

Births: Preliminary Data for 2008

by Brady E. Hamilton, Ph.D.; Joyce A. Martin, M.P.H.; and Stephanie J. Ventura, M.A., Division of Vital Statistics

Abstract

Objectives—This report presents preliminary data for 2008 on births in the United States. U.S. data on births are shown by age, live-birth order, race, and Hispanic origin of mother. Data on marital status, cesarean delivery, preterm births, and low birthweight are also presented.

Methods—Data in this report are based on 99.9% of births for 2008. The records are weighted to independent control counts of all births received in state vital statistics offices in 2008. Comparisons are made with preliminary 2007 data.

Results—The preliminary number of 2008 U.S. births was 4,251,095—down nearly 2% from the 2007 peak; the 2008 general fertility rate (68.7 per 1,000) also declined. The number and rate of births decreased for the three largest race and Hispanic origin groups in 2008. • The birth rate for U.S. teenagers 15–19 years fell 2% in 2008 to 41.5 per 1,000, reversing a brief 2-year increase that had halted the long-term decline from 1991 to 2005. The birth rate for Hispanic teenagers declined to an historic low. • The birth rates for women in their twenties (the primary childbearing years) fell 2% to 3%. • The birth rate for unmarried women aged 15–44 years declined about 2%, to 52.0 per 1,000—the first decline since 2001–2002; however, the number and percentage of births to unmarried women increased to historic levels. • The cesarean delivery rate rose for the 12th straight year, to 32.3% of all births. • The percentage of births born preterm declined 3%, to 12.3 in 2008; declines were seen for most age, race, and ethnic groups. • The rate of low birthweight births was unchanged for 2007–2008 at 8.2%; a small decline in low birthweight was reported for infants born to non-Hispanic black women (from 13.8% to 13.7%).

Keywords: births • birth rates • maternal and infant health • vital statistics

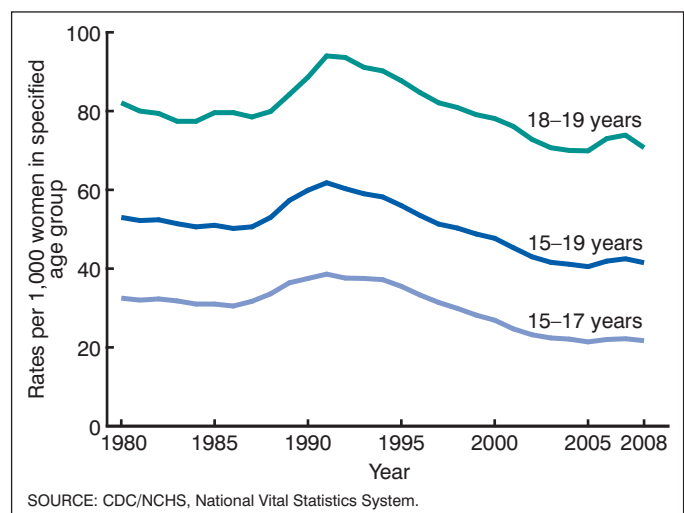


Figure 1. Birth rates for teenagers by age: United States, final 1980–2006 and preliminary 2007 and 2008

Introduction

This report from the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) presents preliminary data on births and birth rates and on selected maternal and infant health characteristics for the United States in 2008. The findings are based on 99.9% of registered vital records occurring in calendar year 2008, which were received and processed by NCHS as of November 4, 2009. Trends in the preliminary reports for 1995–2006 births were confirmed by the final vital statistics for each year (1,2). Although comparisons with 2007 are based on preliminary data, all other comparisons are based on the final data for a year (1).

State-specific detailed tables for 2008 births, based on preliminary data—showing the percentages of births to women under age 20 years, to unmarried women, delivered by cesarean, born preterm, and low birthweight—are available on the NCHS website (see “State-specific detailed tables” at: http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_16_tables.pdf).

Results

Births and birth rates

Key findings are listed below and presented in [Tables 1–7](#) and [Figures 1](#) and [2](#).

- The 2008 preliminary estimate of **births** for the United States was 4,251,095—nearly 2% less than the record number of births ever registered in 2007 (4,317,119) ([Figure 2](#) and [Tables 1–3](#)) (1). Births declined for nearly all race and Hispanic origin groups, with decreases ranging from less than 1% for non-Hispanic black and Asian or Pacific Islander (API) women to 2% for non-Hispanic white and Hispanic women. Births for American Indian or Alaska Native (AIAN) women increased by less than 1% in 2008.
- The 2008 preliminary **crude birth rate (CBR)** was 14.0 births per 1,000 total population—2% less than the rate in 2007 (14.3). The 2008 preliminary **general fertility rate (GFR)** was 68.7 births per 1,000 women aged 15–44 years, also below (1%) the rate in 2007 (69.5) ([Figure 2](#)) (1). The rates for the three largest race and Hispanic origin groups declined, from less than 1% for non-Hispanic black and non-Hispanic white women to 3% for Hispanic women, but were essentially unchanged for AIAN and API women.
- The **birth rate for U.S. teenagers** dropped 2% in 2008 according to preliminary data. The decline reverses two consecutive years of increase that interrupted the 34% decline in teenage child-bearing from 1991 to 2005 (1,2). The rate in 2008 was 41.5 births per 1,000 teenagers 15–19 years, down from 42.5 in 2007 and 41.9 in 2006 (see [Figure 1](#) and [Tables 2–5](#)). The teenage birth rate had increased 5% during 2005–2007, with most of the increase occurring in 2005–2006.
 - Rates declined for all age groups under 20 years, except the rate for the youngest teenagers, those aged 10–14 years, which was unchanged at 0.6 births per 1,000 women. The number of births to this age group fell 7% from 2007 to 2008, to 5,775, the fewest reported since 1954.

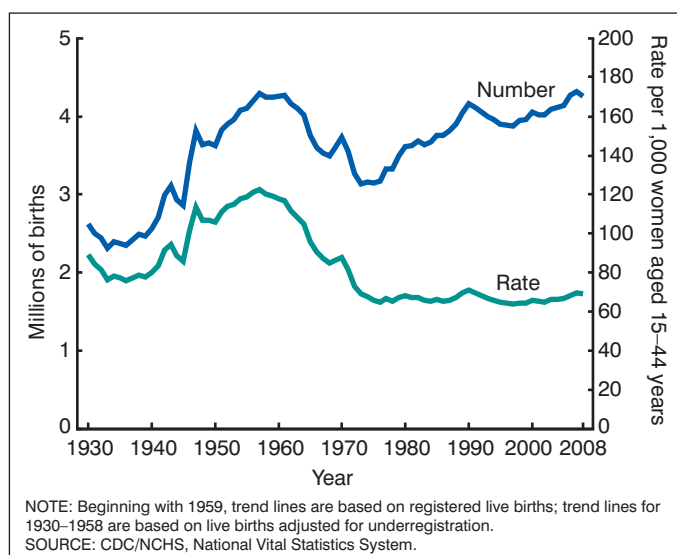


Figure 2. Live births and fertility rates: United States, final 1930–2006 and preliminary 2007 and 2008

- The birth rate for teenagers 15–17 years declined 2%, to 21.7 per 1,000. This rate had increased 4% from 2005 to 2007, interrupting the 45% decline reported for 1991–2005. The number of infants born to this age group declined 3% from 2007 to 2008, to 135,733.
- The birth rate for older teenagers 18–19 years dropped 4% in 2008, to 70.7 per 1,000. The 6% increase in this rate during 2005–2007 had temporarily halted the long-term decline of 26% that occurred from 1991 to 2005.
- The rate for Hispanic teenagers fell to 77.4 births per 1,000—the lowest rate ever reported for this group in the two decades for which rates are available. Rates fell for all race and Hispanic origin groups between 2007 and 2008, with statistically significant declines ranging from 2% for non-Hispanic white and non-Hispanic black teenagers to 5% for Hispanic teenagers and 6% for API teenagers.
- The 2008 preliminary **birth rate for women aged 20–24 years** was 103.1 births per 1,000 women—3% less than the rate in 2007 (106.4) ([Tables 2–4](#)). The number of births to women aged 20–24 years also declined from 2007 to 2008 (3%), while the population of women aged 20–24 years rose less than 1%. The 2008 **rate for women aged 25–29 years** was also less than the rate in 2007, by 2%, or 115.1 births per 1,000 women compared with 117.5. The number of births to women aged 25–29 years decreased less (1%) than the birth rate, reflecting the impact of the 1% increase in the population of women aged 25–29 years.
- The preliminary **birth rate for women aged 30–34 years** in 2008 was 99.3 births per 1,000 women—a drop of less than 1% compared with 2007 (99.9). The number of births to women aged 30–34 years declined less than 1% in 2008. The **rate for women aged 35–39 years** also declined 1% in 2008, to 46.9 births per 1,000, from 47.5 in 2007. This is the first decline in the rate for women aged 35–39 years since 1978 (1,2). The number of births to women aged 35–39 years decreased 2% from 2007 to 2008; the population of these women decreased 1%.
- The preliminary **birth rate for women aged 40–44 years** in 2008 increased 4%, to 9.9 births per 1,000 women—the highest rate since 1967 (10.6) (1,3). The **rate for women aged 45–49 years** (which includes births to women aged 50–54 years) also increased in 2008, from 0.6 births per 1,000 in 2007 to 0.7 ([Tables 2–4](#)). The number of births to women aged 40 years and over increased in 2008 by 1% for women aged 40–44 years and 4% for women aged 45–54 years.
- The 2008 preliminary estimate of the **total fertility rate (TFR)** was 2,085.5 births per 1,000 women—2% lower than the rate in 2007 (2,122.5) ([Table 1](#)). The TFR summarizes the potential impact of current fertility patterns on completed family size by estimating the average number of births that a hypothetical group of 1,000 women would have over their lifetimes, based on the age-specific birth rates observed in the given year.

The TFR for the United States in 2008 was below replacement after being above in 2006 and 2007. Replacement is the rate at which a given generation can exactly replace itself, which is generally considered to be 2,100 births per 1,000 women. The U.S. rate had been below replacement from 1972 to 2005. The TFR by race and Hispanic origin declined for most

groups in 2008, with decreases ranging from 1% for non-Hispanic black women to 3% for Hispanic women (Table 1). The rate increased for API women in 2008 (nearly 1%) and was essentially unchanged for AIAN women.

- The preliminary **first birth rate** for the United States in 2008 was 27.7 births per 1,000 women aged 15–44 years—1% lower than the rate in 2007 (27.9) (Table 4) (1). Rates for women in most age groups either declined (with decreases ranging from 1% to 2% for women aged 15–29 and 35–39 years) or were unchanged from 2007 to 2008. The rate for women aged 40–44 years, however, increased in 2008 (from 2.0 births per 1,000 to 2.2)—the only group to show an increase. The rates for second- and third-order births to women aged 15–44 years also declined in 2008 (by 1% and 2%, respectively); the rate was unchanged for fourth- and higher-order births.
- Preliminary **CBRs for states** in 2008 varied considerably, ranging from 10.2 births per 1,000 total population in Vermont to 20.3 in Utah (Table 6). From 2007 to 2008, birth rates decreased for 38 states (Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, and Wisconsin) and Puerto Rico, increased for only 1 state (Alaska) and 1 territory (Northern Marianas), and were essentially unchanged (i.e., not statistically different) for the remaining states, the District of Columbia (D.C.), and American Samoa.

GFRs for states in 2008 varied considerably as well, ranging from 52.4 births per 1,000 women aged 15–44 years in Vermont to 93.1 in Utah (Table 6). In 2008, fertility rates decreased for 19 states (Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Kentucky, Louisiana, Massachusetts, Michigan, Mississippi, Nevada, New Jersey, Tennessee, Texas, Utah, and Virginia) and Puerto Rico, increased for only 3 states (Alaska, Hawaii, and Washington) and 1 territory (Northern Marianas), and were essentially unchanged for the remaining states and D.C.
- The **birth rate for unmarried women** declined almost 2% from 2007 to 2008. The rate per 1,000 unmarried women aged 15–44 years was 52.0 in 2008, compared with 52.9 in 2007, according to preliminary data (tabular data not shown).
- The decline in the **birth rate for unmarried women** for 2007–2008 was the first reported since a slight decline in 2001–2002. The rate had increased 21% from 2002 (43.7) to 2007, following several years of relative stability.
- The other key measures of **childbearing by unmarried women** increased in the United States to historic levels in 2008, according to preliminary data (2,4,5). The **total number of births** to unmarried women increased about 1%, from 1,714,643 in 2007 to 1,727,950 in 2008 (Table 7). The 2008 total is up 27% from 2002, when the recent steady increases began. Births to unmarried women increased during 2007–2008 within each age group 25 years and older and declined for unmarried teenagers and women in their early twenties.

- The **proportion of all births to unmarried women** increased to 40.6% in 2008, up from 39.7% in 2007. This proportion increased for all race and Hispanic origin population groups except for API women (Tables 1 and 7).
 - Teenagers accounted for 22% of all nonmarital births in 2008, continuing a steady decline in this measure over the last several decades. In 1975, teenaged mothers accounted for 52% of nonmarital births (4,5).
 - In 2008, more than six in seven births to teenagers were nonmarital. Sixty-one percent of births to women aged 20–24 years, and one in three births to women aged 25–29 years, were to unmarried women (Table 7).
 - The percentage of nonmarital births increased significantly in 39 states; changes in other states were not significant.

Maternal and infant health birth characteristics

Key findings are listed below and presented in Figures 3 and 4 and Tables 8 and 9.

- The **cesarean delivery rate** rose to 32.3% in 2008—the 12th consecutive year of increase (Table 8). The percentage of births delivered by cesarean has risen more than 50% since 1996; the pace of increase, however, has slowed somewhat in the last few years (Figure 3). Increases of 1%–3% were seen among women of all age groups and most race and ethnic groups: non-Hispanic white (1%), non-Hispanic black and Hispanic (2% each), and API (almost 4%).
- The **percentage of births born preterm** declined 3% in 2008, to 12.3% of all births (Table 8). This fairly sizable decrease follows a small decline in the preterm rate (infants delivered at less than 37 weeks of gestation per 100 births) during 2006–2007 (12.8% to 12.7%) (1). The rate of preterm births had risen by more than 20% between 1990 and 2006 (Figure 4) (2).
 - The downturn in preterm births for 2007–2008 was mostly among infants born late preterm, or at 34–36 weeks of

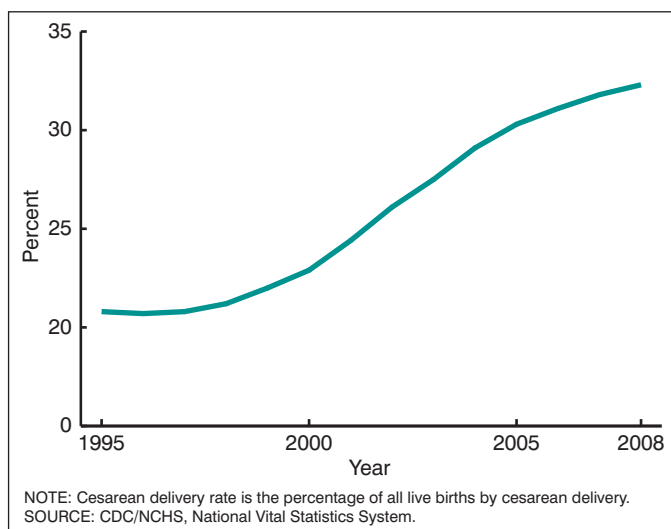


Figure 3. Cesarean delivery rate: United States, final 1995–2006 and preliminary 2007 and 2008

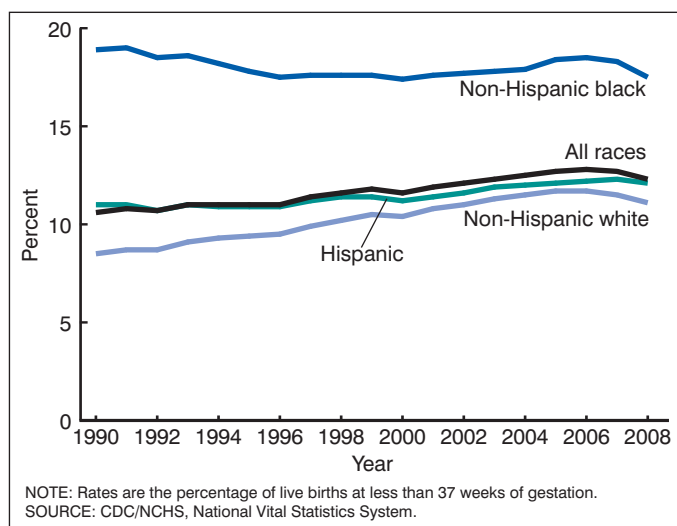


Figure 4. Preterm birth rates by race and Hispanic origin of mother: United States, final 1990–2006 and preliminary 2007 and 2008

gestation (down from 9.0% to 8.8%) (Table 9). The percentage of infants born at less than 34 weeks also declined, albeit modestly, from 3.63% to 3.56%.

- Declines in preterm rates from 2007 to 2008 were reported among most race and ethnic groups: 3% for non-Hispanic white (from 11.5% to 11.1%), 4% for non-Hispanic black (18.3% to 17.5%), 2% for API (10.9% to 10.7%), and 2% for Hispanic infants (12.3% to 12.1%). The decline among AIAN newborns (13.9% to 13.6%) was not statistically significant (Table 8).
- The 2008 **rate of low birthweight** (LBW; less than 2,500 grams or 5 lb 8 oz) was 8.2%—unchanged from 2007 (Table 8). The percentage of infants born LBW had been rising fairly steadily since the mid-1980s (6.7% in 1984) but declined slightly between 2006 and 2007 (from 8.3% to 8.2%) (1,2).
 - The percentage of infants delivered at very low birthweight (VLBW; less than 1,500 grams or 3 lb 4 oz)—those newborns at the highest risk of early death or disability—declined very slightly for 2007–2008, from 1.48% to 1.46%. The 2008 level is the lowest reported since 2003 (2).
 - LBW among non-Hispanic black infants declined 1% between 2007 and 2008, from 13.8% to 13.7%. The non-Hispanic black VLBW rate dipped to 3.01%, the lowest level reported in more than a decade (2). Rates of LBW and VLBW were essentially unchanged among the other race and Hispanic origin groups (Table 8).

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Table 1. Total births and birth, fertility, and total fertility rates and percentage of nonmarital births, by race and Hispanic origin of mother: United States, preliminary 2007 and preliminary 2008

[Data are based on a continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual. 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. Total fertility rates are sums of birth rates for 5-year age groups in specified group, multiplied by 5]

Race and Hispanic origin of mother	Number		Birth rate		Fertility rate		Total fertility rate		Percent of births to unmarried women	
	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
All races and origins ¹	4,251,095	4,317,119	14.0	14.3	68.7	69.5	2,085.5	2,122.5	40.6	39.7
Non-Hispanic white ²	2,273,220	2,312,473	11.4	11.5	59.6	60.1	1,835.0	1,871.0	28.6	27.8
Non-Hispanic black ²	625,314	627,230	16.5	16.4	71.2	71.6	2,110.5	2,134.5	72.3	71.6
American Indian or Alaska Native total ^{2,3}	49,540	49,284	14.5	15.2	64.6	64.7	1,843.5	1,860.5	65.8	65.2
Asian or Pacific Islander total ^{2,3}	253,396	254,734	16.9	17.2	71.4	71.4	2,056.0	2,043.0	16.9	16.9
Hispanic ⁴	1,038,933	1,061,970	22.1	23.3	98.6	102.1	2,905.5	2,992.0	52.5	51.3

¹Includes 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. In 2008, 30 states reported multiple-race data. 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." Multiple-race reporting areas vary for 2007–2008; see "Technical Notes."

³Data for persons of Hispanic origin are included for this race group; see "Technical Notes."

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

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 2. Births and birth rates by age and race and Hispanic origin of mother: United States, preliminary 2007 and preliminary 2008

[Data are based on a continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals. Rates per 1,000 women in specified age and race and Hispanic origin groups]

Age and race and Hispanic origin of mother	2008		2007	
	Number	Rate	Number	Rate
All races and origins ¹				
Total ²	4,251,095	68.7	4,317,119	69.5
10–14 years	5,775	0.6	6,218	0.6
15–19 years	435,000	41.5	445,045	42.5
15–17 years	135,733	21.7	140,640	22.2
18–19 years	299,267	70.7	304,405	73.9
20–24 years	1,052,928	103.1	1,082,837	106.4
25–29 years	1,196,713	115.1	1,208,504	117.5
30–34 years	957,567	99.3	962,179	99.9
35–39 years	489,357	46.9	499,916	47.5
40–44 years	106,090	9.9	105,071	9.5
45–54 years ³	7,666	0.7	7,349	0.6
Non-Hispanic white ⁴				
Total ²	2,273,220	59.6	2,312,473	60.1
10–14 years	1,108	0.2	1,269	0.2
15–19 years	168,865	26.7	173,104	27.2
15–17 years	43,028	11.6	45,144	11.8
18–19 years	125,837	48.6	127,960	50.5
20–24 years	512,538	80.8	526,943	83.3
25–29 years	671,977	106.2	676,599	108.8
30–34 years	563,755	98.9	566,197	99.7
35–39 years	288,629	44.8	301,666	45.8
40–44 years	61,603	8.8	62,152	8.6
45–54 years ³	4,746	0.6	4,544	0.6
Non-Hispanic black ⁴				
Total ²	625,314	71.2	627,230	71.6
10–14 years	2,140	1.4	2,326	1.5
15–19 years	104,794	62.9	106,224	64.3
15–17 years	34,737	34.9	36,266	35.8
18–19 years	70,057	104.7	69,958	109.3
20–24 years	198,699	130.8	200,273	133.6
25–29 years	157,051	105.8	157,173	107.5
30–34 years	98,524	75.1	97,332	74.4
35–39 years	50,823	36.7	50,614	36.4
40–44 years	12,464	8.8	12,428	8.6
45–54 years ³	818	0.6	860	0.6
American Indian or Alaska Native total ^{4,5}				
Total ²	49,540	64.6	49,284	64.7
10–14 years	126	0.9	120	0.9
15–19 years	8,817	58.4	8,925	59.0
15–17 years	2,916	32.5	2,909	31.7
18–19 years	5,900	96.7	6,016	101.3
20–24 years	16,798	115.6	16,759	116.3
25–29 years	12,653	94.4	12,420	96.4
30–34 years	7,169	63.8	7,052	63.7
35–39 years	3,205	28.8	3,265	29.4
40–44 years	730	6.4	704	6.1
45–54 years ³	42	0.4	38	0.3

See footnotes at end of table.

Table 2. Births and birth rates by age and race and Hispanic origin of mother: United States, preliminary 2007 and preliminary 2008—Con.

[Data are based on a continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals. Rates per 1,000 women in specified age and race and Hispanic origin groups]

Age and race and Hispanic origin of mother	2008		2007	
	Number	Rate	Number	Rate
Asian or Pacific Islander total^{4,5}				
Total ²	253,396	71.4	254,734	71.4
10–14 years	81	0.2	92	0.2
15–19 years	7,545	16.2	8,022	17.3
15–17 years	2,210	8.0	2,336	8.4
18–19 years	5,334	28.4	5,686	30.7
20–24 years	31,074	64.5	32,309	66.2
25–29 years	71,294	120.3	71,465	117.9
30–34 years	85,572	126.8	86,949	125.1
35–39 years	47,660	66.8	46,379	66.3
40–44 years	9,458	15.2	8,879	14.5
45–54 years ³	713	1.2	639	1.1
Hispanic⁶				
Total ²	1,038,933	98.6	1,061,970	102.1
10–14 years	2,328	1.2	2,407	1.2
15–19 years	144,702	77.4	148,453	81.7
15–17 years	52,818	46.1	53,941	47.8
18–19 years	91,884	127.0	94,511	137.1
20–24 years	292,595	170.4	305,107	178.5
25–29 years	280,716	152.3	287,730	155.6
30–34 years	199,401	109.3	201,212	110.8
35–39 years	96,889	55.9	95,694	56.4
40–44 years	21,141	13.7	20,273	13.4
45–54 years ³	1,161	0.9	1,095	0.8

¹Includes origin not stated.

²Includes births to women of all ages, 10–54 years. The rate shown for all ages is the fertility rate, which is defined as the total number of births (regardless of the age of the mother) per 1,000 women aged 15–44 years.

³Includes births to women aged 45–54 years. The birth rate for these women is computed by relating the number of births to women aged 45–54 years to the number of births to women aged 45–49 years because most of the births in this group are to women aged 45–49 years.

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. In 2008, 30 states reported multiple-race data. 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." Multiple-race reporting areas vary for 2007–2008; see "Technical Notes."

⁵Data for persons of Hispanic origin are included for this race group; see "Technical Notes."

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

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 3. Live births by age of mother, live-birth order, and race and Hispanic origin of mother: United States, preliminary 2008

[Data are based on a continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals]

Live-birth order 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
All races and origins ¹	4,251,095	5,775	435,000	1,052,928	1,196,713	957,567	489,357	106,090	7,666
1st child	1,705,270	5,642	349,473	512,489	431,690	270,581	110,234	23,127	2,036
2nd child	1,331,563	81	71,053	347,646	394,016	328,455	158,675	29,791	1,846
3rd child	705,683	6	10,590	135,741	224,046	199,260	112,631	22,037	1,372
4th child and over	481,916	–	1,387	50,506	139,666	153,311	104,402	30,315	2,328
Not stated	26,663	46	2,497	6,546	7,295	5,960	3,414	820	84
Non-Hispanic white ²	2,273,220	1,108	168,865	512,538	671,977	563,755	288,629	61,603	4,746
1st child	954,873	1,091	141,405	272,503	275,887	176,117	71,377	15,097	1,397
2nd child	742,336	11	23,647	165,330	226,530	206,281	100,525	18,765	1,247
3rd child	354,871	1	2,826	55,644	109,694	108,723	64,740	12,409	833
4th child and over	209,534	–	285	16,514	56,728	69,664	50,183	14,935	1,224
Not stated	11,606	4	701	2,547	3,138	2,969	1,804	397	45
Non-Hispanic black ²	625,314	2,140	104,794	198,699	157,051	98,524	50,823	12,464	818
1st child	245,417	2,080	81,903	86,860	41,673	20,907	9,467	2,330	196
2nd child	174,732	34	18,160	63,943	47,677	28,076	13,625	3,073	143
3rd child	105,426	–	3,286	30,658	34,524	22,373	11,805	2,645	134
4th child and over	93,181	–	502	15,282	31,502	25,997	15,305	4,255	336
Not stated	6,559	26	942	1,957	1,675	1,170	621	160	8
American Indian or Alaska Native total ^{2,3}	49,540	126	8,817	16,798	12,653	7,169	3,205	730	42
1st child	17,669	124	6,806	6,554	2,627	1,060	411	82	5
2nd child	13,335	1	1,614	5,803	3,485	1,667	645	111	7
3rd child	8,757	–	320	2,903	3,090	1,623	690	118	12
4th child and over	9,463	–	42	1,440	3,372	2,770	1,419	402	18
Not stated	316	1	35	98	79	48	39	16	–
Asian or Pacific Islander total ^{2,3}	253,396	81	7,545	31,074	71,294	85,572	47,660	9,458	713
1st child	115,414	80	6,180	18,662	39,020	34,859	13,896	2,498	218
2nd child	88,562	–	1,151	8,417	21,403	34,464	19,592	3,337	198
3rd child	31,284	–	157	2,701	6,786	10,624	8,955	1,927	135
4th child and over	16,800	–	23	1,086	3,682	5,232	4,976	1,648	152
Not stated	1,335	1	34	207	404	392	241	48	9
Hispanic ⁴	1,038,933	2,328	144,702	292,595	280,716	199,401	96,889	21,141	1,161
1st child	367,692	2,276	113,015	127,183	71,155	36,463	14,462	2,945	193
2nd child	309,645	35	26,478	103,933	94,119	56,928	23,599	4,332	220
3rd child	204,165	5	3,994	43,848	69,713	55,522	26,052	4,821	210
4th child and over	152,036	–	535	16,165	44,227	49,396	32,259	8,924	530
Not stated	5,395	12	679	1,467	1,502	1,092	518	118	7

– Quantity zero.

¹Includes 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. In 2008, 30 states reported multiple-race data. 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."

³Data for persons of Hispanic origin are included for this race group; see "Technical Notes."

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

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 4. Birth rates by age of mother, live-birth order, and race and Hispanic origin of mother: United States, preliminary 2008

[Data are based on a continuous file of records received from the states. Rates per 1,000 women in specified age and race and Hispanic origin groups]

Live-birth order and race and Hispanic origin 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
All races and origins ³	68.7	0.6	41.5	103.1	115.1	99.3	46.9	9.9	0.7
1st child	27.7	0.6	33.5	50.5	41.8	28.2	10.6	2.2	0.2
2nd child	21.6	0.0	6.8	34.3	38.1	34.3	15.3	2.8	0.2
3rd child	11.5	*	1.0	13.4	21.7	20.8	10.9	2.1	0.1
4th child and over	7.8	*	0.1	5.0	13.5	16.0	10.1	2.8	0.2
Non-Hispanic white ⁴	59.6	0.2	26.7	80.8	106.2	98.9	44.8	8.8	0.6
1st child	25.1	0.2	22.5	43.2	43.8	31.1	11.1	2.2	0.2
2nd child	19.5	*	3.8	26.2	36.0	36.3	15.7	2.7	0.2
3rd child	9.3	*	0.5	8.8	17.4	19.2	10.1	1.8	0.1
4th child and over	5.5	*	0.0	2.6	9.0	12.3	7.8	2.2	0.2
Non-Hispanic black ⁴	71.2	1.4	62.9	130.8	105.8	75.1	36.7	8.8	0.6
1st child	28.2	1.4	49.6	57.7	28.4	16.1	6.9	1.7	0.1
2nd child	20.1	0.0	11.0	42.5	32.5	21.6	10.0	2.2	0.1
3rd child	12.1	*	2.0	20.4	23.5	17.2	8.6	1.9	0.1
4th child and over	10.7	*	0.3	10.2	21.5	20.0	11.2	3.1	0.2
American Indian or Alaska Native total ^{4,5}	64.6	0.9	58.4	115.6	94.4	63.8	28.8	6.4	0.4
1st child	23.2	0.9	45.3	45.4	19.7	9.5	3.7	0.7	*
2nd child	17.5	*	10.7	40.2	26.2	14.9	5.9	1.0	*
3rd child	11.5	*	2.1	20.1	23.2	14.5	6.3	1.1	*
4th child and over	12.4	*	0.3	10.0	25.3	24.8	12.9	3.6	*
Asian or Pacific Islander total ^{4,5}	71.4	0.2	16.2	64.5	120.3	126.8	66.8	15.2	1.2
1st child	32.7	0.2	13.3	39.0	66.2	51.9	19.6	4.0	0.4
2nd child	25.1	*	2.5	17.6	36.3	51.3	27.6	5.4	0.3
3rd child	8.9	*	0.3	5.6	11.5	15.8	12.6	3.1	0.2
4th child and over	4.8	*	0.0	2.3	6.2	7.8	7.0	2.7	0.3
Hispanic ⁶	98.6	1.2	77.4	170.4	152.3	109.3	55.9	13.7	0.9
1st child	35.1	1.2	60.7	74.4	38.8	20.1	8.4	1.9	0.1
2nd child	29.5	0.0	14.2	60.8	51.3	31.4	13.7	2.8	0.2
3rd child	19.5	*	2.1	25.7	38.0	30.6	15.1	3.1	0.2
4th child and over	14.5	*	0.3	9.5	24.1	27.2	18.7	5.8	0.4

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.

¹The rate shown is the fertility rate, which is defined as the total number of births, regardless of age of mother, per 1,000 women aged 15–44 years.²The birth rate for ages 45–49 years is computed by relating births to women aged 45–54 years to the number of births to women aged 45–49 years because most of the births in this group are to women aged 45–49 years.³Includes 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. In 2008, 30 states reported multiple-race data. 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."⁵Data for persons of Hispanic origin are included for this race group; see "Technical Notes."⁶Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 5. Birth rates for women under age 20 years, by age and race and Hispanic origin of mother: United States, final 1991, 2005, and 2006, and preliminary 2007 and 2008; and percent change in rates, 1991–2005, 2005–2007, and 2007–2008

[Data for 2007 and 2008 are based on continuous files of records received from the states. Rates per 1,000 women in specified age and race and Hispanic origin groups]

Age and race and Hispanic origin of mother	Year				Percent change			
	2008	2007	2006	2005	1991	2007–2008	2005–2007	1991–2005
10–14 years								
All races and origins ¹	0.6	0.6	0.6	0.7	1.4	0	-14	-50
Non-Hispanic white ²	0.2	0.2	0.2	0.2	0.5	0	0	-60
Non-Hispanic black ²	1.4	1.5	1.6	1.7	4.9	-7	-12	-65
American Indian or Alaska Native total ^{2,3}	0.9	0.9	0.9	0.9	1.6	0	0	-44
Asian or Pacific Islander total ^{2,3}	0.2	0.2	0.2	0.2	0.8	0	0	-75
Hispanic ⁴	1.2	1.2	1.3	1.3	2.4	0	-8	-46
15–19 years								
All races and origins ¹	41.5	42.5	41.9	40.5	61.8	-2	5	-34
Non-Hispanic white ²	26.7	27.2	26.6	25.9	43.4	-2	5	-40
Non-Hispanic black ²	62.9	64.3	63.7	60.9	118.2	-2	6	-48
American Indian or Alaska Native total ^{2,3}	58.4	59.0	55.0	52.7	84.1	-1	12	-37
Asian or Pacific Islander total ^{2,3}	16.2	17.3	17.0	17.0	27.3	-6	2	-38
Hispanic ⁴	77.4	81.7	83.0	81.7	104.6	-5	0	-22
15–17 years								
All races and origins ¹	21.7	22.2	22.0	21.4	38.6	-2	4	-45
Non-Hispanic white ²	11.6	11.8	11.8	11.5	23.6	-2	3	-51
Non-Hispanic black ²	34.9	35.8	36.2	34.9	86.1	-3	3	-59
American Indian or Alaska Native total ^{2,3}	32.5	31.7	30.7	30.5	51.9	3	4	-41
Asian or Pacific Islander total ^{2,3}	8.0	8.4	8.8	8.2	16.3	-5	2	-50
Hispanic ⁴	46.1	47.8	47.9	48.5	69.2	-4	-1	-30
18–19 years								
All races and origins ¹	70.7	73.9	73.0	69.9	94.0	-4	6	-26
Non-Hispanic white ²	48.6	50.5	49.3	48.0	70.6	-4	5	-32
Non-Hispanic black ²	104.7	109.3	108.4	103.0	162.2	-4	6	-36
American Indian or Alaska Native total ^{2,3}	96.7	101.3	93.0	87.6	134.2	-5	16	-35
Asian or Pacific Islander total ^{2,3}	28.4	30.7	29.5	30.1	42.2	-7	2	-29
Hispanic ⁴	127.0	137.1	139.7	134.6	155.5	-7	2	-13

¹Includes 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. In 2008, 30 states reported multiple-race data. 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." Multiple-race reporting areas vary for 2005–2008; see "Technical Notes."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."

SOURCE: CDC/NCHS National Vital Statistics System.

Table 6. Live births by race and Hispanic origin of mother, and birth and fertility rates: United States and each state and territory, preliminary 2008

[By place of residence. Data are based on a continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals. Birth rates are total births per 1,000 population; fertility rates are total births per 1,000 women aged 15–44 years]

Area	Number						Birth rate for all races	Fertility rate for all races
	All races and origins ¹	Non-Hispanic white ²	Non-Hispanic black ²	American Indian or Alaska Native total ^{2,3}	Asian or Pacific Islander total ^{2,3}	Hispanic ⁴		
United States ⁵	4,251,095	2,273,221	625,314	49,540	253,396	1,038,933	14.0	68.7
Alabama	64,345	38,036	19,851	195	920	5,346	13.8	68.3
Alaska	11,468	6,520	404	2,906	953	652	16.7	81.1
Arizona	99,459	42,208	4,053	6,546	3,474	43,336	15.3	77.4
Arkansas	40,669	27,256	8,029	265	683	4,341	14.2	72.1
California	551,779	151,407	31,975	3,733	73,111	287,389	15.0	71.0
Colorado	70,029	41,488	3,140	726	2,454	21,851	14.2	68.8
Connecticut	40,426	23,985	5,151	224	2,332	8,677	11.5	58.4
Delaware	12,088	6,459	3,225	17	534	1,836	13.8	68.4
District of Columbia	9,131	2,364	5,013	4	231	1,506	15.4	61.3
Florida	231,426	105,732	51,687	753	7,779	66,001	12.6	66.7
Georgia	147,181	64,086	48,474	299	6,001	25,847	15.2	71.1
Hawaii	19,484	4,813	478	90	12,916	3,062	15.1	78.3
Idaho	25,149	19,868	154	462	445	4,055	16.5	83.4
Illinois	176,830	93,005	30,852	284	9,864	42,773	13.7	66.0
Indiana	88,743	67,852	10,450	135	1,847	8,516	13.9	69.3
Iowa	40,225	33,960	1,782	269	989	3,324	13.4	69.5
Kansas	41,832	30,195	3,156	413	1,367	6,783	14.9	75.6
Kentucky	58,376	49,012	5,445	95	1,013	2,910	13.7	67.7
Louisiana	65,262	34,725	25,562	487	1,156	3,362	14.8	70.9
Maine	13,610	12,637	361	125	239	221	10.3	54.5
Maryland	77,288	35,638	25,929	164	5,048	10,545	13.7	65.4
Massachusetts	77,025	52,248	7,202	214	6,053	10,941	11.9	56.7
Michigan	121,128	84,558	22,450	779	4,203	8,860	12.1	60.5
Minnesota	72,420	52,685	6,675	1,688	5,536	5,732	13.9	69.1
Mississippi	44,943	22,578	19,836	292	472	1,750	15.3	74.4
Missouri	80,963	61,385	12,478	421	2,118	4,528	13.7	68.3
Montana	12,594	10,329	72	1,590	153	429	13.0	69.5
Nebraska	26,989	19,925	1,753	598	709	4,273	15.1	76.9
Nevada	39,509	16,229	3,601	563	3,278	15,365	15.2	76.0
New Hampshire	13,683	12,201	233	22	552	547	10.4	52.8
New Jersey	112,715	53,741	17,443	153	12,090	29,245	13.0	65.1
New Mexico	30,177	8,478	489	4,017	539	16,888	15.2	75.9
New York	253,539	125,756	42,619	783	23,379	58,026	13.0	62.2
North Carolina	130,813	72,079	31,164	1,784	4,052	21,628	14.2	69.1
North Dakota	8,939	7,324	148	1,043	129	279	13.9	71.3
Ohio	148,729	112,827	24,254	324	3,744	6,903	12.9	65.1
Oklahoma	54,784	35,169	4,961	6,510	1,241	7,073	15.0	75.9
Oregon	49,105	34,060	1,211	1,032	2,765	10,362	13.0	65.6
Pennsylvania	149,291	105,917	21,658	453	6,219	13,927	12.0	61.8
Rhode Island	12,047	6,002	1,009	157	574	2,601	11.5	55.3
South Carolina	62,973	34,645	20,582	269	1,328	6,216	14.1	69.6
South Dakota	12,071	9,193	215	2,096	158	462	15.0	79.1
Tennessee	85,543	57,639	18,132	438	1,869	7,967	13.8	67.9
Texas	405,536	139,267	45,949	1,213	16,696	203,074	16.7	79.1
Utah	55,633	42,745	560	746	1,824	9,465	20.3	93.1
Vermont	6,340	6,035	95	11	114	73	10.2	52.4
Virginia	106,684	61,453	23,269	183	7,556	14,273	13.7	66.0
Washington	90,321	57,059	3,961	2,363	9,404	17,345	13.8	68.0
West Virginia	21,501	20,213	821	22	183	231	11.8	62.2
Wisconsin	72,261	53,812	7,241	1,249	3,006	7,060	12.8	64.9
Wyoming	8,038	6,422	58	334	95	1,075	15.1	78.4

See footnotes at end of table.

Table 6. Live births by race and Hispanic origin of mother, and birth and fertility rates: United States and each state and territory, preliminary 2008—Con.

[By place of residence. Data are based on a continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual, so categories may not add to totals. Birth rates are total births per 1,000 population; fertility rates are total births per 1,000 women aged 15–44 years]

Area	Number						Birth rate for all races	Fertility rate for all races
	All races and origins ¹	Non-Hispanic white ²	Non-Hispanic black ²	American Indian or Alaska Native total ^{2,3}	Asian or Pacific Islander total ^{2,3}	Hispanic ⁴		
Puerto Rico	45,622	1,437	150	1	10	43,996	11.5	54.1
Virgin Islands	---	---	---	---	---	---	---	---
Guam	3,459	206	37	5	3,175	37	19.7	89.7
American Samoa	1,332	---	---	—	1,326	---	20.5	91.7
Northern Marianas	1,266	---	---	—	1,261	---	22.9	79.9

--- Data not available.

— Quantity zero.

¹Includes 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. In 2008, 30 states reported multiple race data. 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."

³Data for persons of Hispanic origin are included for this race group; see "Technical Notes."

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

⁵Excludes data for the territories.

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 7. Number and percentage of births to unmarried women, by age: United States, preliminary 2007 and preliminary 2008

[Data are based on continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual, so categories may not add to total]

Age of mother	Number		Percent	
	2008	2007	2008	2007
All ages	1,727,950	1,714,643	40.6	39.7
Under 20 years	382,779	386,702	86.8	85.7
Under 15 years	5,721	6,142	99.1	98.8
15–19 years	377,058	380,560	86.7	85.5
15–17 years	127,181	130,519	93.7	92.8
18–19 years	249,878	250,041	83.5	82.1
20–24 years	641,245	644,591	60.9	59.5
25–29 years	397,679	389,169	33.2	32.2
30–34 years	193,618	185,425	20.2	19.3
35–39 years	88,953	86,343	18.2	17.3
40–54 years	23,676	22,411	20.8	19.9

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 8. Total births, total cesarean delivery rate, percentage of live births preterm and very preterm, and percentage of live births low and very low birthweight, by race and Hispanic origin of mother: United States, preliminary 2007 and preliminary 2008

[Data are based on a continuous file of records received from the states. Figures are based on weighted data rounded to the nearest individual]

Race and Hispanic origin of mother	Number		Cesarean rate ¹		Preterm				Low birthweight			
					Total ²		Very preterm ³		Total ⁴		Very low birthweight ⁵	
	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
All races and origins ⁶	4,251,095	4,317,119	32.3	31.8	12.3	12.7	1.99	2.04	8.2	8.2	1.46	1.48
Non-Hispanic white ⁷	2,273,221	2,312,473	32.4	32.0	11.1	11.5	1.60	1.64	7.2	7.2	1.18	1.19
Non-Hispanic black ⁷	625,314	627,230	34.5	33.8	17.5	18.3	3.84	4.08	13.7	13.8	3.01	3.19
American Indian or Alaska Native total ^{7,8}	49,540	49,284	27.9	27.7	13.6	13.9	2.15	2.14	7.4	7.5	1.28	1.27
Asian or Pacific Islander total ^{7,8}	253,396	254,734	32.5	31.4	10.7	10.9	1.50	1.50	8.2	8.1	1.15	1.14
Hispanic ⁹	1,038,933	1,061,970	31.0	30.4	12.1	12.3	1.80	1.82	7.0	6.9	1.20	1.21

¹All births by cesarean delivery per 100 live births.

²Less than 37 completed weeks of gestation.

³Less than 32 completed weeks of gestation.

⁴Less than 2,500 grams (5 lb 8 oz).

⁵Less than 1,500 grams (3 lb 4 oz).

⁶Includes 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. In 2008, 30 states reported multiple-race data. 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." Multiple-race reporting areas vary for 2007–2008; see "Technical Notes."

⁸Data for persons of Hispanic origin are included for this race group; see "Technical Notes."

⁹Includes all persons of Hispanic origin of any race; see "Technical Notes."

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 9. Percentage of preterm births: United States, final 1990, 2000, 2005, 2006, and preliminary 2007 and 2008

[Data for 2007 and 2008 are based on continuous files of records received from the states]

Year	Total preterm ¹	Late preterm ²	Less than 34 weeks		
			Total	32–33 weeks	Less than 32 weeks
2008	12.33	8.77	3.56	1.57	1.99
2007	12.66	9.03	3.63	1.59	2.04
2006	12.80	9.14	3.66	1.62	2.04
2005	12.73	9.09	3.63	1.60	2.03
2000	11.64	8.22	3.42	1.49	1.93
1990	10.61	7.30	3.32	1.40	1.92

¹Preterm is less than 37 completed weeks of gestation.

²Late preterm is 34–36 completed weeks of gestation.

NOTE: For information on the relative standard errors of the data and further discussion, see reference 7.

SOURCE: CDC/NCHS National Vital Statistics System.

Table 10. Total count of records and percent completeness of preliminary file of live births: United States, each state and territory, preliminary 2008

[By place of occurrence]

Area	Live births	
	Count of records	Percent completeness
United States ¹	4,251,095	99.9
Alabama	63,450	100.0
Alaska	11,329	99.8
Arizona	100,106	100.0
Arkansas	39,502	100.0
California	552,618	100.0
Colorado	70,527	100.0
Connecticut	40,942	100.0
Delaware	14,499	100.0
District of Columbia	12,543	100.0
Florida	231,652	100.0
Georgia	147,842	99.9
Hawaii	19,463	100.0
Idaho	24,676	100.0
Illinois	173,415	100.0
Indiana	89,345	100.0
Iowa	40,281	100.0
Kansas	42,568	100.0
Kentucky	56,622	100.0
Louisiana	65,073	100.0
Maine	13,500	100.0
Maryland	74,615	100.0
Massachusetts	77,544	100.0
Michigan	120,174	100.0
Minnesota	72,220	100.0
Mississippi	44,138	100.0
Missouri	81,992	100.0
Montana	12,551	100.0
Nebraska	27,082	100.0
Nevada	39,192	100.0
New Hampshire	13,630	100.0
New Jersey	109,703	100.0
New Mexico	29,573	100.0
New York	252,471	100.0
New York excluding New York City	124,699	97.6
New York City	127,772	100.0
North Carolina	132,106	100.0
North Dakota	10,312	100.0
Ohio	149,354	100.0
Oklahoma	53,711	100.0
Oregon	49,506	100.0
Pennsylvania	148,465	100.0
Rhode Island	12,805	99.9
South Carolina	60,402	100.0
South Dakota	12,631	100.0
Tennessee	90,885	100.0
Texas	409,433	99.3
Utah	56,787	100.0
Vermont	5,957	100.0
Virginia	104,990	100.0
Washington	90,318	100.0
West Virginia	21,441	100.0
Wisconsin	71,272	100.0
Wyoming	7,444	100.0
Puerto Rico	45,672	100.0
Virgin Islands	834	45.2
Guam	3,461	99.9
American Samoa	1,332	100.0
Northern Marianas	1,266	100.0

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

NOTE: Percent completeness = (Number of records in preliminary file x 100) / Count of records.

SOURCE: CDC/NCHS National Vital Statistics System.

Technical Notes

Nature and sources of data

Preliminary data for 2008 are based on nearly all births for that year (99.9%; see [Table 10](#)). Levels for 46 of the 50 states and the District of Columbia (D.C.) were at 100%; levels for the remaining states were above 99%. Information on reporting for the 2007 preliminary data are available elsewhere (1). Preliminary 2008 data are based on continuous receipt and processing of statistical records through November 4, 2009, by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS). NCHS receives the data from the states' vital registration systems through the Vital Statistics Cooperative Program. In this report, U.S. totals include only events occurring within the 50 states and D.C. Data for Puerto Rico, Guam, American Samoa, and the Northern Marianas are included in tables showing data by state but are not included in U.S. totals (see [Table 6](#) and "State-specific detailed tables" at: http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_16_tables.pdf). Less than 50% of data for the Virgin Islands were available as of release of the 2008 preliminary file, and data for this territory are not included in this report. Detailed information on reporting completeness and imputation procedures may be found in "Births: Preliminary Data for 2007" (1) and "User Guide to the 2006 Natality Public Use File: Detailed Technical Notes" (6).

To produce the preliminary estimates shown in this report, records in the preliminary file were weighted using independent control counts of all 2008 births by state of occurrence. Detailed information on weighting and the reliability of estimates also may be found elsewhere (7).

1989 and 2003 U.S. Standard Certificates of Live Birth

This report includes selected 2008 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 (1,8,9). Twenty-seven states (California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Montana, Nebraska, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington, and Wyoming) and Puerto Rico had implemented the revised birth certificate as of January 1, 2008. These 27 states represent 65% of all 2008 births.

Data items exclusive to either the 1989 or the 2003 birth certificate revisions are not shown in this report. A forthcoming report will present selected data exclusive to the 2003 revised certificate from the 2008 final data file.

Hispanic origin and race

Hispanic origin

Hispanic origin and race are reported separately on the birth certificate. Data shown by race (i.e., American Indian or Alaska Native (AIAN) and Asian or Pacific Islander (API)) include persons of

Hispanic or non-Hispanic origin, and data for Hispanic origin include all persons of Hispanic origin of any race. Data for non-Hispanic persons are shown separately 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 have been included on the birth certificates of all states and D.C., the Virgin Islands, and Guam since 1993 and on the birth certificate of Puerto Rico starting in 2005 (7). American Samoa and the Northern Marianas do not collect this information.

Single, multiple, and "bridged" race

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 (8) in accordance with the revised standards issued by the Office of Management and Budget (OMB) in 1997 (10,11). Information on this change is presented in several recent reports (2,12).

In 2008, 30 states reported multiple-race: California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Montana, Nebraska, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington, and Wyoming, which used the 2003 revision of the U.S. Standard Certificate of Live Birth, as well as Hawaii, Minnesota, and Utah, which used the 1989 revision of the U.S. Standard Certificate of Live Birth. Puerto Rico, which revised its birth certificate in 2005, continued to report race according to the 1989 revision of the U.S. Standard Certificate of Live Birth (i.e., as an open-ended question in which only one response is accepted). The 30 states accounted for 68% of U.S. births in 2008. Data from the vital records of the remaining 20 states and D.C. are based on the 1989 revision of the U.S. Standard Certificate of Live Birth that follows the 1977 OMB standard, allowing only a single race to be reported (10–12).

To provide uniformity and comparability of the data during the transition period before all or most of the data are available in the new multiple-race format, it was necessary to bridge the responses of those who reported more than one race (multiple races) to one single race. The bridging procedure for multiple-race mothers and fathers is based on the procedure used to bridge the multiple-race population estimates (see "Population denominators" below) (13,14). Information detailing the processing and tabulation of data by race is presented elsewhere (2,6). A recent report describes multiple-race birth data for 2003 (15).

Marital status

National estimates of births to unmarried women are based on two methods of determining marital status. For 2007 and 2008, birth certificates in 49 states and D.C. included a direct question about mother's marital status (in two of these states, California and Nevada, a direct question is part of the electronic birth registration process but does not appear on certified or paper copies of the birth certificate). The question in most states is: "Mother married? (At birth, conception, or any time between) (Yes or no)." Marital status is inferred in New York. A birth is inferred as nonmarital if a paternity acknowledgment was filed or if the father's name is missing from the birth certificate (listed in respective priority-of-use order).

Population denominators

The U.S. birth and fertility rates for 2008 shown in this report are based on population estimates based on the 2000 census, as of July 1, 2008. These population estimates are available on the NCHS website (16). The production of these population estimates is described in detail in a recent report (2).

Birth and fertility rates for the territories shown in this report are based on population estimates from the U.S. Census Bureau's International Data Base (17). Rates by territory may differ from rates computed on the basis of other population estimates. Rates for territories with smaller populations are more likely to be affected by differences in population base.

Information on the national estimates of births to unmarried women (i.e., methods of determining marital status) and the computation of the preliminary birth rates for unmarried women is presented elsewhere (2,4). The birth rates for unmarried women for 2007 and 2008 are estimated on the basis of population distributions by marital status provided by the U.S. Census Bureau as of March 2007 and 2008 and applied to the national population estimates as of July 1, 2007 and 2008 (4,16,18). Both population files are based on the 2000 census.

The nonmarital birth rates shown here for 2007 and 2008 thus differ from those published by NCHS in the annual final reports, which are based on populations estimated from 3-year averages of the marital status distributions rather than a single year, as shown here (4). Population estimates for a single year are not an adequate basis for computing age-specific birth rates for unmarried women—these rates are available only in reports based on final data.

The U.S. populations 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 persons to report more than one race as appropriate for themselves and household members (10). To produce birth and fertility rates by race, bridging of the reported population data for multiple-race persons back to single-race categories was necessary. For detailed information on the revised OMB standards on race reporting and the procedures used to produce the bridged populations, see "United States Census 2000 Population With Bridged Race Categories" (12).

Computing rates and percentages; reliability of estimates

For information and further discussion on computing rates and percentages and the relative standard errors of the data, see "Births: Preliminary Data for 2005" (7).

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National Center for Health Statistics

Edward J. Sondik, Ph.D., *Director*

Jennifer H. Madans, Ph.D., *Associate Director for Science*

Division of Vital Statistics

Charles J. Rothwell, M.S., *Director*