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Births: Final Data for 2013

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Abstract

Objectives—This report presents 2013 data on U.S. births according to a wide variety of characteristics. Data are presented for maternal age, live-birth order, race and Hispanic origin, marital status, attendant at birth, method of delivery, period of gestation, birthweight,

and plurality. Birth and fertility rates are presented by age, live-birth order, race and Hispanic origin, and marital status. Selected data by mother's state of residence and birth rates by age and race of father also are shown. Trends in fertility patterns and maternal and infant characteristics are described and interpreted.

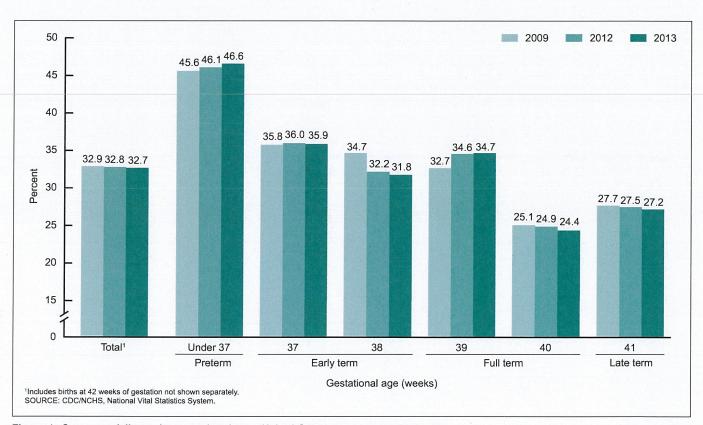


Figure 1. Cesarean delivery, by gestational age: United States, 2009, 2012, and 2013





Methods—Descriptive tabulations of data reported on the birth certificates of the 3.93 million U.S. births that occurred in 2013 are presented.

Results—A total of 3,932,181 births were registered in the United States in 2013, down less than 1% from 2012. The general fertility rate declined to 62.5 per 1,000 women aged 15–44. The teen birth rate fell 10%, to 26.5 per 1,000 women aged 15–19. Birth rates declined for women in their 20s and increased for most age groups of women aged 30 and over. The total fertility rate (estimated number of births over a woman's lifetime) declined 1% to 1,857.5 per 1,000 women. Measures of unmarried childbearing were down in 2013 from 2012. The cesarean delivery rate declined to 32.7%. The preterm birth rate declined for the seventh straight year to 11.39%, but the low birthweight rate was essentially unchanged at 8.02%. The twin birth rate rose 2% to 33.7 per 1,000 births; the triplet and higher-order multiple birth rate dropped 4% to 119.5 per 100,000 total births.

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

Highlights

- A total of 3,932,181 births were registered in the United States in 2013, down less than 1% from 2012. The number of births declined for non-Hispanic white and Hispanic women but did not appreciably change for non-Hispanic black women from 2012 to 2013.
- The general fertility rate declined 1% in 2013 to 62.5 births per 1,000 women aged 15–44, reaching another record low for the United States. The total fertility rate also declined 1% in 2013, to 1,857.5 births per 1,000 women.
- The birth rate for teenagers aged 15–19 declined 10% in 2013 from 2012, to 26.5 births per 1,000 teenagers aged 15–19, another historic low for the nation; rates declined for teenagers in nearly all race and Hispanic origin groups.
- Birth rates also declined for women in their 20s to record lows in 2013. Rates rose for women in their 30s and late 40s in 2013 from 2012; the rate for women in their early 40s was unchanged.
- The mean age of mother at first birth rose again, to 26.0 years in 2013, up from 25.8 years in 2012.
- The birth rate for unmarried women fell for the fifth consecutive year, to 44.3 per 1,000 unmarried women 15–44 in 2013. The number of nonmarital births was 1% lower in 2013 (1,595,873) than in 2012. The percentage of births to unmarried women was down slightly, to 40.6% in 2013.
- The cesarean delivery rate, which had been stable at 32.8% for 2010–2012, declined to 32.7% of all U.S. births in 2013. Declines in cesarean deliveries were seen at 38, 40, and 41 completed weeks of gestation in 2013 from 2012 (Figure 1).
- The preterm birth rate (under 37 weeks) declined again in 2013, to 11.39%. This rate has been dropping steadily since 2006, for a total decline of 11%. Preterm births in 2013 were down from 2012 for non-Hispanic white, non-Hispanic black, and Hispanic births.
- The 2013 rate of low birthweight (less than 2,500 grams) was 8.02%, essentially unchanged from 2012 but 3% lower than the 2006 high (8.26%).
- The twin birth rate reached a new high for the nation of 33.7 per 1,000 total births, up 2% from 2012. The triplet and higher-order

multiple birth rate (triplet/+) dropped another 4% in 2013 to 119.5 per 100,000 births and has fallen more than one-third since 1998 (193.5).

Introduction

This report presents detailed data on numbers and characteristics of births in 2013, birth and fertility rates, maternal demographic and health characteristics, place of and attendant at birth, and infant health characteristics. A report of preliminary birth statistics for 2013 presented data on selected topics based on a substantial sample (99.85%) of 2013 births (1). In addition to the tabulations included in this report, more detailed analysis is possible by using the natality public-use file issued each year. The data file may be downloaded from: http://www.cdc.gov/nchs/data_access/Vitalstatsonline.htm (2). The public-use file does not include geographic detail; a file with this information may be available upon special request (3). Birth data may also be accessed via VitalStats, a data access and analysis tool (4), which includes birth data for 1990–2013, with more than 100 variables including geographic information by state and for counties with populations of 100,000 or more.

1989 and 2003 revisions of U.S. Standard Certificate of Live Birth

This report includes 2013 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 (revised). The 2003 revision is described in detail elsewhere (5,6).

Forty-one states, the District of Columbia (DC), and three territories implemented the revised birth certificate as of January 1, 2013. The 41 revised states and DC represent 90% of all 2013 U.S. births. The revised reporting areas are: Alaska, California, Colorado, Delaware, DC, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin, Wyoming, Guam, Northern Marianas, and Puerto Rico. One state, Maine, implemented the revised birth certificate in 2013 but after January 1.

This report presents information on selected data items comparable between the 1989 and 2003 birth certificate revisions. Sources of information on topics comparable between revisions but not presented in this report (e.g., day of birth, month of birth, and congenital anomalies) can be found in the Internet tables (see List of Internet Tables) and in the public-use microdata files for each data year (2). Recent reports and data releases present information on items exclusive to the 2013 birth certificate revision and not previously available from the National Center for Health Statistics (e.g., use of infertility therapies, WIC food, source of payment for the delivery, maternal morbidity, and breastfeeding) for 2009–2013 (2,7–9). Recent reports assess the quality of the 2003 revised medical and health birth certificate data (9,10). Information on these and other items exclusive to the 2003 revision are shown in the "User Guide to the 2013 Natality Public Use File" (11).

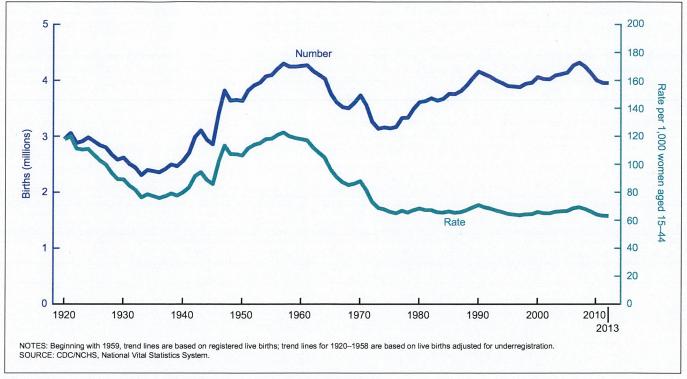


Figure 2. Live births and general fertility rates: United States, 1920-2013

Methods

Data shown in this report are based on 100% of the birth certificates registered in all states and DC. More than 99% of births occurring in this country are registered (11). Tables showing data by state also provide separate information for Puerto Rico, Virgin Islands, Guam, American Samoa, and Commonwealth of the Northern Marianas. These areas, however, 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 the categories of non-Hispanic white, non-Hispanic black, and Hispanic. Data for births are also presented in some tables for American Indian or Alaska Native (AIAN) and Asian or Pacific Islander (API); for specific Hispanic groups Mexican, Puerto Rican, Cuban, and Central and South American; and for other and unknown Hispanic. Data for AIAN and API births are not shown separately by Hispanic origin because the majority of these populations are non-Hispanic. Text references to black births and black mothers or to white births and white mothers are used interchangeably for ease in writing; see Technical Notes.

The 2003 revision of the U.S. Standard Certificate of Live Birth allows the reporting of more than one race (multiple races) for each parent (5) in accordance with the revised standards issued by the Office of Management and Budget (OMB) in 1997 (12). See Technical Notes and the User Guide (11) for detailed information on the 2012 multiple-race reporting area and methods used to bridge responses to a single race for those who report more than one race.

In this report, the total number of births includes births to women up to age 64. In tables that include age of mother, the oldest age groups shown (40–54, 45–49, 45–54, or 50–54) include births to mothers up to age 64. For information on levels of incomplete reporting by state, see Table I and the User Guide (11). For information on the measurement of data items shown in this report and the Internet tables, imputation techniques used, computation of derived statistics, and definitions of terms, see the User Guide (11).

The 2013 population estimates for the specific Hispanic population groups derived from the U.S. Census Bureau's American Community Survey were not available as of the preparation of this report. Accordingly, birth and fertility rates for these groups are not shown in this report but will be available in forthcoming expanded Tables 5, 7, 8, and 14. For more information on populations for Hispanic groups, see Technical Notes and the User Guide (11).

Demographic Characteristics

Births and birth rates

Number of births

The number of registered births in the United States for 2013 was 3,932,181, less than 1% fewer births than in 2012 (3,952,841) (Tables 1 and 5; Figure 2). Since 2007, the number of births has declined, but the pace of decline has slowed since 2010.

Among the three largest race and Hispanic origin groups, births declined less than 1% for non-Hispanic white and 1% for Hispanic women from 2012 to 2013, but did not appreciably change for non-

Hispanic black women. The number of births declined for API women, down 3% in 2013, but was essentially stable for AIAN women. Among the specified Hispanic groups, births declined 2% for Mexican women but rose 2% for Puerto Rican and 8% for Cuban women. The number of births was essentially unchanged for Central and South American women in 2013.

Fertility rate

The general fertility rate (GFR) for the United States in 2013 was 62.5 births per 1,000 women aged 15–44, down 1% from 2012 (63.0) to another record low rate for the nation (Tables 1 and 5; Figure 2). Since 2007, the fertility rate has declined, but as with the number of births, the pace of decline has slowed since 2010.

The GFR declined for two of the three largest race and Hispanic origin groups in 2013 from 2012, down 1% for non-Hispanic black and 2% for Hispanic women. However, the rate rose less than 1% for non-Hispanic white women. The GFR declined for AIAN and API women as well, down 1% and 5%, respectively.

Age of mother

Birth rates declined for all women under age 30 in 2013 from 2012, rose for women aged 30–39 and 45–49, and were unchanged for women aged 40–44.

Teenagers—The **teen birth rate** for the United States in 2013 was 26.5 births per 1,000 teenagers aged 15–19, down 10% from 2012 (29.4) and another historic low for the nation (Tables A, 3, 4, 7, and 8; Figure 3) (13–16). The rate has fallen 57% since 1991 (61.8), when the long-term decline in births to teenagers began (13). The number of births to teenagers aged 15–19 was 273,105 in 2013, down 11% from 2012 (305,388) and 47% from 1991 (519,577).

Birth rates for teenagers aged 15–17 and 18–19 in 2013 were 12.3 births per 1,000 for the younger age group and 47.1 births per 1,000 for the older group, down 13% and 8% from 2012, respectively, and record lows for both groups. Since 1991, the rates for these two groups have fallen 68% and 50%, respectively. The birth rate for teenagers aged 10–14 declined to 0.3 births per 1,000 women in 2013, a record low, from 0.4 in 2012.

Among race and ethnicity groups, rates for teenagers aged 15–19 declined for all groups in 2013 from 2012, with rates down 9% for non-Hispanic white, 10% for Hispanic and API, and 11% for non-Hispanic black and AIAN teenagers. Birth rates for teenagers aged 15–17 and 18–19 also declined for all racial and ethnicity groups in 2013.

Women in their 20s—The birth rate for women aged 20–24 in 2013 was 80.7 births per 1,000 women, down 3% from 2012 (83.1) and another record low for the nation (Tables 3, 4, 7, 8, and 12). The rate for women in this age group has declined 23% since 2007. The number of births to women in their early 20s declined 2% in 2013 from 2012 (14). The rate for women aged 25–29 was 105.5 births per 1,000 women, down 1% from 2012 (106.5) and a record low as well. The rate for women in this age group has declined steadily, by 8% overall, since 2008. The number of births to women in their late 20s also declined in 2013, down slightly (less than 1%) from 2012 (Tables 2 and 6).

Women in their 30s—The birth rate for women aged 30–34 was 98.0 births per 1,000 women in 2013, up 1% from 2012 (97.3). The

number of births to women in this age group increased 2% in 2013 from 2012. The **birth rate for women aged 35–39** was 49.3 births per 1,000 women in 2013, up 2% from 2012 (48.3). The 2013 rate is the highest since 1964 (16). The number of births to women aged 35–39 increased 2% in 2013 (Tables 2 and 6) (14).

Women in their 40s—The birth rate for women aged 40–44 was 10.4 births per 1,000 women in 2013, unchanged from 2012 (Tables 4 and 8). The rate for women in this age group generally has risen over the last three decades (Figure 4). The number of births to women in their early 40s was essentially unchanged from 2012 to 2013. The birth rate for women aged 45–49 (which includes births to women aged 50 and over) was 0.8 births per 1,000 women in 2013, up from 0.7 in 2012. The number of births to women aged 45–49 rose 14% in 2013 from 2012.

Women aged 50 and over—There were 677 births to women aged 50 and over in 2013, up from 600 in 2012 (Tables 2 and 6) (14). The number of births to women in this age group has generally increased since 1997 (144), when data for women aged 50 and over became available again. The birth rate for women aged 50–54 was 0.7 births per 10,000 women in 2013, up from 0.5 in 2012 (data not shown in tables). Because of the small number of births to women in this age group, the birth rate for women aged 50–54 is expressed per 10,000 women. For rates shown elsewhere in this report, births to women aged 50 and over are included with births to women aged 45–49 when computing birth rates by age of mother (the denominator for the rate is women aged 45–49). The increase in birth rates for women aged 35 and over during the last 20 years has been linked, in part, to the use of fertility-enhancing therapies (17,18).

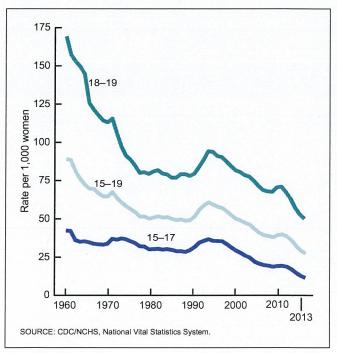


Figure 3. Birth rates for teenagers aged 15–19, by age group: United States, 1960–2013

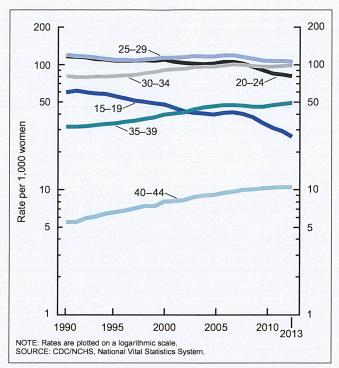


Figure 4. Birth rates, by selected age of mother: United States, 1990-2013

Live-birth order

The first-birth rate for the United States was 24.7 births per 1,000 women aged 15–44 in 2013, down 2% from 2012 (25.2) (Tables 3, 7, and 9). First-birth rates declined for all women under age 30 (down 10% for ages 15–19, 3% for ages 20–24, and 1% for ages 25–29), rose for women aged 30–39 (up 1% for ages 30–34 and 2% for ages 35–39), and were unchanged for women aged 40 and over.

Another useful measure for interpreting childbearing patterns is the **mean age at first birth**—the arithmetic average of the age of mothers at the time of birth, which is computed directly from the frequency of first births by age of mother. The mean age of mothers giving birth in 2013 was 26.0 years, up from 25.8 years in 2012 and a record high for the nation (Tables 13, 14, and I–1) (16,19,20). The increase in the mean age in 2013 reflects, in part, the decline in first births to women in their teens and 20s and the rise in first births to women in their 30s and late 40s.

In 2013, mean age at first birth varied by race and Hispanic origin, from 22.9 years for AIAN women, to 29.4 years for API women. Average ages at first birth for the three largest race and Hispanic origin groups were 23.9 years for non-Hispanic black, 24.0 years for Hispanic, and 26.8 years for non-Hispanic white women (Tables 13 and 14). Among the specified Hispanic groups, average ages ranged from 23.4 years for Mexican women to 26.7 years for Cuban women. Average age at first birth increased for women in nearly all race and Hispanic origin groups in 2013 from 2012, with the exception of Cuban women, for whom the average age was essentially unchanged.

Total fertility rate

The total fertility rate (TFR) for the United States in 2013 was 1,857.5 births per 1,000 women, down 1% from 2012 (1,880.5) (Tables 4, 8, 13, and 14). TFR estimates the number of births that a hypothetical group of 1,000 women would have over their lifetimes, based on age-specific birth rates in a given year. Because it is computed from age-specific birth rates, TFR is age-adjusted and can be compared for populations across time, population groups, and geographic areas. The overall TFR has declined each year from 2007 through 2013 and has declined for nearly all race and Hispanic origin groups for 2012–2013—down 1% for non-Hispanic white and non-Hispanic black, 2% for Hispanic, and 5% for API women. The rate for AIAN women was essentially unchanged.

In 2013, the U.S. TFR was again below replacement, the level at which a given generation can exactly replace itself (generally considered to be 2,100 births per 1,000 women), and has generally been below replacement since 1971 (16). With the exception of Hispanic women, the rates for all other groups were below replacement (Tables 8 and 14).

Births and birth rates by state

From 2012 to 2013, the number of births declined in 12 states (Arizona, California, Georgia, Idaho, Illinois, Kansas, Maryland, New Jersey, New Mexico, New York, Pennsylvania, and Washington), rose in 3 states (Florida, North Dakota, and Texas), and was essentially unchanged in the remaining 35 states and DC. Among U.S. territories, the number of births declined in Puerto Rico, Guam, and Northern Marianas, and was essentially unchanged in American Samoa (Tables 10 and 11).

The GFR declined 1%–4% in 19 states (Arizona, Arkansas, California, Colorado, Georgia, Idaho, Illinois, Kansas, Maryland, Massachusetts, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, South Carolina, Utah, Virginia, and Washington) and DC from 2012 to 2013 and was essentially unchanged in the 31 remaining states. Rates among the states ranged from 50.8 births per 1,000 women aged 15–44 in New Hampshire to 80.9 in Utah (Table 12). The fertility rate declined in Puerto Rico, Guam, and Northern Marianas, and was essentially unchanged in American Samoa.

The TFR declined 1%–5% in 22 states (Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Georgia, Idaho, Illinois, Kansas, Maryland, Massachusetts, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, South Carolina, Utah, Virginia, Washington, and Wisconsin) and DC in 2013 from 2012 and was essentially unchanged in the remaining 28 states. TFRs ranged from 1,528.5 births per 1,000 women in DC to 2,339.5 in Utah (Table 12). TFRs declined for all U.S. territories.

Birth rates for teenagers by state

The birth rate for teenagers aged 15–19 declined in 45 states and DC in 2013 from 2012—with declines ranging from 5% for Arkansas and Kentucky to 17% for DC—and was essentially unchanged in the remaining 5 states (Delaware, Montana, New Hampshire, North Dakota, and Vermont). Rates among the states

Table A. Birth rates for women aged 10–19, by age and race and Hispanic origin of mother: United States, 1991, 2007, and 2011–2013

[Rates per 1,000 women in specified age and race and Hispanic origin group. Population estimated as of July 1]

Age group (years) and race and Hispanic	Year					Percent change			
origin of mother	2013	2012	2011	2007	1991	2012–2013	2007–2013	1991–2013	
10–14									
All races and origins ¹	0.3	0.4	0.4	0.6	1.4	-25	-50	-79	
Ion-Hispanic white ²	0.1	0.2	0.2	0.2	0.5	-50	-50	-80	
on-Hispanic black ²	0.7	0.8	0.9	1.4	4.9	-13	-50	-86	
merican Indian or Alaska Native total ^{2,3}	0.4	0.5	0.5	0.7	1.6	-20	-43	-75	
sian or Pacific Islander total ^{2,3}	0.1	0.1	0.1	0.2	0.8	†	-50	-88	
ispanic ⁴	0.5	0.6	0.7	1.2	2.4	-17	-58	-79	
15–19									
II races and origins ¹	26.5	29.4	31.3	41.5	61.8	-10	-36	-57	
on-Hispanic white ²	18.6	20.5	21.7	27.2	43.4	-9	-32	-57	
on-Hispanic black ²	39.0	43.9	47.3	62.0	118.2	-11	-37	-67	
merican Indian or Alaska Native total ^{2,3}	31.1	34.9	36.1	49.3	84.1	-11	-37	-63	
sian or Pacific Islander total ^{2,3}	8.7	9.7	10.2	14.8	27.3	-10	-41	-68	
ispanic ⁴	41.7	46.3	49.6	75.3	104.6	-10	-45	-60	
15–17									
Il races and origins ¹	12.3	14.1	15.4	21.7	38.6	-13	-43	-68	
on-Hispanic white ²	7.4	8.4	9.0	11.9	23.6	-12	-38	-69	
on-Hispanic black ²	18.9	21.9	24.6	34.6	86.1	-14	-45	-78	
merican Indian or Alaska Native total ^{2,3}	15.9	17.0	18.2	26.1	51.9	-6	-39	-69	
sian or Pacific Islander total ^{2,3}	3.7	4.1	4.6	7.4	16.3	-10	-50	-77	
ispanic ⁴	22.0	25.5	28.0	44.4	69.2	-14	-50	-68	
18–19									
Il races and origins ¹	47.1	51.4	54.1	71.7	94.0	-8	-34	-50	
on-Hispanic white ²	35.0	37.9	39.9	50.4	70.6	-8	-31	-50	
on-Hispanic black ²	67.0	74.1	78.8	105.2	162.2	-10	-36	-59	
merican Indian or Alaska Native total ^{2,3}	53.3	60.5	61.6	86.3	134.2	-12	-38	-60	
sian or Pacific Islander total ^{2,3}	16.1	17.7	18.1	24.9	42.2	-9	-35	-62	
ispanic ⁴	70.8	77.2	81.5	124.7	155.5	-8	-43	-54	

[†] Difference not statistically significant.

ranged from 12.1 births per 1,000 teenagers aged 15–19 in Massachusetts to 43.5 in Arkansas (Table 12). The teen birth rate declined for Puerto Rico and was essentially unchanged for the remaining territories. The wide range in state-specific teen rates is consistent with patterns observed in previous analyses (15,21).

Births to unmarried women

The birth rate for unmarried women declined for the fifth consecutive year in 2013, to 44.3 per 1,000 unmarried women aged 15–44 (Tables B, 15, and 16). The 2013 nonmarital birth rate was 2% lower than in 2012 (45.3) and 14% lower than the peak of 51.8 in 2007 and 2008 (Tables B, 15, and 16).

In contrast to trends among unmarried women, the birth rate for married women, which had declined 5% for 2007–2010, increased 1% in 2013 from 2012, and is up 3% since 2010 (from 84.3 per 1,000 married women aged 15–44 to 86.9) (Table B).

The percentage of all births to unmarried women was 40.6% in 2013, slightly lower than in 2012 (40.7%), and returning to its 2008 level

(Table C). This percentage peaked in 2009 at 41.0%. In 2013, the percentage of nonmarital births varied widely among population groups, from 17.0% for API mothers to 71.5% for non-Hispanic black mothers (Table 15).

The number of nonmarital births dropped from 1,609,619 in 2012 to 1,595,873 in 2013, a 1% decline. The number had risen steadily every year from 2000 through 2008, when it peaked at 1,726,566. The trend since 2008 has been generally downward, with the exception of a slight increase from 2011 to 2012.

The steepest decline in nonmarital birth rates in 2013 from 2012 was for younger teenagers, in the 15–17 age group, falling 13% from 13.7 per 1,000 to 11.9 (Table 16). Nonmarital birth rates also declined for older teenagers aged 18–19, for women in their 20s, and for women aged 40–44. Nonmarital birth rates reached historic peaks for women in their 30s, rising 1% for women aged 30–34 (from 56.3 in 2012 to 56.6 in 2013) and 3% for women aged 35–39 (from 30.9 in 2012 to 31.8 in 2013).

Compositional differences by race and Hispanic origin among states is a major contributing factor to the geographic variation in the

Includes births to race and Hispanic origin groups not shown separately, such as white Hispanic and black Hispanic women, and births with 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 1977 Office of Management and Budget (OMB) standards. Forty-four states and the District of Columbia reported multiple-race data in 2013 that were bridged to single-race categories for comparability with other states; see Technical Notes. Multiple-race reporting areas vary for 2007 and 2011–2013; see Technical Notes.

³Includes persons of Hispanic and non-Hispanic origin, and origin not stated, according to the mother's reported race; see Technical Notes.

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

Table B. Births and birth rates for unmarried and married women: United States, 1980, 1985, 1990, 1995, and 2000-2013

	Bir	Birth rate for			
Year	Number	Rate ¹	Percent ²	married women ³	
2013	1,595,873	44.3	40.6	86.9	
012	1,609,619	45.3	40.7	86.0	
011	1,607,773	46.0	40.7	85.1	
010	1,633,471	47.5	40.8	84.3	
009	1,693,658	49.9	41.0	85.6	
008	1,726,566	51.8	40.6	86.9	
007	1,715,047	51.8	39.7	89.1	
006	1,641,946	50.3	38.5	88.7	
005	1,527,034	47.2	36.9	87.9	
004	1,470,189	46.0	35.8	88.1	
003	1,415,995	44.7	34.6	88.4	
002	1,365,966	43.6	34.0	86.9	
001	1,349,249	43.7	33.5	86.6	
000	1,347,043	44.1	33.2	87.4	
95	1,253,976	44.3	32.2	82.6	
90	1,165,384	43.8	28.0	93.2	
985	828,174	32.8	22.0	93.3	
980	665,747	29.4	18.4	97.0	

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

percentage of births to unmarried mothers (Table I-4). The percentages ranged from less than one in five births in Utah (18.9%) to more than one-half of births in DC, Louisiana, Mississippi, and New Mexico.

Age of father

The **fertility rate of men** for the United States in 2013 was 45.8 births per 1,000 men aged 15–54, down 1% from 2012 (46.1) (Table 17). Similar to fertility rates among women, rates declined for all men under age 30 (down 11% for ages 15–19, 4% for ages 20–24, and 2% for ages 25–29); rose for men aged 35–54 (up 1%–2% for age groups 35–39, 40–44, and 45–49, and 4% for ages 50–54); and were unchanged for men aged 30–34 and 55 and over. Rates for men aged 15–19 (12.3), 20–24 (55.7), and 25–29 (90.6) were again at record lows in 2013, whereas the rates for men aged 35–39 (66.6), 40–44 (27.0), and 45–49 (8.8) were the lowest in more than 40 years (16).

Birth rates declined less than 1% for both white and black men in 2013 from 2012, to 43.8 and 58.0 births per 1,000 men aged 15–54, respectively. Rates declined for both white and black men under age 30, rose for white men aged 35–40 and black men aged 30–54, and were unchanged for the remaining groups. Information on age of father is often missing on birth certificates of children born to women under age 25 and to unmarried women. In 2013, age of father was not reported for 13% of all births, 32% of births to all women under age 20, and 29% of all nonmarital births. The procedures for computing birth rates by age of father that account for the missing data are described in the User Guide (11).

Medical Services Utilization

Attendant at birth and place of delivery

In 2013, 98.6% of all births in the United States were in hospitals, the same as in 2012. Doctors of medicine attended 85.4%

of all hospital births, certified nurse midwives (CNMs) 7.8%, and doctors of osteopathy 6.3% (Table 20).

Out-of-hospital deliveries represented 1.4% of births in 2013. Of the more than 56,000 out-of-hospital births in the United States in 2013, 64.4% occurred in a residence (home) and 30.2% in a freestanding birthing center (Table 20). The number of births occurring at home, 36,080, was the highest since reporting began for this item in 1989. Older mothers, aged 35 and over, are more likely to give birth at home than younger mothers (22). Montana had the highest percentage of home births (2.5%) in 2013, with six other states at 2.0% or more (Table I–12). Six states and DC reported that less than one-half of a percent of their births occurred at home.

Method of delivery

The cesarean delivery rate declined to 32.7% of U.S. births in 2013, down from 32.8% for 2010–2012 (Table 21; Figure 1). The rate peaked in 2009 at 32.9% after increasing every year since 1996 (20.7%).

In 2013, cesarean delivery rates declined for all maternal age groups under 40 (Table 22). The largest change was among women under age 20 (from 22.3% in 2012 to 21.8% in 2013). The rate for women aged 40 and over was unchanged.

Changes in the cesarean delivery rate in 2013 from 2012 varied by race and Hispanic origin (Table 21). The rate declined for non-Hispanic white women for the fourth consecutive year, from 32.3% in 2012 to 32.0% in 2013, down 2% from the 2009 peak of 32.8%. Rates for non-Hispanic black (35.8%) and Hispanic women (32.2%) remained unchanged in 2013. For the first time since data have been available, non-Hispanic white women had the lowest cesarean delivery rate compared with non-Hispanic black and Hispanic women; non-Hispanic black women continued to have the highest rate.

Cesarean delivery rates declined in 2013 from 2012 for eight states; rates for Delaware and Montana dropped 5%. Rates remained

²Percentage of all births to unmarried women.

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

NOTE: Rates for 2001-2009 have been revised, using revised intercensal population estimates based on the 2010 census.

Table C. Low-risk cesarean delivery, by age of mother, race and Hispanic origin of mother, and gestational age: United States, 2012 and 2013

Characteristic	2013	2012	Percent change 2012–2013
		Perce	nt
Total	26.9	27.3	-2
Age of mother (years)			
Under 20 20–24 25–29 30–34 35–39 40 or more	18.3 23.6 26.9 31.7 40.8 53.5	19.0 24.1 27.7 32.4 41.7 53.3	-4 -2 -3 -2 -2
Race and Hispanic origin of mother			
Non-Hispanic white	25.9 30.8 26.6	26.5 31.0 26.8	-2 * -1
Gestational age			
Early term. 37 weeks. 38 weeks. Full term. 39 weeks. 40 weeks. Late term ¹ . Post term ² .	25.0 26.5 24.3 26.6 26.5 26.7 30.5 28.5	25.5 26.7 24.9 27.0 27.1 30.9 28.9	-2 * -2 -2 -2 -1 -1

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

NOTE: Low-risk cesarean is defined as singleton, term (37 or more weeks of gestation), vertex (not breech) cesarean deliveries to women having a first birth per 100 women delivering singleton, term, vertex first births.

unchanged for 41 states and DC (Table I-7). Georgia was the only state with a higher cesarean delivery rate in 2013 (34.2%) than in 2012 (33.8%).

In recent years, efforts within the obstetrics community have focused on reducing nonmedically indicated cesarean delivery and induction of labor prior to 39 weeks (23–26). Since 2009, cesarean delivery rates for births under 39 weeks of gestation have declined,

Table D. Live births delivered by forceps or vacuum extraction: United States, 1990, 1995, 2000, 2005, and 2010–2013

Year	Forceps	Vacuum extraction	Forceps of vacuum
		Percent	
2013	0.59	2.72	3.30
2012	0.61	2.79	3.40
2011	0.65	2.85	3.50
2010	0.66	2.96	3.62
2005	0.93	3.87	4.80
2000	2.07	4.85	6.92
1995	3.48	5.90	9.38
1990 ¹	5.11	3.90	9.01

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

driven by changes at 38 weeks (Figure 1). At 39 weeks and over, declines in 2013 from 2012 and during 2009–2013 are also seen at 40 and 41 weeks; cesarean rates at all other gestational ages either rose or were unchanged. Thus, the decline in the overall cesarean delivery rate for 2012–2013 and 2009–2013 can be attributed to declines at 38, 40, and 41 weeks of gestation.

The low-risk cesarean delivery rate—that is, cesarean delivery among nulliparous (first birth), term (37 or more completed weeks), singleton (one fetus), vertex (head-first) births—showed similar patterns to the overall cesarean rate (Table C). The low-risk cesarean rate decreased to 26.9% in 2013 from 27.3% in 2012. Declines by maternal age, race and Hispanic origin, and gestational age were more pronounced among low-risk births than among all births. A recent report examines the changes in low-risk cesarean delivery from 2009 through 2013 (27).

Information for 2013 on primary cesarean and vaginal birth after cesarean delivery for the revised reporting area (41 states and DC) is presented in the User Guide (11). A recent report examined trends in primary cesarean delivery rates by state and for limited reporting areas through 2012 (28).

Use of forceps and vacuum extraction continued to decline in 2013 (Table D). Use of either method of instrumental delivery decreased from 3.40% in 2012 to 3.30% in 2013 (down from 9.01% in 1990). Use of forceps remains the rarer method, declining from 0.61% in 2012 to 0.59% of all births in 2013, compared with vacuum extraction, down from 2.79% to 2.72%. Among vaginal births, use of either method fell below 5% in 2013 (4.91%, from 5.06% in 2012).

Infant Health Characteristics

Period of gestation

The 2013 **preterm birth rate** was 11.39%, down 1% from 2012 (11.55%) and 11% from the 2006 peak (12.80%); see Tables E, 23, and 24. The percentage of infants born preterm (under 37 completed weeks of gestation) rose by more than one-third from 1981 through 2006 but has been on the decline since (Table 24). The early preterm birth rate (under 34 weeks) was essentially stable at 3.40% in 2013, but the late preterm birth rate (34–36 weeks) decreased 2% to 7.99%. The percentage of newborns delivered late preterm has declined 13% since 2006 (Table E).

Recent years have also witnessed a shift in early-term (37–38 weeks) and full-term (39–40 weeks) deliveries. Early-term births declined to 24.80% in 2013 from 24.96% in 2012 (Table E). Since 2006, the percentage of early-term births is down 14%, and the percentage of full-term births is up 13%. Reductions in late-preterm and early-term deliveries from 2006 to 2013 may be related to heightened understanding of the increased neonatal risk at these gestational ages compared with full term, and with subsequent recommendations and efforts to reduce nonmedical deliveries prior to 39 weeks (29–32).

Analyzing births in singleton deliveries separately can be important because of the shorter average gestations of multiple births and their accordant influence on overall gestational age measures (see "Multiple births"). The preterm birth rate for singleton births only was 9.71% in 2013, down 2% from 2012 (9.89%) and 12% from 2006 (11.09%) (Table E).

¹41 completed weeks.

²42 or more completed weeks.

Table E. Distribution of births, by	y gestational age, all birth	s, and for singleton bir	rths only: United States,	1990, 2000, 2005, 2006,
2010-2013				

Gestational age (completed weeks)	2013	2012	2011	2010	2006	2005	2000	1990
	All births (percent)							
Jnder 28	0.73	0.73	0.73	0.74	0.76	0.77	0.72	0.71
8–31	1.20	1.19	1.20	1.22	1.29	1.26	1.21	1.21
2–33	1.48	1.49	1.52	1.53	1.62	1.60	1.49	1.40
Total under 34	3.40	3.41	3.44	3.50	3.66	3.63	3.42	3.32
4–36	7.99	8.13	8.28	8.49	9.15	9.09	8.22	7.30
Total under 37	11.39	11.55	11.73	11.99	12.80	12.73	11.64	10.62
7–38	24.80	24.96	25.86	26.88	28.89	28.29	24.50	19.66
9	30.23	29.77	29.19	28.31	25.43	25.25	24.32	21.72
0	19.61	19.56	19.29	19.11	18.87	19.24	21.31	22.59
	8.49	8.55	8.36	8.24	8.33	8.66	10.95	14.09
12 or more	5.49	5.62	5.57	5.48	5.67	5.84	7.28	11.33
	Singletons (percent)							
nder 28	0.58	0.59	0.59	0.60	0.61	0.61	0.59	0.61
3–31	0.96	0.97	0.97	0.99	1.04	1.02	0.99	1.08
2–33	1.18	1.20	1.21	1.23	1.31	1.28	1.22	1.24
Total under 34	2.72	2.76	2.77	2.82	2.96	2.91	2.80	2.93
1–36	6.99	7.13	7.28	7.48	8.14	8.09	7.33	6.77
Total under 37	9.71	9.89	10.05	10.3	11.09	11.00	10.12	9.70
7–38	24.52	24.70	25.66	26.74	28.91	28.30	24.38	19.43
	31.16	30.66	30.06	29.14	26.15	25.96	24.89	21.98
)	20.23	20.17	19.90	19.71	19.44	19.82	21.89	22.99
l	8.75	8.81	8.62	8.49	8.58	8.93	11.26	14.37
2 or more	5.63	5.77	5.72	5.62	5.83	5.99	7.46	11.53

Preterm birth rates declined for each of the largest race and Hispanic origin groups in 2013 from 2012 (Table 24). The preterm rate for non-Hispanic white infants declined to 10.17% in 2013, down 13% from the 2006 high of 11.70%. The 2013 rate among non-Hispanic black infants was 16.27%, down 12% from the most recent high of 18.46% in 2006 and the lowest rate reported for this group since 1981, when comparable data on gestational age became available (Figure 5). Among Hispanic women, preterm births decreased to 11.31% of all births for this group, a decline of 8% from the highs reported for 2006 and 2007.

Reductions in preterm birth rates were reported across the United States during 2006–2013 (33). Rates declined in 49 states and DC; 13 states reported declines in preterm rates of 15% or more, and 23 additional states had declines of 10%–14%. The change in rates for one state, Hawaii, was not statistically significant.

Birthweight

The percentage of infants born at **low birthweight** (LBW) was essentially unchanged in 2013 at 8.02%, compared with 7.99% for 2012. Following increases of nearly 20% from 1990 to 2006, the LBW rate (less than 2,500 grams or 5 lb 8 oz) has trended slightly downward for a total decline of 3% (Tables 23–25). The 2013 very low birthweight rate (less than 1,500 grams) was also stable at 1.41% but is down from the high of 1.49% reported for 2005–2007. The percentage of moderately low birthweight infants (1,500–2,499 grams) increased by less than 1% in 2013 (6.61%) from 2012 (6.57%) but remained lower than the 2006 peak of 6.77% (Table 24).

Weight at birth is closely associated with gestational age and can be an important and independent predictor of short- and long-term outcomes (34–36).

As the gestational age distribution has shifted toward longer pregnancies since 2006 (see "Period of gestation"), the birthweight distribution has also moved toward heavier infants, albeit to a lesser degree. In addition to the modest reduction in LBW noted earlier, the percentage of births at 2,500–2,999 grams (5 lb 9 oz–6 lb 9 oz) has declined from 18.44% in 2006 to 18.22% in 2013, while the percentage of infants weighing 3,000 grams or more has increased from 73.30% to 73.75%.

LBW levels were essentially stable among non-Hispanic white (6.98%) and non-Hispanic black (13.08%) infants in 2013 from 2012 but increased slightly among Hispanic births (to 7.09% from 6.97%) (Table 24). From 1990 through 2006, LBW rates rose among each group; since 2006, however, rates have declined among non-Hispanic white (5%) and non-Hispanic black (6%) infants. Among Hispanic infants, rates have fluctuated fairly narrowly; the 2013 level, however, is the highest reported since national data for Hispanic births became available in the early 1990s (Figure 6). See also Tables I–9 and I–10 for 2013 state-specific very low birthweight and LBW rates by race and Hispanic origin.

Births in singleton deliveries are often examined separately because infants in multiple births tend to be born smaller than singletons, and changes in multiple-birth incidence can influence overall LBW levels; see Table F and "Multiple births." For 2013, the singleton LBW rate was stable at 6.27%. This percentage rose 10% from 1990 (5.90%) through 2006 (6.49%) but has declined somewhat from the 2006 high.



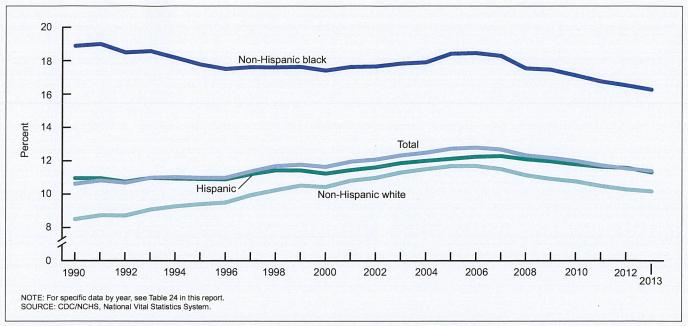


Figure 5. Preterm birth rates, by race and Hispanic origin of mother: United States, 1990-2013

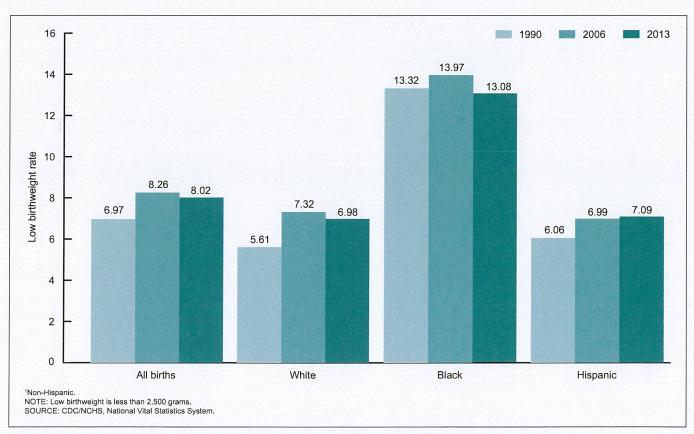


Figure 6. Low birthweight rates, by race and Hispanic origin of mother: United States, 1990, 2006, and 2013