999 grams	360,878	72,726	408	1,644	32,178	38,496	270,410	211,571	41,475	17,364	15,859	1,883
3,000–3,499 grams	852,959	51,793	–	2,116	18,813	30,864	745,882	504,508	168,271	73,103	51,107	4,176
3,500–3,999 grams	686,535	19,896	–	1,216	8,085	10,595	614,242	352,840	176,025	85,377	49,114	3,282
4,000–4,499 grams	196,457	3,910	–	–	1,793	2,117	175,300	87,763	55,847	31,690	16,239	1,008
4,500–4,999 grams	29,782	599	–	–	264	335	26,164	12,267	8,433	5,464	2,856	163
5,000 grams or more	3,027	82	–	–	33	49	2,622	1,325	746	551	299	24
Not stated	1,774	876	584	71	151	70	645	398	167	79	74	179
Percent												
Very low birthweight ⁴	1.2	10.1	91.4	44.7	3.3	0.3	0.0	0.0	0.0	0.0	0.1	2.2
Low birthweight ⁵	7.2	43.1	96.6	79.7	50.0	19.7	2.6	3.4	1.2	1.2	2.1	9.7
Number												
Non-Hispanic black ⁶	578,772	102,967	10,444	12,848	47,158	32,517	438,385	292,300	100,286	45,799	33,564	3,856
Less than 500 grams	2,388	2,337	2,249	82	5	1	–	–	–	–	3	48
500–999 grams	7,632	7,504	5,785	1,548	158	13	38	24	10	4	10	80
1,000–1,499 grams	8,171	7,632	1,122	4,467	1,908	135	401	298	60	43	66	72
1,500–1,999 grams	15,280	12,668	323	2,818	8,257	1,270	2,280	1,884	264	132	172	160
2,000–2,499 grams	45,907	22,705	184	1,189	14,239	7,093	21,611	17,928	2,569	1,114	1,213	378
2,500–2,999 grams	141,219	25,631	321	1,224	11,574	12,512	107,803	82,329	18,133	7,341	6,921	864
3,000–3,499 grams	220,105	17,125	–	1,129	7,682	8,314	187,156	123,452	44,351	19,353	14,531	1,293
3,500–3,999 grams	110,479	5,633	–	360	2,654	2,619	95,765	54,409	27,622	13,734	8,388	693
4,000–4,499 grams	22,980	981	–	–	531	450	19,916	10,140	6,291	3,485	1,936	147
4,500–4,999 grams	3,249	154	–	–	74	80	2,805	1,482	819	504	267	23
5,000 grams or more	460	33	–	–	20	13	384	237	87	60	35	8
Not stated	902	564	460	31	56	17	226	117	80	29	22	90
Percent												
Very low birthweight ⁴	3.1	17.1	91.7	47.6	4.4	0.5	0.1	0.1	0.1	0.1	0.2	5.3
Low birthweight ⁵	13.7	51.6	96.8	78.8	52.2	26.2	5.6	6.9	2.9	2.8	4.4	19.6

See footnotes at end of table.

Table 31. Live births by birthweight and percentage very low and low birthweight, by period of gestation and race and Hispanic origin of mother: United States, 2004—Con.

Birthweight ¹ and race and Hispanic origin of mother	All births	Period of gestation ²										Not stated
		Preterm					Term				Postterm	
		Total under 37 weeks	Under 28 weeks	28–31 weeks	32–35 weeks	36 weeks	Total 37–41 weeks	37–39 weeks	40 weeks	41 weeks	42 weeks and over	
Hispanic ⁷	946,349	110,938	5,844	10,511	53,870	40,713	749,757	473,195	187,028	89,534	63,916	21,738
Less than 500 grams	1,093	1,007	960	42	5	–	4	2	–	2	–	82
500–999 grams	4,523	4,251	3,211	911	120	9	55	38	10	7	6	211
1,000–1,499 grams	5,717	5,106	879	2,824	1,306	97	367	256	69	42	44	200
1,500–1,999 grams	12,317	9,894	200	2,331	6,354	1,009	1,890	1,534	241	115	211	322
2,000–2,499 grams	40,533	20,034	130	1,051	12,894	5,959	18,404	15,186	2,208	1,010	1,117	978
2,500–2,999 grams	166,140	28,977	246	1,130	13,482	14,119	125,125	93,787	21,985	9,353	8,395	3,643
3,000–3,499 grams	381,659	26,866	–	1,487	12,476	12,903	320,503	208,344	77,449	34,710	25,912	8,378
3,500–3,999 grams	259,009	11,667	–	706	5,733	5,228	220,197	122,697	64,935	32,565	21,159	5,986
4,000–4,499 grams	63,993	2,401	–	–	1,239	1,162	53,992	26,822	17,229	9,941	6,007	1,593
4,500–4,999 grams	9,558	373	–	–	184	189	7,996	3,807	2,606	1,583	950	239
5,000 grams or more	1,226	52	–	–	29	23	1,022	585	249	188	100	52
Not stated	581	310	218	29	48	15	202	137	47	18	15	54
Percent												
Very low birthweight ⁴	1.2	9.4	89.8	36.0	2.7	0.3	0.1	0.1	0.0	0.1	0.1	2.3
Low birthweight ⁵	6.8	36.4	95.6	68.3	38.4	17.4	2.8	3.6	1.4	1.3	2.2	8.3

0.0 Quantity more than zero but less than 0.05.

– Quantity zero.

¹Equivalents of the gram weights in pounds and ounces are shown in the “Technical Notes.”²Expressed in completed weeks.³Includes races other than white and black and origin not stated.⁴Birthweight of less than 1,500 grams (3 lb 4 oz).⁵Birthweight of less than 2,500 grams (5 lb 8 oz).⁶Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see “Technical Notes.”⁷Includes all persons of Hispanic origin of any race.

Table 32. Percentage of live births very preterm and preterm and percentage of live births of very low birthweight and low birthweight, by race and Hispanic origin of mother: United States, 1981–2004

Year	Very preterm ¹				Preterm ²			
	All races ³	Non-Hispanic		Hispanic ⁵	All races ³	Non-Hispanic		Hispanic ⁵
		White ⁴	Black ⁴			White ⁴	Black ⁴	
2004	2.01	1.63	4.05	1.77	12.5	11.5	17.9	12.0
2003	1.97	1.60	3.99	1.73	12.3	11.3	17.8	11.9
2002	1.96	1.56	4.04	1.72	12.1	11.0	17.7	11.6
2001	1.95	1.55	4.05	1.69	11.9	10.8	17.6	11.4
2000	1.93	1.51	4.09	1.69	11.6	10.4	17.4	11.2
1999	1.96	1.54	4.18	1.68	11.8	10.5	17.6	11.4
1998	1.96	1.52	4.15	1.72	11.6	10.2	17.6	11.4
1997	1.94	1.49	4.19	1.68	11.4	9.9	17.6	11.2
1996	1.89	1.43	4.17	1.66	11.0	9.5	17.5	10.9
1995	1.89	1.41	4.29	1.66	11.0	9.4	17.8	10.9
1994	1.91	1.39	4.36	1.67	11.0	9.3	18.2	10.9
1993	1.93	1.39	4.45	1.67	11.0	9.1	18.6	11.0
1992 ⁸	1.91	1.33	4.50	1.64	10.7	8.7	18.5	10.7
1991 ⁸	1.94	1.35	4.65	1.65	10.8	8.7	19.0	11.0
1990 ⁹	1.92	1.33	4.63	1.69	10.6	8.5	18.9	11.0
1989 ¹⁰	1.95	1.34	4.68	1.76	10.6	8.4	19.0	11.1
1988	1.96	---	---	---	10.2	---	---	---
1987	1.96	---	---	---	10.2	---	---	---
1986	1.90	---	---	---	10.0	---	---	---
1985	1.88	---	---	---	9.8	---	---	---
1984	1.83	---	---	---	9.4	---	---	---
1983	1.86	---	---	---	9.6	---	---	---
1982	1.84	---	---	---	9.5	---	---	---
1981	1.81	---	---	---	9.4	---	---	---

Year	Very low birthweight ⁶				Low birthweight ⁷			
	All races ³	Non-Hispanic		Hispanic ⁵	All races ³	Non-Hispanic		Hispanic ⁵
		White ⁴	Black ⁴			White ⁴	Black ⁴	
2004	1.48	1.20	3.15	1.20	8.1	7.2	13.7	6.8
2003	1.45	1.18	3.12	1.16	7.9	7.0	13.6	6.7
2002	1.46	1.17	3.15	1.17	7.8	6.9	13.4	6.5
2001	1.44	1.17	3.08	1.14	7.7	6.8	13.1	6.5
2000	1.43	1.14	3.10	1.14	7.6	6.6	13.1	6.4
1999	1.45	1.15	3.18	1.14	7.6	6.6	13.2	6.4
1998	1.45	1.15	3.11	1.15	7.6	6.6	13.2	6.4
1997	1.42	1.12	3.05	1.13	7.5	6.5	13.1	6.4
1996	1.37	1.08	3.02	1.12	7.4	6.4	13.1	6.3
1995	1.35	1.04	2.98	1.11	7.3	6.2	13.2	6.3
1994	1.33	1.01	2.99	1.08	7.3	6.1	13.3	6.2
1993	1.33	1.00	2.99	1.06	7.2	5.9	13.4	6.2
1992 ⁸	1.29	0.94	2.97	1.04	7.1	5.7	13.4	6.1
1991 ⁸	1.29	0.94	2.97	1.02	7.1	5.7	13.6	6.1
1990 ⁹	1.27	0.93	2.93	1.03	7.0	5.6	13.3	6.1
1989 ¹⁰	1.28	0.93	2.97	1.05	7.0	5.6	13.6	6.2
1988	1.24	---	---	---	6.9	---	---	---
1987	1.24	---	---	---	6.9	---	---	---
1986	1.21	---	---	---	6.8	---	---	---
1985	1.21	---	---	---	6.8	---	---	---
1984	1.19	---	---	---	6.7	---	---	---
1983	1.19	---	---	---	6.8	---	---	---
1982	1.18	---	---	---	6.8	---	---	---
1981	1.16	---	---	---	6.8	---	---	---

--- Data not available.

¹Births of less than 32 completed weeks of gestation.²Births of less than 37 completed weeks of gestation.³Includes races other than white and black and origin not stated.⁴Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁵Includes all persons of Hispanic origin of any race.⁶Less than 1,500 grams (3 lb 4 oz).⁷Less than 2,500 grams (5 lb 8 oz).⁸Data by Hispanic origin exclude New Hampshire, which did not report Hispanic origin.⁹Data by Hispanic origin exclude New Hampshire and Oklahoma, which did not report Hispanic origin.¹⁰Data by Hispanic origin exclude New Hampshire, Oklahoma, and Louisiana, which did not report Hispanic origin.

Table 33. Number and percentage of births delivered preterm, by race and Hispanic origin of mother: United States, each State and territory, 2004

[By place of residence. Preterm is less than 37 completed weeks of gestation]

State	Number				Percent			
	All races ¹	Non-Hispanic			All races ¹	Non-Hispanic		
		White ²	Black ²	Hispanic ³		White ²	Black ²	Hispanic ³
United States ⁴	508,356	262,643	102,967	110,938	12.5	11.5	17.9	12.0
Alabama	9,599	5,193	3,815	462	16.1	14.0	21.3	13.9
Alaska	1,084	452	39	82	10.5	8.8	13.2	9.4
Arizona	12,450	5,004	519	5,547	13.3	12.6	18.4	13.4
Arkansas	5,037	3,247	1,294	386	13.1	12.1	17.7	11.0
California	54,158	15,035	4,205	27,714	10.7	9.8	15.1	10.9
Colorado	8,429	4,761	484	2,826	12.3	11.6	17.3	13.0
Connecticut	4,231	2,493	697	822	10.1	9.2	14.2	10.8
Delaware	1,490	772	484	169	13.1	12.0	17.0	11.1
District of Columbia	1,141	176	799	134	14.4	8.8	17.1	13.5
Florida	29,287	12,461	8,558	7,297	13.4	11.9	18.2	12.5
Georgia	17,703	7,795	7,253	1,909	12.8	11.4	16.8	9.5
Hawaii	2,210	401	74	326	12.1	9.3	15.3	12.2
Idaho	2,477	1,994	8	350	11.0	10.9	*	10.8
Illinois	23,553	11,681	5,828	5,033	13.1	11.9	19.0	11.8
Indiana	11,483	8,586	1,779	891	13.2	12.6	18.6	12.3
Iowa	4,519	3,783	240	341	11.8	11.5	16.5	12.0
Kansas	4,667	3,353	466	634	11.8	11.5	16.9	11.6
Kentucky	8,026	6,744	871	304	14.4	14.1	18.4	13.8
Louisiana	10,165	4,393	5,345	235	15.6	12.5	20.1	12.1
Maine	1,475	1,379	31	11	10.6	10.5	14.3	*
Maryland	9,910	4,339	4,113	955	13.3	11.4	17.0	12.5
Massachusetts	8,829	6,011	1,051	1,144	11.3	10.8	15.7	11.6
Michigan	15,954	10,155	4,060	849	12.3	11.2	18.3	10.9
Minnesota	7,416	5,445	715	543	10.5	10.2	12.9	10.2
Mississippi	7,669	3,309	4,083	163	17.9	14.8	22.1	14.8
Missouri	10,075	7,165	2,179	479	13.0	11.9	19.3	12.5
Montana	1,336	1,032	9	41	11.6	11.1	*	11.0
Nebraska	3,110	2,320	218	396	11.8	11.8	14.2	11.5
Nevada	4,716	2,044	530	1,666	13.5	12.8	19.1	12.8
New Hampshire	1,470	1,316	28	45	10.1	10.2	14.7	9.7
New Jersey	14,293	6,672	3,026	3,479	12.4	11.1	17.9	12.7
New Mexico	3,567	1,026	81	1,916	12.6	11.6	18.0	12.7
New York	29,271	13,179	6,952	6,921	11.7	10.3	16.4	12.2
North Carolina	16,171	8,507	4,996	2,062	13.5	12.1	18.2	11.9
North Dakota	1,017	801	12	22	12.4	12.1	*	13.3
Ohio	18,639	13,520	3,933	703	12.5	11.6	17.5	12.3
Oklahoma	6,499	4,247	764	678	12.7	12.4	16.6	11.3
Oregon	4,622	3,251	136	868	10.1	10.0	13.3	9.8
Pennsylvania	16,928	11,400	3,188	1,537	11.8	10.7	16.9	13.4
Rhode Island	1,508	739	156	332	11.8	10.7	15.5	13.7
South Carolina	8,752	4,306	3,785	526	15.5	13.1	20.7	12.1
South Dakota	1,270	931	11	33	11.2	10.5	*	8.4
Tennessee	11,494	7,685	2,943	660	14.5	13.7	18.9	11.4
Texas	52,098	17,533	7,821	25,007	13.7	12.9	18.9	13.3
Utah	5,492	4,267	66	858	10.8	10.5	17.0	12.0
Vermont	549	509	11	4	8.3	8.1	*	*
Virginia	12,572	6,908	3,651	1,283	12.1	11.0	16.4	11.0
Washington	8,393	5,259	420	1,545	10.3	9.9	13.6	10.9
West Virginia	2,915	2,754	114	20	14.0	13.9	17.1	13.2
Wisconsin	7,847	5,687	1,121	635	11.2	10.5	17.2	10.8
Wyoming	790	623	5	95	11.6	11.0	*	13.6
Puerto Rico	9,119	---	---	---	17.8	---	---	---
Virgin Islands	257	11	175	56	16.3	*	17.3	16.0
Guam	552	18	2	3	16.2	*	*	*
American Samoa	---	---	---	---	---	---	---	---
Northern Marianas	166	---	---	---	12.3	---	---	---

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

--- Data not available.

¹Includes races other than white and black and origin not stated.²Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."³Includes all persons of Hispanic origin of any race.⁴Excludes data for the territories.

Table 34. Number and percentage low birthweight and number of live births by birthweight, by age and race and Hispanic origin of mother: United States, 2004

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 races³															
All ages	331,772	8.1	4,112,052	6,282	23,433	30,925	65,691	205,441	729,675	1,573,189	1,124,630	299,081	44,889	5,007	3,809
Under 15 years	921	13.6	6,781	30	105	112	158	516	1,742	2,752	1,195	155	10	–	6
15–19 years	41,025	9.9	415,262	813	3,098	3,670	7,576	25,868	94,570	169,643	90,246	17,325	1,886	184	383
15 years	2,124	11.6	18,274	60	191	219	382	1,272	4,429	7,555	3,507	579	52	5	23
16 years	4,476	10.7	41,860	100	409	432	842	2,693	10,185	17,117	8,497	1,397	125	19	44
17 years	7,488	10.1	73,846	135	557	665	1,381	4,750	17,232	30,488	15,446	2,809	294	26	63
18 years	11,561	9.9	117,237	223	887	1,059	2,120	7,272	26,837	47,919	25,374	4,882	513	42	109
19 years	15,376	9.4	164,045	295	1,054	1,295	2,851	9,881	35,887	66,564	37,422	7,658	902	92	144
20–24 years	83,790	8.1	1,034,454	1,548	5,771	7,474	15,472	53,525	204,413	413,887	261,656	60,949	7,963	804	992
25–29 years	80,172	7.3	1,104,485	1,562	5,612	7,237	15,561	50,200	185,398	424,814	314,761	84,412	12,535	1,360	1,033
30–34 years	72,031	7.5	965,663	1,321	5,078	6,871	15,035	43,726	149,798	356,205	287,803	84,037	13,413	1,562	814
35–39 years	41,331	8.7	475,606	775	2,873	4,271	8,987	24,425	74,915	168,334	139,334	43,009	7,349	868	466
40–44 years	11,209	10.8	103,679	218	814	1,149	2,545	6,483	17,643	35,743	28,321	8,779	1,659	219	106
45–54 years	1,293	21.2	6,122	15	82	141	357	698	1,196	1,811	1,314	415	74	10	9
Non-Hispanic white⁴															
All ages	165,271	7.2	2,296,683	2,404	9,988	15,136	33,891	103,852	360,878	852,959	686,535	196,457	29,782	3,027	1,774
Under 15 years	183	12.4	1,477	8	17	22	34	102	317	595	322	55	3	–	2
15–19 years	15,013	8.9	168,795	257	1,091	1,396	2,793	9,476	34,207	67,687	41,490	9,113	1,053	88	144
15 years	509	10.4	4,908	14	50	48	93	304	1,015	1,978	1,148	223	27	1	7
16 years	1,303	10.0	13,055	42	121	130	252	758	2,777	5,211	3,077	611	54	6	16
17 years	2,512	9.2	27,258	38	198	245	466	1,565	5,635	11,003	6,563	1,359	159	5	22
18 years	4,360	9.0	48,740	73	324	417	825	2,721	10,046	19,594	11,842	2,560	283	20	35
19 years	6,329	8.5	74,834	90	398	556	1,157	4,128	14,734	29,901	18,860	4,360	530	56	64
20–24 years	37,135	7.2	517,148	511	2,212	3,271	7,005	24,136	92,472	202,622	143,464	35,772	4,795	450	438
25–29 years	41,102	6.5	631,726	600	2,439	3,651	8,230	26,182	95,096	237,038	193,841	55,150	8,218	804	477
30–34 years	40,878	6.8	604,040	557	2,397	3,767	8,781	25,376	84,135	216,481	192,624	59,165	9,352	983	422
35–39 years	23,725	7.8	304,085	351	1,376	2,344	5,320	14,334	43,654	105,311	94,800	30,670	5,141	550	234
40–44 years	6,383	9.8	65,389	108	402	612	1,484	3,777	10,237	22,088	19,104	6,214	1,163	147	53
45–54 years	852	21.2	4,023	12	54	73	244	469	760	1,137	890	318	57	5	4

See footnotes at end of table.

Table 34. Number and percentage low birthweight and number of live births by birthweight, by age and race and Hispanic origin of mother: United States, 2004—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
Non-Hispanic black⁴															
All ages	79,378	13.7	578,772	2,388	7,632	8,171	15,280	45,907	141,219	220,105	110,479	22,980	3,249	460	902
Under 15 years	450	16.5	2,729	16	55	53	75	251	783	1,054	405	30	3	–	4
15–19 years	14,037	14.4	97,290	378	1,192	1,283	2,633	8,551	27,474	38,204	14,950	2,251	213	29	132
15 years	891	15.5	5,753	26	86	92	154	533	1,670	2,312	770	97	3	2	8
16 years	1,602	14.3	11,240	38	150	154	304	956	3,312	4,396	1,693	199	18	5	15
17 years	2,549	14.2	17,927	62	216	234	459	1,578	5,072	7,144	2,697	401	38	4	22
18 years	3,950	14.8	26,778	97	345	363	753	2,392	7,581	10,474	4,024	641	61	7	40
19 years	5,045	14.2	35,592	155	395	440	963	3,092	9,839	13,878	5,766	913	93	11	47
20–24 years	24,867	13.2	188,761	655	2,199	2,434	4,654	14,925	48,970	73,875	33,713	6,219	761	83	273
25–29 years	17,874	13.0	138,093	595	1,836	1,824	3,334	10,285	31,691	52,543	28,563	6,176	898	121	227
30–34 years	12,688	13.7	92,646	454	1,402	1,432	2,569	6,831	19,623	33,806	20,310	5,120	800	131	168
35–39 years	7,244	15.5	46,945	234	753	865	1,518	3,874	9,991	16,426	10,097	2,575	453	77	82
40–44 years	2,075	17.8	11,676	56	188	255	458	1,118	2,565	3,987	2,318	584	114	17	16
45–54 years	143	22.6	632	–	7	25	39	72	122	210	123	25	7	2	
Hispanic⁵															
All ages	64,183	6.8	946,349	1,093	4,523	5,717	12,317	40,533	166,140	381,659	259,009	63,993	9,558	1,226	581
Under 15 years	270	11.5	2,356	6	31	35	46	152	593	1,014	415	60	4	–	–
15–19 years	10,455	7.9	133,044	146	709	878	1,862	6,860	29,283	57,273	30,158	5,196	540	60	79
15 years	654	9.4	6,969	18	47	75	122	392	1,609	3,013	1,437	229	19	2	6
16 years	1,393	8.8	15,881	15	126	134	245	873	3,736	6,823	3,355	514	44	7	9
17 years	2,168	8.4	25,839	31	133	169	401	1,434	5,842	11,265	5,537	912	83	16	16
18 years	2,821	7.6	37,159	46	186	249	467	1,873	8,209	15,965	8,499	1,475	152	12	26
19 years	3,419	7.2	47,196	36	217	251	627	2,288	9,887	20,207	11,330	2,066	242	23	22
20–24 years	18,000	6.4	279,746	297	1,159	1,485	3,189	11,870	52,220	117,600	73,156	16,322	2,054	231	163
25–29 years	15,311	6.0	254,358	268	1,024	1,312	2,997	9,710	41,156	101,901	73,709	18,937	2,824	359	161
30–34 years	11,821	6.7	177,762	208	939	1,101	2,445	7,128	27,116	68,056	52,921	14,859	2,532	355	102
35–39 years	6,450	8.0	81,021	125	501	704	1,345	3,775	12,675	29,455	23,744	7,137	1,319	180	61
40–44 years	1,743	10.1	17,265	41	151	182	401	968	2,935	6,100	4,716	1,437	279	40	15
45–54 years	133	16.7	797	2	9	20	32	70	162	260	190	45	6	1	–

– Quantity zero.

¹Less than 2,500 grams (5 lb 8 oz).²Equivalents of gram weights in terms of pounds and ounces are shown in "Technical Notes."³Includes races other than white and black and origin not stated.⁴Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁵Includes all persons of Hispanic origin of any race.

Table 35. Number and percentage of births of low birthweight, by race and Hispanic origin of mother: United States, each state and territory, 2004

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

State	Number				Percent			
	All races ¹	Non-Hispanic		Hispanic ³	All races ¹	Non-Hispanic		Hispanic ³
		White ²	Black ²			White ²	Black ²	
United States ⁴	331,772	165,271	79,378	64,183	8.1	7.2	13.7	6.8
Alabama	6,201	3,167	2,708	229	10.4	8.5	15.1	6.8
Alaska	618	259	28	47	6.0	5.1	9.3	5.4
Arizona	6,710	2,875	337	2,795	7.2	7.3	12.0	6.8
Arkansas	3,593	2,164	1,134	212	9.3	8.1	15.5	6.0
California	36,454	10,265	3,770	16,769	6.7	6.3	12.4	6.1
Colorado	6,130	3,589	408	1,863	9.0	8.7	14.6	8.6
Connecticut	3,273	1,808	621	649	7.8	6.7	12.7	8.5
Delaware	1,023	479	393	95	9.0	7.4	13.8	6.2
District of Columbia	880	112	661	78	11.1	5.6	14.1	7.8
Florida	18,633	7,725	6,137	4,095	8.5	7.3	13.1	7.0
Georgia	12,930	5,096	6,018	1,215	9.3	7.4	14.0	6.0
Hawaii	1,442	267	49	212	7.9	6.2	10.2	7.9
Idaho	1,529	1,210	8	228	6.8	6.6	*	7.0
Illinois	15,200	7,120	4,482	2,837	8.4	7.3	14.6	6.7
Indiana	7,028	5,132	1,302	458	8.1	7.5	13.6	6.3
Iowa	2,686	2,263	161	173	7.0	6.9	11.0	6.1
Kansas	2,898	2,037	378	346	7.3	7.0	13.7	6.3
Kentucky	4,872	4,021	630	159	8.8	8.4	13.3	7.2
Louisiana	7,139	2,816	4,031	151	10.9	8.0	15.2	7.7
Maine	895	836	19	7	6.4	6.4	*	*
Maryland	6,947	2,817	3,195	558	9.3	7.4	13.2	7.3
Massachusetts	6,117	4,027	788	844	7.8	7.2	11.8	8.6
Michigan	10,828	6,433	3,222	497	8.3	7.1	14.5	6.4
Minnesota	4,604	3,201	585	336	6.5	6.0	10.5	6.3
Mississippi	4,956	1,951	2,853	82	11.6	8.7	15.5	7.4
Missouri	6,429	4,422	1,575	253	8.3	7.3	14.0	6.6
Montana	880	707	8	32	7.6	7.6	*	8.6
Nebraska	1,854	1,371	181	204	7.0	7.0	11.8	5.9
Nevada	2,809	1,252	386	827	8.0	7.8	13.8	6.3
New Hampshire	984	882	17	29	6.8	6.9	*	6.3
New Jersey	9,528	4,322	2,316	1,980	8.3	7.2	13.7	7.2
New Mexico	2,306	708	66	1,243	8.1	8.0	14.7	8.2
New York	20,393	8,825	5,516	4,273	8.2	6.9	13.0	7.5
North Carolina	10,822	5,405	3,885	1,100	9.0	7.7	14.2	6.4
North Dakota	539	424	9	12	6.6	6.4	*	*
Ohio	12,637	8,666	3,164	403	8.5	7.5	14.0	7.0
Oklahoma	4,117	2,676	599	398	8.0	7.8	13.0	6.6
Oregon	2,758	1,947	108	460	6.0	6.0	10.6	5.2
Pennsylvania	11,804	7,525	2,567	1,072	8.2	7.1	13.5	9.3
Rhode Island	1,025	504	111	201	8.0	7.3	11.0	8.3
South Carolina	5,761	2,599	2,791	271	10.2	7.9	15.3	6.3
South Dakota	784	607	8	19	6.9	6.9	*	*
Tennessee	7,273	4,635	2,146	346	9.2	8.2	13.8	6.0
Texas	30,621	10,021	5,772	13,509	8.0	7.4	13.9	7.2
Utah	3,379	2,574	42	548	6.7	6.3	10.8	7.6
Vermont	423	396	9	5	6.4	6.3	*	*
Virginia	8,587	4,401	2,856	753	8.3	7.0	12.8	6.4
Washington	5,063	3,054	342	863	6.2	5.7	11.1	6.1
West Virginia	1,937	1,813	96	11	9.3	9.1	14.3	*
Wisconsin	4,885	3,383	883	377	7.0	6.2	13.6	6.4
Wyoming	588	482	7	59	8.6	8.5	*	8.4
Puerto Rico	5,856	---	---	---	11.5	---	---	---
Virgin Islands	179	9	133	26	11.4	*	13.3	7.5
Guam	289	7	1	2	8.5	*	*	*
American Samoa	57	---	---	---	3.3	---	---	---
Northern Marianas	102	---	---	---	7.6	---	---	---

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

--- Data not available. ¹Includes races other than white and black and origin not stated.²Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."³Includes all persons of Hispanic origin of any race.⁴Excludes data for the territories.

Table 36. Number and percentage of births of very low birthweight, by race and Hispanic origin of mother: United States, each state and territory, 2004

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

State	Number				Percent			
	All races ¹	Non-Hispanic		Hispanic ³	All races ¹	Non-Hispanic		Hispanic ³
		White ²	Black ²			White ²	Black ²	
United States ⁴	60,640	27,528	18,191	11,333	1.5	1.2	3.1	1.2
Alabama	1,168	538	572	42	2.0	1.4	3.2	1.2
Alaska	120	43	7	12	1.2	0.8	*	*
Arizona	1,077	420	76	501	1.2	1.1	2.7	1.2
Arkansas	671	393	216	43	1.7	1.5	2.9	1.2
California	6,393	1,665	824	3,020	1.2	1.0	2.7	1.1
Colorado	874	494	68	278	1.3	1.2	2.4	1.3
Connecticut	647	301	172	144	1.5	1.1	3.5	1.9
Delaware	181	78	87	10	1.6	1.2	3.1	*
District of Columbia	219	20	180	14	2.8	1.0	3.8	*
Florida	3,457	1,209	1,460	668	1.6	1.1	3.1	1.1
Georgia	2,512	847	1,333	221	1.8	1.2	3.1	1.1
Hawaii	242	53	14	29	1.3	1.2	*	1.1
Idaho	254	209	1	33	1.1	1.1	*	1.0
Illinois	2,982	1,359	1,011	493	1.7	1.4	3.3	1.2
Indiana	1,245	849	281	92	1.4	1.2	2.9	1.3
Iowa	499	399	47	43	1.3	1.2	3.2	1.5
Kansas	542	380	85	52	1.4	1.3	3.1	0.9
Kentucky	888	687	160	31	1.6	1.4	3.4	1.4
Louisiana	1,359	406	911	30	2.1	1.2	3.4	1.5
Maine	146	129	6	2	1.0	1.0	*	*
Maryland	1,486	477	845	111	2.0	1.3	3.5	1.5
Massachusetts	1,134	668	217	160	1.4	1.2	3.2	1.6
Michigan	2,101	1,161	740	102	1.6	1.3	3.3	1.3
Minnesota	801	516	150	59	1.1	1.0	2.7	1.1
Mississippi	935	322	585	16	2.2	1.4	3.2	*
Missouri	1,169	719	370	56	1.5	1.2	3.3	1.5
Montana	126	93	1	3	1.1	1.0	*	*
Nebraska	323	246	36	28	1.2	1.3	2.3	0.8
Nevada	440	175	79	139	1.3	1.1	2.8	1.1
New Hampshire	175	156	4	5	1.2	1.2	*	*
New Jersey	1,767	702	541	384	1.5	1.2	3.2	1.4
New Mexico	360	117	10	181	1.3	1.3	*	1.2
New York	3,916	1,509	1,338	836	1.6	1.2	3.2	1.5
North Carolina	2,268	979	989	214	1.9	1.4	3.6	1.2
North Dakota	109	82	3	3	1.3	1.2	*	*
Ohio	2,309	1,454	734	66	1.6	1.3	3.3	1.2
Oklahoma	670	409	129	61	1.3	1.2	2.8	1.0
Oregon	491	338	24	87	1.1	1.0	2.3	1.0
Pennsylvania	2,303	1,345	637	189	1.6	1.3	3.4	1.6
Rhode Island	184	91	19	33	1.4	1.3	*	1.4
South Carolina	1,186	470	646	60	2.1	1.4	3.5	1.4
South Dakota	136	97	—	1	1.2	1.1	*	*
Tennessee	1,139	693	381	41	1.4	1.2	2.4	0.7
Texas	5,347	1,674	1,256	2,254	1.4	1.2	3.0	1.2
Utah	512	382	4	100	1.0	0.9	*	1.4
Vermont	57	50	3	1	0.9	0.8	*	*
Virginia	1,602	750	642	138	1.5	1.2	2.9	1.2
Washington	861	490	65	158	1.1	0.9	2.1	1.1
West Virginia	304	276	20	4	1.5	1.4	3.0	*
Wisconsin	854	530	210	74	1.2	1.0	3.2	1.3
Wyoming	99	78	2	11	1.5	1.4	*	*
Puerto Rico	753	---	---	---	1.5	---	---	---
Virgin Islands	32	2	19	6	2.0	*	*	*
Guam	48	—	—	—	1.4	*	*	*
American Samoa	4	---	---	---	*	---	---	---
Northern Marianas	9	---	---	---	*	---	---	---

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

— Quantity zero.

--- Data not available.

¹Includes races other than white and black and origin not stated.²Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."³Includes all persons of Hispanic origin of any race.⁴Excludes data for the territories.

Table 37. Live births by plurality of birth and ratios, by age and race and Hispanic origin of mother: United States, 2004

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						
All live births						Number					
All races ¹	4,112,052	6,781	415,262	133,980	281,282	1,034,454	1,104,485	965,663	475,606	103,679	6,122
Non-Hispanic white ²	2,296,683	1,477	168,795	45,221	123,574	517,148	631,726	604,040	304,085	65,389	4,023
Non-Hispanic black ²	578,772	2,729	97,290	34,920	62,370	188,761	138,093	92,646	46,945	11,676	632
Hispanic ³	946,349	2,356	133,044	48,689	84,355	279,746	254,358	177,762	81,021	17,265	797
Live births in single deliveries											
All races ¹	3,972,558	6,693	408,634	132,219	276,415	1,010,421	1,069,417	924,160	450,733	97,732	4,768
Non-Hispanic white ²	2,207,747	1,456	166,197	44,617	121,580	505,466	610,031	574,667	285,988	60,936	3,006
Non-Hispanic black ²	557,590	2,697	95,204	34,349	60,855	182,229	132,330	88,521	44,801	11,235	573
Hispanic ³	925,275	2,323	131,316	48,160	83,156	274,838	248,619	172,599	78,204	16,666	710
Live births in twin deliveries											
All races ¹	132,219	85	6,544	1,742	4,802	23,602	33,315	38,751	23,088	5,569	1,265
Non-Hispanic white ²	83,346	21	2,566	599	1,967	11,457	20,359	27,174	16,672	4,144	953
Non-Hispanic black ²	20,605	32	2,048	563	1,485	6,420	5,608	3,964	2,056	421	56
Hispanic ³	20,351	30	1,717	523	1,194	4,827	5,564	4,914	2,643	576	80
Live births in higher order multiple deliveries ⁴											
All races ¹	7,275	3	84	19	65	431	1,753	2,752	1,785	378	89
Non-Hispanic white ²	5,590	–	32	5	27	225	1,336	2,199	1,425	309	64
Non-Hispanic black ²	577	–	38	8	30	112	155	161	88	20	3
Hispanic ³	723	3	11	6	5	81	175	249	174	23	7
All multiple births						Ratio per 1,000 live births					
All races ¹	33.9	13.0	16.0	13.1	17.3	23.2	31.8	43.0	52.3	57.4	221.2
Non-Hispanic white ²	38.7	14.2	15.4	13.4	16.1	22.6	34.3	48.6	59.5	68.1	252.8
Non-Hispanic black ²	36.6	11.7	21.4	16.4	24.3	34.6	41.7	44.5	45.7	37.8	93.4
Hispanic ³	22.3	14.0	13.0	10.9	14.2	17.5	22.6	29.0	34.8	34.7	109.2
Twin births											
All races ¹	32.2	12.5	15.8	13.0	17.1	22.8	30.2	40.1	48.5	53.7	206.6
Non-Hispanic white ²	36.3	14.2	15.2	13.2	15.9	22.2	32.2	45.0	54.8	63.4	236.9
Non-Hispanic black ²	35.6	11.7	21.1	16.1	23.8	34.0	40.6	42.8	43.8	36.1	88.6
Hispanic ³	21.5	12.7	12.9	10.7	14.2	17.3	21.9	27.6	32.6	33.4	100.4
Higher order multiple births ⁴						Ratio per 100,000 live births					
All races ¹	176.9	*	20.2	*	23.1	41.7	158.7	285.0	375.3	364.6	1453.8
Non-Hispanic white ²	243.4	*	19.0	*	21.8	43.5	211.5	364.0	468.6	472.6	1590.9
Non-Hispanic black ²	99.7	*	39.1	*	48.1	59.3	112.2	173.8	187.5	171.3	*
Hispanic ³	76.4	*	*	*	*	29.0	68.8	140.1	214.8	133.2	*

— Quantity zero.

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

¹Includes races other than white and black and origin not stated.²Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."³Includes all persons of Hispanic origin of any race.⁴Births in greater than twin deliveries.

Table 38. Numbers and rates of twin and triplet and higher order multiple births by race and Hispanic origin of mother, United States: 1980–2004

Year and race and Hispanic origin of mother	Total births	Twin births	Triplet/+ births	Twin birth rate ¹	Multiple birth rate ²	Triplet/+ birth rate ³
All races⁴						
2004	4,112,052	132,219	7,275	32.2	33.9	176.9
2003	4,089,950	128,665	7,663	31.5	33.3	187.4
2002	4,021,726	125,134	7,401	31.1	33.0	184.0
2001	4,025,933	121,246	7,471	30.1	32.0	185.6
2000	4,058,814	118,916	7,325	29.3	31.1	180.5
1999	3,959,417	114,307	7,321	28.9	30.7	184.9
1998	3,941,553	110,670	7,625	28.1	30.0	193.5
1997	3,880,894	104,137	6,737	26.8	28.6	173.6
1996	3,891,494	100,750	5,939	25.9	27.4	152.6
1995	3,899,589	96,736	4,973	24.8	26.1	127.5
1994	3,952,767	97,064	4,594	24.6	25.7	116.2
1993	4,000,240	96,445	4,168	24.1	25.2	104.2
1992	4,065,014	95,372	3,883	23.5	24.4	95.5
1991	4,110,907	94,779	3,346	23.1	23.9	81.4
1990	4,158,212	93,865	3,028	22.6	23.3	72.8
1989	4,040,958	90,118	2,798	22.3	23.0	69.2
1988	3,909,510	85,315	2,385	21.8	22.4	61.0
1987	3,809,394	81,778	2,139	21.5	22.0	56.2
1986	3,756,547	79,485	1,814	21.2	21.6	48.3
1985	3,760,561	77,102	1,925	20.5	21.0	51.2
1984	3,669,141	72,949	1,653	19.9	20.3	45.1
1983	3,638,933	72,287	1,575	19.9	20.3	43.3
1982	3,680,537	71,631	1,484	19.5	19.9	40.3
1981	3,629,238	70,049	1,385	19.3	19.7	38.2
1980	3,612,258	68,339	1,337	18.9	19.3	37.0
Non-Hispanic white⁵						
2004	2,296,683	83,346	5,590	36.3	38.7	243.4
2003	2,321,904	81,691	5,922	35.2	37.7	255.0
2002	2,298,156	79,949	5,754	34.8	37.3	250.4
2001	2,326,578	77,882	5,894	33.5	36.0	253.3
2000	2,362,968	76,018	5,821	32.2	34.6	246.3
1999	2,346,450	73,964	5,909	31.5	34.0	251.8
1998	2,283,986	71,270	6,206	30.2	32.8	262.8
1997	2,333,363	67,191	5,386	28.8	31.1	230.8
1996	2,358,989	65,523	4,885	27.8	29.8	207.1
1995	2,382,638	62,370	4,050	26.2	27.9	170.0
1994	2,438,855	62,476	3,721	25.6	27.1	152.6
1993	2,472,031	61,525	3,360	24.9	26.2	135.9
1992 ⁶	2,527,207	60,640	3,115	24.0	25.2	123.3
1991 ⁶	2,589,878	60,904	2,612	23.5	24.5	100.9
1990 ⁷	2,626,500	60,210	2,358	22.9	23.8	89.8
Non-Hispanic black⁵						
2004	578,772	20,605	577	35.6	36.6	99.7
2003	576,033	20,010	631	34.7	35.8	109.5
2002	578,335	20,064	591	34.7	35.7	102.2
2001	589,917	19,974	531	33.9	34.8	90.0
2000	604,346	20,173	506	33.4	34.2	83.7
1999	588,981	18,920	561	32.1	33.1	95.2
1998	593,127	18,589	518	31.3	32.2	87.3
1997	581,431	17,472	523	30.0	30.9	90.0
1996	578,099	16,873	425	29.2	29.9	73.5
1995	587,781	16,622	340	28.3	28.9	57.8
1994	619,198	17,934	357	29.0	29.5	57.7
1993	641,273	18,115	314	28.2	28.7	49.0
1992 ⁶	657,450	18,294	346	27.8	28.4	52.6
1991 ⁶	666,758	18,243	367	27.4	27.9	55.0
1990 ⁷	661,701	17,646	306	26.7	27.1	46.2

See footnotes at end of table.

Table 38. Numbers and rates of twin and triplet and higher order multiple births by race and Hispanic origin of mother, United States: 1980–2004—Con.

Year and race and Hispanic origin of mother	Total births	Twin births	Triplet/+ births	Twin birth rate ¹	Multiple birth rate ²	Triplet/+ birth rate ³
Hispanic ⁸						
2004	946,349	20,351	723	21.5	22.3	76.4
2003	912,329	19,472	784	21.3	22.2	85.9
2002	876,642	18,128	737	20.7	21.5	84.1
2001	851,851	17,257	710	20.3	21.1	83.3
2000	815,868	16,470	659	20.2	21.0	80.8
1999	764,339	15,388	583	20.1	20.9	76.3
1998	734,661	15,015	553	20.4	21.2	75.3
1997	709,767	13,821	516	19.5	20.2	72.7
1996	701,339	13,014	409	18.6	19.1	58.3
1995	679,768	12,685	355	18.7	19.2	52.2
1994	665,026	12,206	348	18.4	18.9	52.3
1993	654,418	12,294	321	18.8	19.3	49.1
1992 ⁶	643,271	11,932	239	18.5	18.9	37.2
1991 ⁶	623,085	11,356	235	18.2	18.6	37.7
1990 ⁷	595,073	10,713	235	18.0	18.4	39.5

¹The number of live births in twin deliveries per 1,000 live births.²The number of live births in all multiple deliveries per 1,000 live births.³The number of live births in triplet and other higher-order deliveries per 100,000 live births.⁴Includes races other than those shown.⁵Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Fifteen states reported multiple-race data for 2004. Multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Technical Notes."⁶Excludes data for New Hampshire, which did not report Hispanic origin.⁷Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.⁸Includes all persons of Hispanic origin of any race.

Table 39. Twin and triplet and higher order multiple birth rates by state: United States and each state, 2002–2004

Twin			Triplet/+ ¹		
State	Number	Rate per 1,000 live births	State	Number	Rate per 100,000 live births
United States	386,018	31.6	United States	22,339	182.8
Alabama	5,663	31.8	Alabama	361	202.8
Alaska	802	26.4	Alaska	15	*
Arizona	7,184	26.4	Arizona	499	183.1
Arkansas	3,251	28.6	Arkansas	111	97.5
California	45,616	28.2	California	2,376	147.1
Colorado	6,403	31.0	Colorado	343	166.3
Connecticut	5,136	40.5	Connecticut	328	258.3
Delaware	1,200	35.5	Delaware	75	222.0
District of Columbia	735	31.9	District of Columbia	13	*
Florida	18,731	29.5	Florida	934	146.9
Georgia	12,803	31.4	Georgia	613	150.2
Hawaii	1,511	28.1	Hawaii	77	143.0
Idaho	1,930	29.6	Idaho	99	151.6
Illinois	19,300	35.5	Illinois	1,412	259.6
Indiana	8,206	31.7	Indiana	627	242.4
Iowa	3,755	32.9	Iowa	205	179.6
Kansas	3,603	30.4	Kansas	210	177.1
Kentucky	5,005	30.3	Kentucky	398	240.9
Louisiana	6,010	30.8	Louisiana	298	152.6
Maine	1,353	32.7	Maine	54	130.6
Maryland	8,322	37.3	Maryland	460	206.4
Massachusetts	10,805	45.2	Massachusetts	737	308.0
Michigan	13,297	34.0	Michigan	892	228.2
Minnesota	6,911	33.1	Minnesota	454	217.5
Mississippi	3,964	31.3	Mississippi	192	151.5
Missouri	7,452	32.4	Missouri	416	180.8
Montana	983	28.9	Montana	35	103.0
Nebraska	2,454	31.6	Nebraska	261	336.2
Nevada	2,869	28.3	Nevada	143	141.0
New Hampshire	1,561	36.0	New Hampshire	93	214.3
New Jersey	14,327	41.3	New Jersey	1,150	331.4
New Mexico	1,996	23.8	New Mexico	58	69.1
New York	27,222	36.1	New York	1,840	243.7
North Carolina	11,138	31.3	North Carolina	556	156.4
North Dakota	777	32.5	North Dakota	55	230.0
Ohio	14,890	33.3	Ohio	1,054	235.6
Oklahoma	4,101	26.9	Oklahoma	145	95.0
Oregon	4,067	29.7	Oregon	159	116.2
Pennsylvania	14,265	32.9	Pennsylvania	912	210.4
Rhode Island	1,491	38.3	Rhode Island	101	259.8
South Carolina	5,210	31.2	South Carolina	260	155.9
South Dakota	1,007	30.5	South Dakota	39	118.0
Tennessee	7,093	30.1	Tennessee	358	151.7
Texas	31,370	27.7	Texas	1,589	140.5
Utah	3,914	26.1	Utah	177	118.2
Vermont	662	33.8	Vermont	32	163.5
Virginia	10,053	33.0	Virginia	466	152.9
Washington	6,987	29.0	Washington	267	110.7
West Virginia	1,767	28.3	West Virginia	49	78.4
Wisconsin	6,324	30.3	Wisconsin	317	151.9
Wyoming	542	27.0	Wyoming	24	119.7

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator, see "Technical Notes."

¹Includes triplet, quadruplet, and other higher order multiple births.

Technical Notes

Source of data

Data shown in this report for 2004 are based on 100 percent of the birth certificates filed 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 percentage 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.

The 1989 and 2003 Revisions of the U.S. Standard Certificates of Live Birth

This report includes 2004 data on items that are collected on *both* the 1989 Revision of the U.S. Standard Certificate of Live Birth (unrevised) and the 2003 Revision of the U.S. Standard Certificate of Live Birth (revised). The 2003 revision is described in detail elsewhere (4–6). Seven states, Idaho, Kentucky, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington implemented the revised birth certificate as of January 1, 2004, or in 2003. Two additional states, Florida and New Hampshire, implemented the revised birth certificate in 2004, but after January 1. The nine revised states represent 20 percent of all 2004 births; the seven revised states that implemented as of January 1, 2004, represent 14 percent of all births.

Data for educational attainment, prenatal care, and tobacco use, although collected on both the revised and unrevised certificates, are not considered comparable between revisions, and are presented separately in this report. Data on educational attainment, prenatal care, and tobacco use for the two states that revised after January 1, 2004, are excluded from all tabulations. See following discussion of the specific data items.

Data items exclusive to either the 1989 or the 2003 birth certificate revision are not shown in this report. Supplemental 2004 tables for data exclusive to the 1989 revision are available on the NCHS website (www.cdc.gov/nchs). A forthcoming report will present selected information exclusive to the 2003 revision.

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 four states (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 under age 10 years or over 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 age 9 years or under and age 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 have been too small historically to compute age-specific birth rates. These births have been included with births to women aged 45–49 years for computing birth rates.

In 2004, age of mother was not reported on 0.02 percent of the records; for these records age of mother was imputed according to the last record with the same race and total birth order.

Hispanic origin and race

Hispanic origin

Hispanic origin and race are reported separately on the birth certificate. Data for specified Hispanic groups 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 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 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 that include Hispanic origin, 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 characteristics 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 (7,137). Puerto Rico, American Samoa, and the Northern Marianas do not collect this information. In addition, Florida (for births occurring from March 1, 2004, only), Idaho, Kentucky, New Hampshire (for births occurring as of July 19, 2004, only), New York State (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington, which used the 2003 revision of the U.S. Standard Certificate of Live Birth, permitted respondents to select one or more Hispanic origin categories (7,138). Minnesota, which used the 1989 revision of the U.S. Standard Certificate of Live Birth, also allowed the reporting of multiple Hispanic groups in 2004. These 10 revised states account for 13 percent of Hispanic births in the United States. The percentage of records for which Hispanic origin of the parents was not reported in 2004 is shown by state in [Table I](#). Mothers of a specified Hispanic group (i.e., Mexican, Puerto Rican, Cuban, or Central and South American) in combination with one or more other specified Hispanic group were classified as “other Hispanic.” The percentage of Hispanic mothers in the 10 states reporting more than one Hispanic origin group was 1.5 for 2004.

Single, multiple, and bridged race of mother and father

In 1997, the Office of Management and Budget (OMB) issued “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity,” which revised the “1977 Statistical Policy Directive 15, Race and Ethnic Standards for Federal Statistics and Administrative Reporting” (8–10). These documents specify guidelines for collection, tabulation, and presentation of race and ethnicity data within the federal statistical system. The 1997 revised standards

Table I. Percentage of birth records on which specified items were not stated: United States and each state and territory, plus New York City, and the District of Columbia, 2004

[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	4,112,052	0.0	0.2	0.4	13.6	16.0	0.8	14.1
Alabama	59,510	0.0	0.0	0.0	20.8	21.1	0.1	20.8
Alaska	10,338	—	0.9	0.5	9.2	14.2	11.6	20.9
Arizona	93,663	0.0	0.0	0.1	14.7	18.2	1.9	16.8
Arkansas	38,573	—	0.0	0.5	19.0	20.3	0.3	19.1
California	544,843	0.0	0.0	0.4	7.3	8.1	1.4	7.7
Colorado	68,503	—	0.0	0.5	8.1	8.8	0.0	8.8
Connecticut	42,095	0.0	0.1	0.5	10.6	11.8	0.3	10.9
Delaware	11,369	—	0.1	0.3	32.6	33.6	0.7	32.6
District of Columbia	7,933	—	0.0	0.0	35.7	44.1	0.4	35.7
Florida ²	218,053	0.0	0.1	0.2	15.8	24.5	0.3	18.4
Georgia	138,849	0.0	0.0	0.2	17.0	17.7	1.6	18.4
Hawaii	18,281	—	0.1	0.2	8.6	12.3	0.2	8.6
Idaho	22,532	0.0	0.0	0.4	9.2	15.2	1.3	12.1
Illinois	180,778	0.0	0.0	0.2	13.7	15.2	0.1	15.0
Indiana	87,142	0.0	0.1	0.0	13.2	13.2	0.4	13.4
Iowa	38,438	—	—	0.0	14.0	15.5	0.3	15.7
Kansas	39,669	—	0.0	0.1	10.6	11.1	1.4	12.1
Kentucky	55,720	0.0	0.1	0.6	20.1	24.7	0.1	23.3
Louisiana	65,369	0.0	0.0	0.0	19.6	19.7	0.2	19.7
Maine	13,944	—	0.0	0.0	9.2	12.7	0.5	12.8
Maryland	74,628	0.0	0.0	0.1	13.4	19.4	0.1	15.5
Massachusetts	78,484	0.0	—	0.9	7.9	9.4	0.7	8.5
Michigan	129,776	0.0	0.1	0.2	14.6	16.9	2.7	18.6
Minnesota	70,624	—	0.1	0.3	12.1	18.2	1.4	13.9
Mississippi	42,827	0.0	0.1	0.1	20.7	20.7	0.1	20.7
Missouri	77,765	—	0.0	0.3	18.0	19.9	0.1	18.5
Montana	11,519	—	0.1	0.0	9.2	10.6	1.6	11.9
Nebraska	26,332	—	—	—	13.2	14.9	2.5	15.6
Nevada	35,200	—	0.0	0.5	22.4	24.0	1.0	22.8
New Hampshire ²	14,565	—	0.0	0.2	6.4	8.6	3.5	7.6
New Jersey	115,253	0.0	0.1	0.1	7.6	9.0	0.1	7.8
New Mexico	28,384	—	0.0	1.6	19.7	19.6	0.0	19.6
New York (excluding NYC)	130,879	0.0	0.0	0.1	10.8	16.1	0.2	10.9
New York City	119,068	0.0	0.0	0.5	15.4	16.1	0.4	15.6
North Carolina	119,847	0.0	—	0.0	16.2	16.3	0.1	16.3
North Dakota	8,189	—	—	—	9.3	9.5	2.8	12.1
Ohio	148,954	0.4	0.0	0.5	16.2	19.9	0.5	16.9
Oklahoma	51,306	—	0.0	0.0	14.6	17.2	0.3	16.8
Oregon	45,678	—	—	0.1	10.2	4.9	0.3	4.9
Pennsylvania	144,748	0.0	4.6	3.9	6.6	11.0	1.2	5.9
Rhode Island	12,779	—	—	0.2	13.0	14.3	13.8	24.1
South Carolina	56,590	—	0.0	0.1	29.5	33.8	0.1	0.7
South Dakota	11,338	0.0	0.0	0.1	10.4	11.0	0.1	13.4
Tennessee	79,642	0.0	1.2	0.3	16.0	22.2	0.2	15.9
Texas	381,293	0.0	0.0	0.4	14.3	14.7	0.3	14.5
Utah	50,670	0.0	0.0	0.2	9.9	12.9	0.6	10.8
Vermont	6,599	—	—	0.4	7.6	10.0	1.1	10.7
Virginia	103,933	—	0.0	0.1	15.3	17.0	0.1	15.3
Washington	81,747	—	0.1	0.3	9.7	23.6	2.9	15.5
West Virginia	20,880	0.0	0.0	0.1	13.0	13.5	0.2	13.4
Wisconsin	70,146	0.0	0.0	0.1	30.8	30.9	0.1	30.9
Wyoming	6,807	—	0.0	0.1	16.0	16.4	0.3	16.2
Puerto Rico	51,127	—	0.1	—	3.2	4.3	—	—
Virgin Islands	1,574	—	0.3	—	21.0	22.1	4.3	60.7
Guam	3,410	0.1	0.4	0.4	22.3	22.6	1.5	27.8
American Samoa	1,714	0.2	—	3.9	36.4	36.5	—	—
Northern Marianas	1,355	—	0.5	—	8.9	9.0	—	—

See footnotes at end of table.

Table I. Percentage of birth records on which specified items were not stated: United States and each state and territory, 2004—Con.

[By place of residence]

Area	Educational attainment of mother		Live-birth order	Length of gestation	Month prenatal care began		Number of prenatal visits
	Unrevised ³	Revised ⁴			Unrevised ³	Revised ⁴	
Total of reporting areas ¹	2.0	---	0.5	1.0	2.5	---	3.6
Alabama	0.7	---	0.0	0.1	0.7	---	0.2
Alaska	6.7	---	10.4	0.4	6.8	---	10.6
Arizona	1.4	---	0.1	0.1	0.1	---	0.7
Arkansas	1.9	---	0.2	0.2	2.7	---	2.2
California ⁵	2.9	---	0.1	6.8	1.7	---	2.7
Colorado	1.1	---	0.1	0.0	1.8	---	2.0
Connecticut	1.2	---	0.0	0.0	1.5	---	1.0
Delaware	3.1	---	0.2	0.1	2.7	---	0.6
District of Columbia	8.0	---	0.2	0.2	11.1	---	15.8
Florida ²	---	---	0.7	0.1	---	---	4.5
Georgia	3.3	---	0.1	0.1	2.6	---	1.4
Hawaii	1.2	---	0.0	0.2	3.4	---	2.8
Idaho	---	5.1	0.2	0.1	---	1.3	1.6
Illinois	1.6	---	0.3	0.2	5.6	---	5.9
Indiana	1.6	---	0.1	0.0	2.3	---	1.8
Iowa	0.2	---	0.1	0.1	0.2	---	0.3
Kansas	0.4	---	0.0	0.1	0.8	---	0.8
Kentucky	---	4.4	0.1	0.0	---	1.9	1.6
Louisiana	0.1	---	0.1	0.1	0.3	---	0.3
Maine	1.5	---	0.2	0.1	1.2	---	0.3
Maryland	1.5	---	0.1	0.1	1.9	---	2.3
Massachusetts	0.4	---	0.2	0.2	2.0	---	0.7
Michigan	2.6	---	0.4	0.1	3.7	---	4.8
Minnesota	1.9	---	0.5	0.2	4.2	---	5.3
Mississippi	4.3	---	0.1	0.2	5.2	---	3.6
Missouri	1.2	---	0.5	0.2	2.3	---	4.0
Montana	0.6	---	0.1	0.1	0.8	---	0.5
Nebraska	0.1	---	0.0	0.0	0.2	---	0.3
Nevada	2.7	---	1.3	0.6	7.7	---	10.3
New Hampshire ²	---	---	0.5	0.3	---	---	2.8
New Jersey	2.2	---	0.1	0.1	2.0	---	1.0
New Mexico	3.2	---	1.0	0.3	6.0	---	6.3
New York (excluding NYC)	---	7.5	2.0	0.1	---	4.5	6.0
New York City	4.5	---	0.0	0.0	5.9	---	0.7
North Carolina	0.5	---	0.0	0.0	1.0	---	0.8
North Dakota	0.3	---	0.1	0.2	1.1	---	0.8
Ohio	2.4	---	0.3	0.1	4.9	---	9.1
Oklahoma	0.5	---	0.2	0.2	2.2	---	2.2
Oregon	2.9	---	0.0	0.0	1.6	---	0.2
Pennsylvania	---	3.0	1.3	0.8	---	6.7	9.6
Rhode Island	2.5	---	2.0	0.1	6.0	---	10.7
South Carolina	---	5.3	0.0	0.1	---	1.2	0.8
South Dakota	0.1	---	0.0	0.0	0.4	---	0.4
Tennessee	---	0.8	0.9	0.5	---	9.6	8.2
Texas	1.4	---	0.7	0.3	1.5	---	3.8
Utah	1.8	---	0.3	0.0	2.6	---	2.8
Vermont	5.9	---	0.2	0.0	8.3	---	0.6
Virginia	2.3	---	0.0	0.0	1.2	---	1.7
Washington	---	3.2	2.8	0.3	---	17.1	16.2
West Virginia	2.5	---	0.0	0.1	3.8	---	0.7
Wisconsin	0.4	---	0.0	0.0	0.3	---	0.5
Wyoming	1.1	---	0.0	0.0	0.8	---	0.5
Puerto Rico	0.3	---	0.1	0.0	0.2	---	0.1
Virgin Islands	1.0	---	1.3	—	0.1	---	2.6
Guam	1.4	---	2.3	0.1	1.1	---	1.5
American Samoa	---	---	—	---	---	---	---
Northern Marianas	8.1	---	5.4	0.7	4.4	---	4.0

See footnotes at end of table.

Table I. Percentage of birth records on which specified items were not stated: United States and each state and territory, 2004—Con.

[By place of residence]

Area	Birthweight	5-minute apgar score	Weight	Tobacco use		Method of delivery ⁶
				Unrevised ³	Revised ⁴	
Total of reporting areas ¹	0.1	0.5	5.9	1.1	---	0.4
Alabama	0.1	0.2	1.6	0.6	---	0.7
Alaska	0.3	0.9	8.7	1.4	---	0.3
Arizona	0.1	0.4	12.5	1.7	---	0.4
Arkansas	0.1	3.2	8.9	1.5	---	0.5
California	0.0	---	---	---	---	0.0
Colorado	0.0	0.3	3.0	0.2	---	0.0
Connecticut	0.0	0.2	1.1	0.7	---	0.2
Delaware	0.1	0.2	1.1	2.5	---	0.0
District of Columbia	0.1	0.6	13.7	0.1	---	0.1
Florida ²	0.0	0.3	8.5	---	---	0.2
Georgia	0.0	0.4	6.5	1.4	---	0.6
Hawaii	0.1	0.5	13.3	0.1	---	0.5
Idaho	0.0	0.6	8.1	---	3.8	0.2
Illinois	0.0	0.3	6.4	0.3	---	0.6
Indiana	0.4	0.3	2.2	1.2	---	0.6
Iowa	0.1	0.3	0.7	0.1	---	0.8
Kansas	0.0	0.8	0.2	0.1	---	0.3
Kentucky	0.2	0.6	2.0	---	4.3	0.3
Louisiana	0.1	0.4	4.4	0.2	---	0.2
Maine	0.1	0.2	0.9	1.2	---	0.3
Maryland	0.0	0.3	3.1	0.4	---	0.4
Massachusetts	0.2	0.2	0.9	0.3	---	0.3
Michigan	0.1	0.3	7.1	2.9	---	0.6
Minnesota	0.0	0.3	10.4	2.3	---	0.9
Mississippi	0.1	0.4	5.7	0.4	---	0.6
Missouri	0.0	0.6	4.2	4.1	---	0.8
Montana	0.1	0.1	1.3	1.0	---	0.3
Nebraska	0.0	0.1	3.1	0.1	---	0.3
Nevada	0.0	1.5	8.9	2.2	---	0.9
New Hampshire ²	0.2	0.4	8.7	---	---	0.5
New Jersey	0.0	0.2	0.9	1.8	---	0.8
New Mexico	0.3	3.7	11.2	1.7	---	0.4
New York (excluding NYC)	0.1	0.5	6.8	---	6.8	0.5
New York City	0.0	0.2	2.0	4.2	---	0.2
North Carolina	0.0	0.3	2.6	0.4	---	0.6
North Dakota	0.2	0.3	2.3	0.5	---	2.3
Ohio	0.0	0.2	3.8	0.9	---	0.8
Oklahoma	0.1	0.9	3.6	0.9	---	1.9
Oregon	0.0	0.4	1.9	2.5	---	0.7
Pennsylvania	0.4	1.2	13.0	---	4.1	0.1
Rhode Island	0.1	0.4	13.7	2.7	---	0.2
South Carolina	0.0	0.2	1.8	---	5.1	0.0
South Dakota	0.0	0.2	0.8	0.1	---	0.6
Tennessee	0.4	3.2	8.4	---	1.0	0.0
Texas	0.1	---	8.1	0.2	---	0.9
Utah	0.0	0.2	4.0	1.0	---	0.5
Vermont	0.3	0.2	2.0	6.2	---	0.1
Virginia	0.1	0.1	3.2	1.1	---	0.6
Washington	0.4	0.4	16.6	---	3.2	0.0
West Virginia	0.0	0.2	2.2	1.9	---	0.3
Wisconsin	0.0	0.4	2.2	0.2	---	0.0
Wyoming	0.0	0.3	1.9	0.5	---	0.3

See footnotes at end of table.

Table I. Percentage of birth records on which specified items were not stated: United States and each state and territory, 2004—Con.

[By place of residence]

Area	Birthweight	5-minute apgar score	Weight	Tobacco use		Method of delivery ⁶
				Unrevised ³	Revised ⁴	
Puerto Rico	0.0	0.1	0.0	—	---	0.0
Virgin Islands	0.6	1.6	13.0	1.5	---	1.7
Guam	0.1	0.6	2.8	1.0	---	0.2
American Samoa	—	---	---	---	---	---
Northern Marianas	0.4	1.5	---	6.4	---	3.4

0.0 Quantity more than zero but less than 0.05.

— Quantity zero.

--- Data not available.

¹Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas.²Florida and New Hampshire implemented the 2003 U.S. Standard Certificate of Live Birth in 2004, but after January 1, 2004.³Includes data based on the 1989 U.S. Standard Certificate of Live Birth; excludes data based on the 2003 U.S. Standard Certificate of Live Birth.⁴Includes data based on the 2003 U.S. Standard Certificate of Live Birth; excludes data based on the 1989 U.S. Standard Certificate of Live Birth.⁵California reports date last normal menses began but does not report clinical estimate of gestation.⁶Not stated levels for states which implemented the 2003 U.S. Standard Certificate of Live Birth are derived from the item "Final route and method of delivery."

NOTE: For levels of missing data for checkbox items see Technical Appendix of the United States, 2004.

incorporated two major changes designed to reflect the changing racial and ethnic profile of the United States. First, the revision increased from four to five the minimum set of categories to be used by federal agencies for identification of race. The 1977 standards required federal agencies to report race-specific tabulations using a minimum set of four single-race categories: American Indian or Alaska Native (AIAN), Asian or Pacific Islander (API), Black, and White. The five categories for race specified in the 1997 standards are: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. The revised standards called for reporting of Asians separately from Native Hawaiians or Other Pacific Islanders. Collection of additional detail on race and ethnicity is permitted, as before, so long as the additional categories can be aggregated into the minimum categories. The revised standards also require federal data collection programs to allow respondents to select *one or more race categories*.

For the 2000 decennial census, the U.S. Census Bureau collected race and ethnicity data in accordance with the 1997 revised standards. However, the National Vital Statistics System, which is based on data collected by the states, will not be fully compliant with the new standards until all of the states revise their birth certificates to reflect the new standards. Thus, beginning with the 2000 data year, the numerators (births) for birth rates are incompatible with the denominators (populations) (see "Population denominators"). In order to compute rates, it is necessary to bridge population data for multiple-race persons to single-race categories. This has been done for birth rates by race presented in this report. Once all states revise their birth registration systems to be compliant with the 1997 OMB standards, the use of bridged populations can be discontinued.

For the 2004 data year, multiple race was reported by Florida (for births occurring from March 1, 2004, only), Idaho, Kentucky, New Hampshire (for births occurring from July 19, 2004, only), New York State (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington, which used the 2003 revision of the U.S. Standard Certificate of Live Birth, as well as California, Hawaii, Michigan (for births at selected facilities only), Minnesota, Ohio, and Utah, which used the 1989 revision of the U.S. Standard Certificate of

Live Birth. These 15 states, which account for 43.0 percent of births in the U.S. in 2004, reported 1.8 percent of the mothers as multiracial, with levels varying from 0.5 percent (New Hampshire) to 34.4 percent (Hawaii). Data from the vital records of the remaining 35 states, the District of Columbia, and New York City followed the 1977 OMB standards in which a single race is reported (8,9). In addition, these areas also report the minimum set of four races as stipulated in the 1977 standards, compared with the minimum of five races for the 1997 standards.

In order to provide uniformity and comparability of the data during the transition period, before multiple-race data are available for all reporting areas, it is necessary to bridge the responses of those who reported more than one race to a single race. The bridging procedure for multiple-race mothers and fathers is based on the procedure used to bridge the multiracial population estimates (see "Population denominators") (10,11). Multiple race is imputed to a single race (one of the following: AIAN, API, black, or white) according to the combination of races, Hispanic origin, sex, and age indicated on the birth certificate of the mother or father. The imputation procedure is described in detail elsewhere (12,13).

As noted previously, the bridging procedure imputes multiple race of mothers to one of the four minimum races stipulated in the 1977 OMB standards, that is, AIAN, API, black, or white. Mothers of a specified API subgroup (i.e., Chinese, Japanese, Hawaiian, or Filipino) in combination with another race (i.e., AIAN, black, or white) or another API subgroup cannot be imputed to a single API subgroup. API mothers are disproportionately represented in the 15 states reporting multiple race (54.8 percent in 2004). For this report, data are not shown for the specified API subgroups because the bridging technique cannot be applied in this detail (14). However, data for the API subgroups, reported alone or in combination with other races or API subgroups, are available in the 2004 Natality public-use data file. In addition, a report on births in 2003 and 2004 to multiple-race women is forthcoming.

Race of mother is reported by 35 states, the District of Columbia, and New York City in at least eight single-race categories: White, Black, American Indian or Alaska Native, Chinese, Japanese, Hawaiian,

Filipino, and “other Asian or Pacific Islander” (API). Of these, six States (Illinois, Missouri, New Jersey, Texas, Virginia, and West Virginia) and New York City report data on the expanded API subgroups included in the “other API category” (Asian Indian, Korean, Samoan, Vietnamese, Guamanian, and remaining API). Finally, the 15 states which report multiple-race data (California, Florida, Hawaii, Idaho, Kentucky, Michigan, Minnesota, New Hampshire, New York State (excluding New York City), Ohio, Pennsylvania, South Carolina, Tennessee, Utah, and Washington) report a minimum of 14 categories (White, Black, American Indian or Alaska Native, Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, other Asian, Hawaiian, Guamanian, Samoan, and other Pacific Islander). For this report, as discussed above, the multiple-race combinations (for example, White and AIAN or Black and Chinese) were bridged to one of four broad categories (bridged White, bridged Black, bridged AIAN, and bridged API). Detailed data on race (single multiple) as reported in the 15 states are available on the 2004 natality public-use file.

In 2004, race of mother was not reported for 0.9 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 0.7 percent of births in 2004.

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. The reasons for this change are summarized in the Technical Appendix (7).

Trend data by race shown in this report are by race of mother for all years beginning with the 1980 data year. Text references to white births and white mothers or black births and black mothers are used interchangeably for ease in writing.

Marital status

National estimates of births to unmarried women are based on two methods of determining marital status. For 1994–96, 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) that use inferential procedures to compile birth statistics by marital status in 2004, a birth is inferred as nonmarital if either 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 (34,139).

The mother's marital status was not reported in 2004 on 0.04 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.

Education

In this report, data on educational attainment of the mother based on the 2003 revision of the U.S. Standard Certificate of Live Birth (revised) are presented separately from those based on the 1989 revision of the U.S. Standard Certificate of Live Birth (unrevised). The revised item asks for the highest degree or level of school completed at the time of birth (e.g., high school diploma, bachelor's degree, etc.), whereas the 1989 standard certificate item asks for the highest grade (i.e., year) completed at the time of birth. This change in format has resulted in data that are not comparable among revisions. Information on educational attainment for Florida and New Hampshire, which revised in 2004, but after January 1, are excluded from all tabulations. See earlier section on “The 1989 and 2003 Revisions of the U.S. Standard Certificates of Live Birth.”

Tobacco use

In this report, data on tobacco use during pregnancy based on the 2003 revision of the U.S. Standard Certificate of Live Birth (revised) are presented separately from those based on the 1989 revision of the U.S. Standard Certificate of Live Birth (unrevised). The revised certificate asks for the number of cigarettes smoked at different intervals before and during pregnancy. In comparison, the 1989 standard certificate asked for “Tobacco use during pregnancy,” “yes/no,” and the average number of cigarettes per day with no specificity on timing during pregnancy. As a result, revised data are not comparable to unrevised data and are presented separately. California did not report tobacco use in 2004; tobacco use data are also excluded for the two states Florida and New Hampshire, which revised in 2004, but after January 1, 2004. See earlier section on “The 1989 and 2003 Revisions of the U.S. Standard Certificates of Live Birth.”

Prenatal care

Data on the month that prenatal care began based on the 2003 U.S. Standard Certificate of Live Birth (revised) are presented separately from those based on the 1989 revision of the U.S. Standard Certificate of Live Birth (unrevised). Substantive changes in both question wording and the sources for this information have resulted in data that are not comparable among revisions. The wording of the prenatal care item was modified to “Date of first prenatal visit” from “Month prenatal care began.” In addition, the 2003 revision process resulted in recommendations that the prenatal care information be gathered from the prenatal care or medical records, whereas the 1989 revision did not recommend a source for these data. Prenatal care data are excluded for the two states Florida and New Hampshire, which revised in 2004, but after January 1. See earlier section on “The 1989 and 2003 Revisions of the U.S. Standard Certificates of Live Birth.”

Method of delivery

Several rates are computed for method of delivery. The overall cesarean delivery rate or *total cesarean* rate is computed as the

percentage of all births that were delivered by cesarean section. The *primary cesarean* rate is a measure that 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 the sum of primary cesareans and vaginal births without previous cesarean. 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 delivery.

Despite substantive changes between the 1989 and 2003 revisions of the birth certificate to the method of delivery item, data for revised and unrevised states are combined for all national figures shown in this report. The numbers and percentages of total vaginal and total cesarean deliveries (e.g., the total cesarean delivery rate) appear to be very consistent between revisions. However, information on whether the delivery is a VBAC, primary cesarean, or repeat cesarean appears to be less comparable. In brief, data from revised states show higher-than-expected VBAC and primary cesarean rates and lower-than-expected repeat cesarean rates. These discontinuities are likely due to wording and formatting changes to the method of delivery item on the 2003 Revision of the U.S. Standard Certificate of Live Birth. The changes to the method of delivery item appear to have a small impact (2 to 3 percent) on the national primary and VBAC rates shown in this report. However, comparisons of VBAC, primary, and repeat cesarean deliveries data based on revised and unrevised data for individual states should be interpreted with caution.

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 post conception 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 (140,141).

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 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 5.9 percent of the births in 2004 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 1,302 births or 0.04 percent of all birth records in 2004. The levels of the adjustments in 2004 data were similar to those

for earlier years (7). Despite these edits substantial incongruities in these data persist; research is ongoing to address these data deficiencies.

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

Computations of percentages, 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 percentages, percent distributions, and medians were computed. The percentage of records with missing information for each item is shown by state in [Table I](#). An asterisk (*) is shown in place of any derived statistic based on fewer than 20 births in the numerator.

Population denominators

Birth and fertility rates for 2004 shown in [Tables A, B, 1, 3–5, 7–9, 11, 14, 15, and 21](#) are based on populations estimated from the 2000 census, as of July 1, 2004. These populations are shown in [Tables II and III](#). The population estimates have been provided by the U.S. Census Bureau (16) and are based on the 2000 census counts by age, race, and sex, which have been modified to be consistent with the Office of Management and Budget (OMB) racial categories as of 1977 and historical categories for birth data. The modification procedures are described in detail elsewhere (10,11,142,143).

Birth and fertility rates by state shown in [Tables B and 11](#) are based on state-level population estimates projected from the 2000 census provided by the U.S. Census Bureau (16). 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 16](#) are based on monthly population estimates also based on the 2004 estimates. Rates for unmarried women shown in [Tables 18 and 19](#) are based on distributions of the population by marital status averaged over a 3-year period for 2003–05 as reported by the U.S. Census Bureau in the March Current Population Survey for each year (35–37), which have been adjusted to July 2004 population levels (16) by the Division of Vital Statistics, NCHS (34,139). Birth and fertility rates for the Hispanic population, shown in [Tables 5, 7, 8, 9, and 15](#), are based on estimates

Table II. Estimated total population by race, and estimated female population by age and race: United States, 2004

[Populations estimated as of July 1]

Age	All races	White	Black	American Indian or Alaska Native	Asian or Pacific Islander
Total population	293,655,404	238,268,102	38,600,765	3,148,484	13,638,053
Female population					
15–44 years	62,033,402	48,758,090	9,115,649	745,279	3,414,384
10–14 years	10,314,017	7,970,814	1,749,557	149,173	444,473
15–19 years	10,094,408	7,882,326	1,623,541	146,719	441,822
15–17 years	6,074,126	4,730,761	991,660	88,794	262,911
18–19 years	4,020,282	3,151,565	631,881	57,925	178,911
20–24 years	10,168,314	7,948,811	1,569,086	137,971	512,446
25–29 years	9,566,092	7,424,518	1,427,396	115,539	598,639
30–34 years	10,129,814	7,877,175	1,458,754	111,792	682,093
35–39 years	10,481,803	8,290,818	1,472,528	111,698	606,759
40–44 years	11,592,971	9,334,442	1,564,344	121,560	572,625
45–49 years	11,204,882	9,126,191	1,442,853	111,542	524,296

NOTES: These population counts are estimated based on the 2000 census; see “Technical Notes.” Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. The multiple-race population estimates were bridged to the single-race categories of the 1977 OMB standards for comparability with the birth data; see “Technical Notes.”

SOURCE: U.S. Census Bureau. See reference 16.

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, 2004

[Populations estimated as of July 1]

Age	Hispanic					Non-Hispanic		
	Total	Mexican	Puerto Rican	Cuban	Other Hispanic ¹	Total ²	White	Black
Total population	41,322,073	27,239,634	3,796,668	1,615,256	8,670,410	252,333,331	199,775,516	36,921,613
Female population								
15–44 years	9,675,716	6,342,530	895,458	280,672	2,157,027	52,357,686	39,792,952	8,690,960
10–14 years	1,849,239	1,287,209	192,908	47,645	321,475	8,464,778	6,270,957	1,661,367
15–19 years	1,610,907	1,063,976	169,131	36,712	341,085	8,483,501	6,398,834	1,550,705
15–17 years	978,802	643,799	101,899	25,850	207,252	5,095,324	3,830,286	946,674
18–19 years	632,105	420,177	67,232	10,862	133,833	3,388,177	2,568,548	604,031
20–24 years	1,692,204	1,152,713	140,572	32,568	366,353	8,476,110	6,383,764	1,495,431
25–29 years	1,746,376	1,187,946	149,086	42,753	366,575	7,819,716	5,804,787	1,350,322
30–34 years	1,707,611	1,143,451	149,322	46,282	368,555	8,422,203	6,289,881	1,384,303
35–39 years	1,531,559	958,065	144,142	61,685	367,660	8,950,244	6,868,928	1,405,377
40–44 years	1,387,059	836,379	143,205	60,672	346,799	10,205,912	8,046,758	1,504,822
45–49 years	1,124,013	632,549	121,460	53,200	316,809	10,080,869	8,082,874	1,394,156

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

²Includes races other than white and black.

NOTES: These population counts are estimated based on the 2000 census; see “Technical Notes.” Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. The multiple-race population estimates were bridged to the single-race categories of the 1977 OMB standards for comparability with the birth data; see “Technical Notes.”

SOURCE: U.S. Census Bureau. See reference 144.

of the total Hispanic population as of July 1, 2004 (16). Rates for Hispanic subgroups are based on special population estimates that are presented in Table III in the “Technical Notes.” More information about the populations for Hispanic subgroups is presented elsewhere (137,144).

The populations by race used in this report were produced under a collaborative arrangement with the U.S. Census Bureau and are based on the 2000 census counts. Reflecting the new guidelines issued in 1997 by the OMB, the 2000 census included an option for individuals to report more than one race as appropriate for themselves and household members (9). In addition, the 1997 OMB guidelines called for reporting of Asian persons separately from Native Hawaiians or

other Pacific Islanders. In the earlier 1977 OMB guidelines, data for Asian or Pacific Islander (API) persons were collected as a single group (8). Except for 15 states, birth certificates currently report only one race for each parent in the categories specified in the 1977 OMB guidelines (see “Race and Hispanic origin”). In addition, birth certificate data for the unrevised states do not report Asians separately from Native Hawaiians or other Pacific Islanders. Thus, birth certificate data by race (the numerators for birth and fertility rates) currently are largely incompatible with the population data collected in the 2000 census (the denominators for the rates).

To produce birth and fertility rates for 1991–2004, it was necessary to bridge the reported population data for multiple-race persons back

to single-race categories. In addition, the 2000 census counts were modified to be consistent with the 1977 OMB racial categories, that is, to report the data for Asian persons and Native Hawaiians or other Pacific Islanders as a combined category API (27,143). The procedures used to produce the bridged populations are described in separate publications (10,11). Beginning with births occurring in 2003, several states began reporting multiple-race data. Once all states revise their birth certificates to be compliant with the 1997 OMB standards, the use of bridged populations can be discontinued.

Populations used to calculate the rates for 1991–99 are based on population estimates as of July 1 of each year and were produced by the U.S. Census Bureau, with support from the National Cancer Institute (10,16,27). These intercensal population estimates for 1991–99 are revised based on the April 1, 2000, census. The rates for 1990 and 2000 are based on populations from the censuses in those years as of April 1.

Readers should keep in mind that the population data used to compile birth and fertility rates by race and ethnicity shown in this report are based on special estimation procedures, and are not actual counts. This is the case even for the 2000 populations that are based on the 2000 census. As a result, the estimation procedures used to develop these populations may contain some errors. Smaller populations, for example, American Indian or Alaska Natives (AIAN), are likely to be affected much more than larger populations by potential measurement error (10). While the nature and magnitude of error is unknown, the potential for error should be kept in mind when evaluating trends and differentials. As more accurate information becomes available, further revisions of the estimates may be necessary.

Computation of rates

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

In computing birth and fertility rates for the Hispanic population, births with origin of mother not stated are included with non-Hispanic births rather than being distributed. Thus, rates for the U.S. Hispanic population are underestimates of the true rates to the extent that the births with origin of mother not stated (0.8 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.

An asterisk (*) is shown in place of any derived rate based on fewer than 20 births in the numerator, or a population denominator of less than 50 (unweighted) for decennial years and 75,000 (weighted) for all other years for the Hispanic subgroups. Rates based on populations below these minimum levels lack sufficient reliability for analytic purposes. These guidelines follow the suggestions of the U.S. Census Bureau (145,146). The population estimates for some Hispanic subgroups, especially Cubans, often do not meet the above minimum. Therefore, age-specific rates are not shown for some groups. However, summary fertility measures (i.e., crude birth rate, general fertility rate, and total fertility rate) are possible and these have been included.

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 14 percent of the birth certificates, one-quarter of these were on records where the mother is a teenager. This distribution procedure is done separately by race. The resulting distributions are summed to form a composite frequency distribution that is the basis for computing birth rates by age of father. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded.

Graphic presentation

Trend data shown in [Figures 3, 4, and 7](#) 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.

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 (i.e., the comparison of numbers, rates, and percentages over time, for different areas, or among 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 can be 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 percentage 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 percentages can be estimated from the actual number of vital events. Procedures differ for rates and percentages 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 (147). Confidence limits are estimated using the following formulas:

$$\text{Lower limit} = B \times L$$

$$\text{Upper limit} = B \times U$$

where

B = number of births

L = the value in Table IV that corresponds to the number B

U = the value in Table IV that corresponds to the number B

Example

Suppose that the number of first births to American Indian or Alaska Native (AIAN) women aged 40–44 years was 47. The confidence limits for this number would be:

$$\begin{aligned}\text{Lower limit} &= 47 \times 0.73476 \\ &= 35\end{aligned}$$

$$\begin{aligned}\text{Upper limit} &= 47 \times 1.32979 \\ &= 63\end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to AIAN women aged 40–44 years 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:

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

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

where

B = number of births

Example

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

$$\begin{aligned}\text{Lower limit} &= 14,108 - (1.96 \times \sqrt{14,108}) \\ &= 14,108 - 233 \\ &= 13,875\end{aligned}$$

$$\begin{aligned}\text{Upper limit} &= 14,108 + (1.96 \times \sqrt{14,108}) \\ &= 14,108 + 233 \\ &= 14,341\end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to white women aged 40–44 years 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, 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 (or the population denominator is less than 50 for decennial years and 75,000 for all other years for the Hispanic subgroups), an asterisk (*) is shown in place of the rate because there were too few births or the population is too small to compute a statistically reliable rate. When the number of events in the numerator is greater than 20 but less than 100 (and the population denominator for the Hispanic subgroups is above the minimum), the confidence interval for a rate can be estimated using the two formulas that follow and the values in Table IV.

$$\text{Lower limit} = R \times L$$

$$\text{Upper limit} = R \times U$$

where

R = birth rate

L = the value in Table IV that corresponds to the number of events B

U = the value in Table IV that corresponds to the number of events B

Example

Suppose that the first birth rate for AIAN women aged 40–44 years was 0.50 per thousand, based on 47 births in the numerator. Using Table IV:

$$\text{Lower limit} = 0.50 \times 0.73476 = 0.37$$

$$\text{Upper limit} = 0.50 \times 1.32979 = 0.66$$

This means that the chances are 95 out of 100 that the actual first birth rate for AIAN women aged 40–44 years 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 = birth rate

B = number of births

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			

Example

Suppose that the first birth rate for white women aged 40–44 years was 1.55 per 1,000, based on 14,108 births in the numerator. Therefore, the 95-percent confidence interval would be:

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

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

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

Computing 95-percent confidence intervals for percentages

In many instances we need to compute the confidence intervals for percentages. Percentages derive from a binomial distribution. As with birth rates, an asterisk (*) will be shown for any percentage that is based on fewer than 20 births in the numerator. We easily compute a 95-percent confidence interval for a percentage 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 percentage 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 percentage 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:

$$29,682 \times 0.497 = 14,752$$

$$29,682 \times (1 - 0.497) = 29,682 \times 0.503 = 14,930$$

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

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

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

This means that the chances are 95 out of 100 that the actual percentage 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 AIAN women aged 40–44 years was 0.70 per 1,000 in year X and 0.57 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 54 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	0.43	0.74

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

This method of comparing confidence intervals is a conservative test for statistical significance. That is, the difference between two rates may, in fact, be statistically significant even though confidence intervals for the two rates overlap (148). Thus, caution should be observed when interpreting a nonsignificant difference between two rates, especially when the lower and upper limits being compared overlap only slightly.

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.

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

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 aged 40–44 years (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 $1.55 - 1.08 = 0.47$. The statistic is then calculated as follows:

$$\begin{aligned} &1.96 \times \sqrt{\frac{1.08^2}{1,535} + \frac{1.55^2}{14,108}} \\ &= 1.96 \times \sqrt{([1.166/1,535] + [2.403/14,108])} \end{aligned}$$

$$\begin{aligned}
 &= 1.96 \times \sqrt{0.00076 + 0.00017} \\
 &= 1.96 \times \sqrt{0.00093} \\
 &= 1.96 \times 0.03 \\
 &= 0.06
 \end{aligned}$$

The difference between the rates (0.47) is greater than this statistic (0.06). Therefore, the difference is statistically significant at the 95-percent confidence level.

Testing differences between two percentages

When testing the difference between two percentages, both percentages 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 percentages meet these conditions then the difference between the two percentages 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 percentages.

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

where

B_1 = number of births in the denominator of the first percentage

B_2 = number of births in the denominator of the second percentage

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

p_1 = the first percent divided by 100

p_2 = the second percent divided by 100

Example

Is the percentage 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 percentages (calculations not shown). The difference between the two percentages is $0.502 - 0.497 = 0.005$. The statistic is then calculated as follows:

$$\begin{aligned}
 1.96 \times \sqrt{0.499 \times (0.501) \times (0.000106609)} &= 1.96 \times \sqrt{0.000026652} \\
 &= 1.96 \times 0.005162563 \\
 &= 0.010
 \end{aligned}$$

The difference between the percentages (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 (138).

Testing differences between two means

A previous report details the formula and procedure in testing differences between two means in which both means are based on 100 or more cases (31).

Definitions of medical terms

Maternal and infant health characteristics available from both the 1989 and 2003 revisions of the U.S. Standard Certificate of Live Birth are presented in this report. The definitions below are based on those developed for the 2003 revision of the U.S. Standard Certificate of Live Birth (149). These definitions are similar to, but not the same as those developed for the 1989 revision of the U.S. Standard Certificate of Live Birth. For definitions used for the 1989 revision see "Births: Final Data for 2003." (4).

Risk factors in this pregnancy

Diabetes—Glucose intolerance requiring treatment.

Hypertension, pregnancy-associated—Diagnosis in this pregnancy of elevation of blood pressure above normal for age, gender, and physiological condition.

Hypertension, chronic—Diagnosis prior to the onset of this pregnancy of elevation of blood pressure above normal for age, gender, and physiological condition.

Obstetric procedures and characteristics of labor and delivery

Induction of labor—Initiation of uterine contractions by medical or surgical means for the purpose of delivery before the spontaneous onset of labor (i.e., before labor has begun).

Tocolysis—Administration of any agent with the intent to inhibit preterm uterine contractions to extend the length of the pregnancy.

Meconium, moderate/heavy—Staining of the amniotic fluid caused by passage of fetal bowel contents during labor and/or at delivery that is more than enough to cause a greenish color change of an otherwise clear fluid.

Breech/Malpresentation—Presenting part of the fetus listed as breech, complete breech, frank breech, footling breech.

Precipitous labor—Labor lasting less than 3 hours.

Congenital anomalies

Anencephaly—Partial or complete absence of the brain and skull.

Meningomyelocele/Spina bifida—Meningomyelocele is herniation of meninges and spinal cord tissue. Meningocele (herniation of meninges without spinal cord tissue) should also be included in this category. Both open and closed (covered with skin) lesions should be included. Spina bifida is herniation of the meninges and/or spinal cord tissue through a bony defect of spine closure.

Omphalocele/Gastroschisis—Omphalocele is a defect in the anterior abdominal wall, accompanied by herniation of some abdominal organs through a widened umbilical ring into the umbilical stalk. Gastroschisis is an abnormality of the anterior abdominal wall, lateral to the umbilicus, resulting in herniation of the abdominal contents directly into the amniotic cavity.

Cleft lip/palate—Cleft lip is incomplete closure of the lip. It may be unilateral, bilateral, or median. Cleft palate is incomplete fusion of the palatal shelves. It may be limited to the soft palate, or it may extend into the hard palate.

Down's syndrome—The most common chromosomal defect (trisomy 21).

Related reports

Many of the topics discussed in this report are covered in more analytic detail in other reports published by NCHS. Topics include mean age of mother (31); Hispanic origin births (137,150); twin births (151); trends in teenage and young teen births (15); cesarean deliveries (81,152), attendant at birth, place of delivery, and obstetric procedures (153); births to unmarried mothers (34,139); trends in pregnancies and pregnancy rates (19,20), trends in smoking (154); trends in characteristics of births by state (32); birth outcome (155,156); and trends in reproduction and intrinsic rates (157).

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National Center for Health Statistics

Director

Edward J. Sondik, Ph.D.

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Jennifer H. Madans, Ph.D.

Michael H. Sadagursky

Division of Vital Statistics

Director, Charles J. Rothwell

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road
Hyattsville, MD 20782

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