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# Births: Preliminary Data for 2015

Selected preterm birth rates for 2014 have been corrected in the text and in Tables 5, 6, and I-2--July 26, 2016

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#### **Abstract**

*Objectives*—This report presents preliminary 2015 data on U.S. births. Births are shown by age and race and Hispanic origin of mother. Data on marital status, cesarean delivery, preterm births, and low birthweight are also presented.

Methods—Data are based on 99.53% of 2015 births. Records for the few states with less than 100% of records received are weighted to independent control counts of all births received in state vital statistics offices in 2015. Comparisons are made with final 2014 data and earlier years.

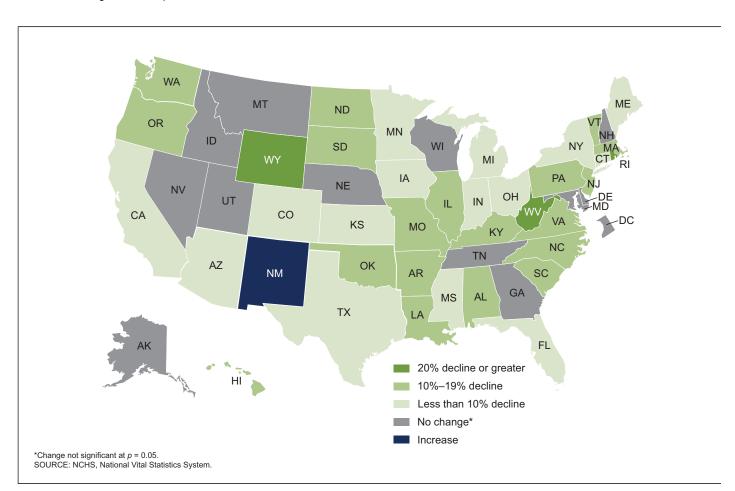


Figure 1. Percent change in low-risk cesarean delivery rates, by state: United States, final 2009 and preliminary 2015





Results—The 2015 preliminary number of U.S. births was 3,977,745, down slightly (less than 1%) from 2014. For the three largest race and Hispanic origin groups in the United States, the number of births decreased for non-Hispanic white women, increased for Hispanic women, and were essentially unchanged for non-Hispanic black women in 2015. The general fertility rate was 62.5 births per 1,000 women aged 15-44, down less than 1% from 2014. The birth rate for teenagers aged 15-19 decreased 8% in 2015 to 22.3 births per 1,000 women, another historic low for the country; rates decreased for both younger and older teenagers to record lows. The birth rate for women in their early 20s declined to 76.9 births per 1,000 women. another record low. The rate for women in their late 20s declined as well, to 104.3 births, also a record low. Birth rates for women in their 30s and early 40s increased in 2015. The nonmarital birth rate declined 1% in 2015, to 43.5 births per 1,000 unmarried women aged 15-44. The cesarean delivery rate declined for the third year in a row to 32.0%. and the low-risk cesarean delivery rate declined again to 25.7% in 2015. The preterm birth rate (based on obstetric estimate of gestation) was up slightly in 2015 to 9.62%, the first increase in this rate since 2007. The low birthweight rate was also up in 2015 to 8.07%.

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

# Introduction

This report from the National Center for Health Statistics (NCHS) presents preliminary data on births and birth rates and selected maternal and infant health characteristics (including low-risk cesarean delivery [Figure 1]) for the United States in 2015. The findings are based on nearly 100% of registered vital records occurring in calendar year 2015, which were received and processed by NCHS as of February 11, 2016. Trends in the preliminary reports for 1995–2014 births were confirmed by the final vital statistics for each year (1,2). Comparisons are based on the final data for 2014 and earlier years (2). Changes and differences presented in this report are statistically significant at the 0.05 level, unless noted otherwise.

Beginning with the 2014 data year, NCHS transitioned to a new standard for estimating the gestational age of the newborn. The new measure—the obstetric estimate of gestation at delivery (OE)—replaces the measure based on the date of the last normal menses (LMP) (3). Accordingly, gestational age data shown in this report are based on the OE. However, LMP-based data are also available for all relevant report tables from: <a href="http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_03\_tables.pdf">http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_03\_tables.pdf</a>. National data based on OE data are available only from data year 2007 forward. Gestational age estimates differ somewhat between the OE- and LMP-based measures. The reasons for the change and a detailed comparison of the two measures are presented in: "Measuring Gestational Age in Vital Statistics Data: Transitioning to the Obstetric Estimate" (3).

State-specific detailed tables for 2015 births, based on preliminary data and showing the percentages of births delivered by cesarean and born preterm, are available on the NCHS website (see Internet Tables I–1 and I–2 at <a href="http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_03\_tables.pdf">http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_03\_tables.pdf</a>).

Population estimates by age, sex, and race and Hispanic origin for 2015 at the national and state levels were not available as of the preparation of this report. Accordingly, birth and fertility rates by race

and Hispanic origin and fertility rates by state could not be shown here. These rates will be shown in the 2015 final birth report.

## Results

#### Births and birth rates

Key findings, illustrated in Tables 1-4 and Figures 2-4, are listed below:

- The preliminary number of births for the United States in 2015 was 3,977,745, a decrease of less than 1% (0.3%) from 2014 (3,988,076) (Table 1 and Figure 2). This decline followed the increase in births from 2013 to 2014, which was the first increase since 2007 (2).
- The number of births decreased 1% for non-Hispanic white women from 2014 to 2015, whereas births to Hispanic women increased 1%, and births to non-Hispanic black women were essentially unchanged (Table 3) (2). The number of births decreased 1% for American Indian or Alaska Native (AIAN) women and were essentially unchanged for Asian or Pacific Islander (API) women.
- The preliminary general fertility rate (GFR) for the United States also decreased less than 1% in 2015, to 62.5 births per 1,000 women aged 15–44, from 62.9 in 2014 (Table 1 and Figure 2) (2). This decline follows an increase in the rate from 2013 to 2014, the first increase since 2007.
- The preliminary birth rate for teenagers in 2015 was 22.3 births per 1,000 women aged 15–19—yet another historic low for the country (Tables 1 and 2 and Figures 3 and 4) (2,4,5). The rate was down 8% from 2014 (24.2) and has declined more than 46% since 2007. Since the most recent peak in 1991 (61.8), the rate has declined a total of 64% (5). In 2015, the preliminary number of births to women aged 15–19 was 229,888 (Table 1), down 8% from 2014 and 48% from 2007 (444,899) (2,5).
  - In 2015, the preliminary birth rates for teenagers aged 15–17 and 18–19 fell 9% and 7%, respectively, to 9.9 and 40.7 births per 1,000 women. These rates were yet another record low for both groups, from 10.9 and 43.8 in 2014. Since 2007, the rate for teenagers aged 15–17 has dropped 54%, and the rate for those aged 18–19 has dropped 43%. The number of births for teenagers aged 15–17 declined 8% from 2014 to 2015, and births to those aged 18–19 declined 7%.
  - The birth rate for females aged 10–14 was 0.2 births per 1,000 in 2015, declining from 2014 (0.3), to a new historic low for the country. The number of births to mothers in this age group declined 10% in 2015, to 2,503 births.
- The preliminary birth rate for women aged 20–24 was 76.9 births per 1,000 women in 2015, declining 3% from the rate in 2014 (79.0), reaching yet another record low for the country (Table 1 and Figure 4) (2,4). The rate for women in this age group has declined steadily by 27% since 2007. The number of births to women in their early 20s decreased 4% from 2014 to 2015 (Table 1). The rate for women aged 25–29 was 104.3 births per 1,000 women, dropping 1% from the rate in 2014 (105.8) (2).

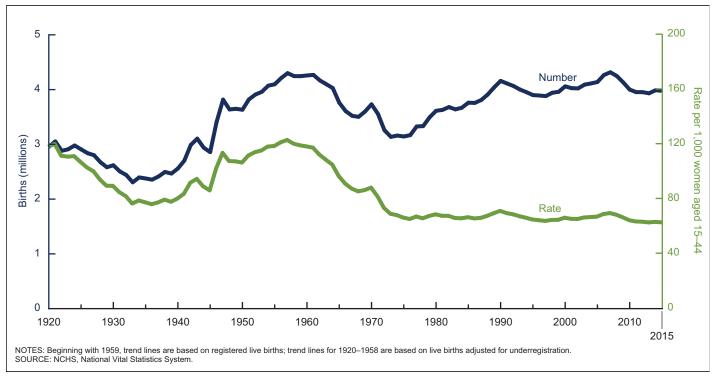


Figure 2. Live births and general fertility rates: United States, final 1920-2014 and preliminary 2015

From 2008 to 2013, the rate for women in this age group declined steadily by 8%, but increased slightly from 2013 to 2014 (2). The number of births to women in their late 20s increased 1% from 2014 to 2015.

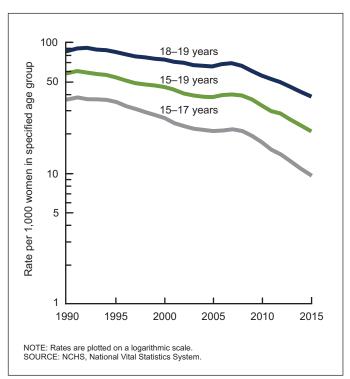


Figure 3. Birth rates for women aged 15–19, by age group: United States, final 1990–2014 and preliminary 2015

- The preliminary birth rate for women aged 30–34 in 2015 was 101.4 births per 1,000 women, an increase of less than 1% from the rate in 2014 (100.8) (Table 1 and Figure 4). The rate for this group has increased steadily by 5% since 2011. The number of births to women in their early 30s also increased in 2015 by 1%. The rate for women aged 35–39 was 51.7 births per 1,000 women, up 1% from 2014 (51.0). The rate for this group has increased steadily by 13% since 2010 (2). The number of births to women in their late 30s increased 4% in 2015.
- The preliminary birth rate for women aged 40–44 in 2015 was 11.0 births per 1,000 women, up 4% from 2014 (10.6). Since 1982, the rate for women in their early 40s has either risen or remained unchanged (2,4). The number of births to these women increased 1% in 2015. The rate for women aged 45–49 (which includes births to women aged 50 and over) was 0.8 births per 1,000 women, unchanged from 2014. The number of births to women in this age group increased 5% in 2015 (Table 1).
- The preliminary total fertility rate (TFR) for the United States in 2015 was 1,843.0 births per 1,000 women, a decrease of 1% from the rate in 2014 (1,862.5) (2). The TFR estimates the number of births that a hypothetical group of 1,000 women would have over their lifetimes, based on the age-specific birth rates in a given year.
  - The TFR in 2015 was below replacement—the level at which a given generation can exactly replace itself (2,100 births per 1,000 women). The rate has generally been below replacement since 1971 (2).
- The preliminary birth rate for unmarried women in 2015 was 43.5 births per 1,000 unmarried women aged 15–44, down 1% from 2014 (43.9) and marking the seventh consecutive year of decline since the all-time peak in 2007 and 2008 (51.8) (2).



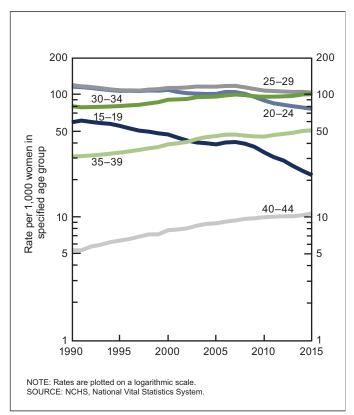


Figure 4. Birth rates, by selected age of mother: United States, final 1990–2014 and preliminary 2015

- In 2015, the number of births to unmarried women was 1,600,208, a less than 1% (0.3%) decline from 2014 (1,604,870) (Table 4). The 2015 preliminary number of nonmarital births was 7% lower than the 2008 peak (1,726,566) (1,2).
- The percentage of all births to unmarried women was 40.2% in 2015, unchanged from 2014. The percentages increased slightly (less than 1%) for women in age groups 15–24 and increased 2%–3% for women in age groups 25 and over.
- The percentage of births to unmarried women by race and Hispanic origin declined for only one group—non-Hispanic black women—down less than 1% from 2014 to 2015, and was essentially unchanged for all other groups. The percentage of births to unmarried mothers in 2015 ranged from 16.4% for API women to 70.4% for non-Hispanic black women.

#### Maternal and infant health characteristics

Key findings, illustrated in Tables 5 and 6 and Figure 1, are listed below:

- In 2015, the preliminary overall cesarean delivery rate declined for the third year in a row to 32.0%, down from 32.2% in 2014 (Table 5). After peaking in 2009 at 32.9%, the rate remained stable from 2010 to 2012 (2). The 2015 preliminary rate is the lowest since 2007.
  - The cesarean delivery rate for non-Hispanic white women declined for the sixth straight year in 2015 to 31.1%, down 1% from 2014 (31.4%) and down 5% from the peak in 2009

- (32.8%). For Hispanic women, the cesarean delivery rate declined for the second consecutive year to 31.7%. Rates for non-Hispanic black (35.5%), AIAN (28.3%), and API (33.0%) women were essentially unchanged for 2015 (Table 5) (2).
- The rate of low-risk cesarean delivery, which is cesarean delivery among nulliparous (first birth), term (37 or more completed weeks based on the obstetric estimate), singleton (one fetus), vertex (head-first) births, declined to 25.7% in 2015. This is 1% lower than the 2014 rate (26.0%).
- As with overall cesarean delivery, low-risk cesarean delivery declined for non-Hispanic white and Hispanic women in 2015.
   The rate for Hispanic women declined more than one-half of a percentage point from 25.8% in 2014 to 25.2% in 2015 (Table 5). The rates for other racial and ethnic groups were essentially unchanged in 2015 from 2014.
- Low-risk cesarean delivery rates declined in 10 states from 2014 to 2015 (Table I-1). Since the peak in 2009, low-risk cesarean delivery rates have dropped in 37 states, with declines of more than 20% in Wyoming, Rhode Island, and West Virginia (Figure 1). Low-risk cesarean increased in 1 state (New Mexico) from 2009 to 2015.
- The 2015 preliminary preterm birth rate (based on the obstetric estimate of gestation; see Introduction) was up slightly for 2015, to 9.62% from 9.57% in 2014. This marks the first increase in this rate since at least 2007 (the first year for which national data are available for the obstetric estimate of gestation) (Tables 5 and 6) (3).
  - The late preterm birth rate (34–36 weeks), which had declined 9% from 2007 (7.51%) to 2014 (6.82%), rose in 2015 to 6.87% (Table 6). The percentage of infants born early preterm (less than 34 weeks) was essentially unchanged at 2.75% and was down 6% from 2007.
  - The preterm rate for non-Hispanic white infants was essentially unchanged for 2014–2015 (from 8.91% to 8.88%), but rose among non-Hispanic black (13.23% to 13.39%) and Hispanic (9.03% to 9.13%) infants (Table 5). Preterm rates had declined fairly steadily from 2007 to 2014 for non-Hispanic white (10%) and non-Hispanic black (10%) infants but fluctuated among Hispanic infants (2,3).
  - Preterm birth rates declined in 41 states and the District of Columbia from 2007 to 2015 (3). Rates for 8 states did not change significantly, and the preterm rate for Wisconsin increased (Table I-2 for 2014 and 2015 data).
- ▶ Following a downward trend from 2007 to 2014, the U.S. low birthweight rate (the percentage of infants born at less than 2,500 grams or 5 lb, 8 oz) rose in 2015 to 8.07%, up from 8.00% in 2014 (2). The percentage of very low birthweight (VLBW) infants (less than 1,500 grams) was essentially stable at 1.39% in 2015. The VLBW level has also declined in recent years, from a peak of 1.49% for 2005–2007 (Table 5) (2). The percentage of infants delivered at moderately low birthweight (1,500–2,499 grams) rose to 6.67% in 2015, from 6.60% in 2014. This rate peaked in 2006 at 6.77%.
  - Low birthweight (LBW) levels were essentially unchanged in 2015 for non-Hispanic white infants (6.93 in 2015) but increased for non-Hispanic black infants (from 13.17% to

13.33%) and Hispanic infants (7.05% to 7.20%). Since 2006, modest declines in LBW were reported for non-Hispanic white and non-Hispanic black births (5%), but the rate among Hispanic infants rose by 3% (see Table 5 for 2014 and 2015 data) (2).

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#### Table 1. Births and birth rates, by age of mother: United States, final 2014 and preliminary 2015

[Data for 2015 are based on a continuous file of records received from the states. Figures for 2015 are based on weighted data rounded to the nearest individual, so categories may not add to totals. Rates are per 1,000 women in specified age group. Rates for all ages are the total number of births (regardless of the age of the mother) per 1,000 women aged 15–44]

	2015	5	2014	1
Age of mother	Number	Rate	Number	Rate
All ages	3,977,745	62.5	3,988,076	62.9
10–14	2,503	0.2	2,769	0.3
15–19	229,888	22.3	249,078	24.2
15–17	61,223	9.9	66,791	10.9
18–19	168,665	40.7	182,287	43.8
20–24	851,142	76.9	882,567	79.0
5–29	1,152,660	104.3	1,145,392	105.8
0–34	1,093,898	101.4	1,081,058	100.8
5–39	527,168	51.7	508,748	51.0
0–44	111,611	11.0	110,021	10.6
15–54 <sup>1</sup>	8,876	0.8	8,443	0.8

<sup>&</sup>lt;sup>1</sup>The birth rate for women in this age group is computed by relating the number of births to women aged 45 and over to women aged 45–49, because most of the births in this group are to women aged 45–49.

NOTE: For information on the relative standard errors of the data and further discussion of random variation, see reference 6.

Table 2. Birth rates for women aged 10-19, by age of mother: United States, final 1991, 2007, and 2014, and preliminary 2015

[Data for 2015 are based on a continuous file of records received from the states. Figures for 2015 are based on weighted data rounded to the nearest individual. Rates are per 1,000 women in specified age group. Population based on counts estimated as of July 1 for all years]

	Year			Percent change			
Age of mother	2015	2014	2007	1991	2014–2015	2007–2015	1991–2015
10–14	0.2	0.3	0.6	1.4	-33	-67	-86
15–19	22.3	24.2	41.5	61.8	-8	-46	-64
15–17	9.9	10.9	21.7	38.6	<b>-9</b>	-54	-74
18–19	40.7	43.8	71.7	94.0	<b>-</b> 7	-43	<b>–</b> 57

NOTE: For information on the relative standard errors of the data and further discussion of random variation, see reference 6.

Table 3. Births, by race and Hispanic origin of mother: United States and each state and territory, preliminary 2015

[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]

	Number						
Area	All races and origins <sup>1</sup>	Non-Hispanic white <sup>2</sup>	Non-Hispanic black <sup>2</sup>	American Indian or Alaska Native total <sup>2,3</sup>	Asian or Pacific Islander total <sup>2,3</sup>	Hispanic⁴	
United States <sup>5</sup>	3,977,745	2,129,657	589,605	44,328	281,306	922,836	
Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware District of Columbia Florida	59,632 11,266 85,344 38,841 491,487 66,530 35,754 11,164 9,583 224,263	35,811 6,534 36,972 25,684 141,388 40,833 20,401 5,955 2,979 102,537	18,254 422 4,581 7,576 27,019 3,454 4,440 2,987 4,800 49,605	190 2,410 5,317 353 3,501 803 97 16 16 372	1,193 1,114 3,518 1,235 80,275 2,973 2,499 675 500 7,618	4,292 809 35,246 4,005 234,238 18,132 8,275 1,532 1,330 64,077	
Georgia Hawaii Idaho Illinois Indiana Iowa Kansas Kentucky Louisiana Maine	131,309 18,395 22,821 158,081 83,995 39,494 39,143 55,945 64,542 12,605	60,267 4,785 18,081 85,401 63,426 32,037 28,227 46,302 33,972 11,558	45,437 577 240 27,159 10,343 2,503 2,911 5,278 24,006 463	295 35 406 209 120 241 330 89 392	6,465 11,441 516 10,221 2,524 1,364 1,483 1,317 1,498 186	17,832 2,770 3,645 33,893 7,634 3,420 6,300 3,004 4,810 251	
Maryland Massachusetts Michigan Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire	73,598 71,566 113,501 69,803 38,390 75,060 12,582 26,662 36,272 12,417	32,403 43,352 79,053 49,652 19,634 57,079 10,271 19,187 14,920 10,907	23,645 6,830 21,895 8,028 16,416 11,312 89 1,870 4,453 237	279 138 782 1,414 259 359 1,558 556 510 26	5,835 6,749 4,304 5,658 556 2,131 152 989 3,337 526	11,734 12,812 7,449 4,851 1,612 4,044 573 4,248 13,219 639	
New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island	103,203 26,012 236,814 120,815 11,311 139,217 53,067 45,583 141,948 10,967	46,559 7,241 115,529 67,091 8,794 103,553 33,260 32,086 98,442 6,681	15,221 476 36,881 28,869 573 23,731 4,991 1,331 20,295 953	179 3,479 736 1,976 985 253 5,920 813 393 138	11,992 525 26,631 5,858 344 4,366 1,760 2,897 7,021 639	28,694 14,515 54,049 18,091 579 6,972 7,398 8,511 15,053 2,612	
South Carolina South Dakota Tennessee Texas Utah. Vermont Virginia Washington West Virginia Wisconsin Wyoming	58,124 12,331 81,460 403,385 50,779 5,903 103,229 88,960 19,797 67,034 7,758	33,918 9,061 55,375 140,463 38,473 5,370 59,190 55,307 18,448 49,017 6,190	17,798 328 16,655 49,624 644 131 21,769 4,615 698 7,099	217 2,163 202 1,270 700 25 253 2,059 27 1,029 294	1,288 322 2,161 21,775 1,875 175 8,532 10,654 225 3,276 135	4,940 559 7,224 191,054 7,876 139 13,923 16,072 330 6,603 963	

See footnotes at end of table.

#### Table 3. Births, by race and Hispanic origin of mother: United States and each state and territory, preliminary 2015—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]

			Nu	ımber		
Area	All races and origins <sup>1</sup>	Non-Hispanic white <sup>2</sup>	Non-Hispanic black <sup>2</sup>	American Indian or Alaska Native total <sup>2,3</sup>	Asian or Pacific Islander total <sup>2,3</sup>	Hispanic <sup>4</sup>
Puerto Rico	31,272	1,460	134	40	52	29,573
Virgin Islands						
Guam	3,371	193	34	11	3,108	32
American Samoa	1,058			_	1,057	
Northern Marianas	384	1	_	_	383	_

<sup>---</sup> Data not available.

NOTE: For information on the relative standard errors of the data and further discussion of random variation, see reference 6.

<sup>-</sup> Quantity zero.

<sup>1</sup> Includes births to race and origin groups not shown separately, such as white-Hispanic and black-Hispanic women, and births with origin not stated.

<sup>&</sup>lt;sup>2</sup>Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Forty-nine states and the District of Columbia reported multiple race data in 2015. The multiple-race data for these states were bridged to the single race categories of the OMB standards for comparability with other states; see Technical Notes.

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

<sup>&</sup>lt;sup>4</sup>Includes all persons of Hispanic origin of any race; see Technical Notes.

<sup>&</sup>lt;sup>5</sup>Excludes data for the territories.

# Table 4. Births and percentages of births to unmarried women, by age of mother and race and Hispanic origin of mother: United States, final 2014 and preliminary 2015

[Data for 2015 are based on a continuous file of records received from the states. Figures for 2015 are based on weighted data rounded to the nearest individual, so categories may not add to totals]

	Nur	nber	Percent		
Characteristics	2015	2014	2015	2014	
Age of mother					
II ages <sup>1</sup>	1,600,208	1,604,870	40.2	40.2	
nder 20	206,530	223,386	88.9	88.7	
Under 15	2,490	2,752	99.5	99.4	
15–19	204,040	220,634	88.8	88.6	
15–17	58,546	63,904	95.6	95.7	
18–19	145,494	156,730	86.3	86.0	
)–24	560,494	579,760	65.9	65.7	
j–29	435,054	419,792	37.7	36.7	
)–34	251,962	243,054	23.0	22.5	
5–39	116,338	110,058	22.1	21.6	
and over	29,831	28,820	24.8	24.3	
Race and Hispanic origin of mother					
on-Hispanic white <sup>2</sup>	621,468	628,078	29.2	29.2	
on-Hispanic black <sup>2</sup>	415,029	417,518	70.4	70.9	
nerican Indian or Alaska Native total <sup>2,3</sup>	29,156	29,529	65.8	65.7	
ian or Pacific Islander total <sup>2,3</sup>	46,199	46.342	16.4	16.4	
ispanic <sup>4</sup>	488,213	483,807	52.9	52.9	

<sup>1</sup> Includes births to race and origin groups not shown separately, such as white-Hispanic and black-Hispanic women, and births with origin not stated.

NOTE: For information on the relative standard errors of the data and further discussion of random variation, see reference 6.

<sup>&</sup>lt;sup>2</sup>Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Forty-nine states and the District of Columbia reported multiple-race data in 2015. The multiple-race data for these states were bridged to the single-race categories of the OMB standards for comparability with other states; see Technical Notes. Multiple-race reporting areas vary for 2014–2015; see Technical Notes.

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

<sup>&</sup>lt;sup>4</sup>Includes all persons of Hispanic origin of any race; see Technical Notes.

Table 5. Selected health characteristics of births, by race and Hispanic origin of mother: United States, final 2014 and preliminary 2015

[Data for 2015 are based on a continuous file of records received from the states. Figures for 2015 are based on weighted data rounded to the nearest individual]

		Cesarear	n delivery			Pret	erm		Low birthweight			
	To	tal <sup>1</sup>	Low	-risk <sup>2</sup>	To	tal <sup>3</sup>	La	ite <sup>4</sup>	Tot	tal <sup>5</sup>		y low veight <sup>6</sup>
Race and Hispanic origin of mother	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
All races and origins <sup>7</sup>	32.0	32.2	25.7	26.0	9.62	9.57	6.87	6.82	8.07	8.00	1.39	1.40
Non-Hispanic white <sup>8</sup> Non-Hispanic black <sup>8</sup> American Indian or Alaska Native	31.1 35.5	31.4 35.6	24.8 29.7	25.0 29.9	8.88 13.39	8.91 13.23	6.54 8.57	6.55 8.47	6.93 13.33	6.96 13.17	1.09 2.88	1.10 2.87
total <sup>8,9</sup> . Asian or Pacific Islander total <sup>8,9</sup> . Hispanic <sup>10</sup> .	28.3 33.0 31.7	28.5 33.2 31.9	22.2 27.5 25.2	21.9 27.5 25.8	10.51 8.63 9.13	10.22 8.45 9.03	7.70 6.40 6.62	7.48 6.27 6.53	7.51 8.40 7.20	7.65 8.05 7.05	1.26 1.13 1.22	1.27 1.15 1.23

<sup>&</sup>lt;sup>1</sup>All births by cesarean delivery per 100 live births.

NOTE: For information on the relative standard errors of the data and further discussion of random variation, see reference 6.

Table 6. Distribution of births born preterm: United States, final 2007 and 2014 and preliminary 2015

[Data for 2015 are based on a continuous file of records received from the states. Figures for 2015 are based on weighted data rounded to the nearest individual]

Gestational age (weeks) <sup>1</sup>	2015	2014	2007
		Percent	
Under 32	1.58	1.60	1.71
32–33	1.17	1.15	1.22
Total under 34	2.75	2.75	2.93
34–36	6.87	6.82	7.51
Total under 37	9.62	9.57	10.44

<sup>&</sup>lt;sup>1</sup>Completed weeks of gestation based on the obstetric estimate; see Technical Notes.

NOTES: Preterm births are those born prior to 37 completed weeks of gestation. For information on the relative standard errors of the data and further discussion of random variation, see reference 6.

<sup>&</sup>lt;sup>2</sup>Defined as singleton, term (37 weeks or more of gestation based on obstetric estimate; see Technical Notes), vertex (not breech) cesarean deliveries to women having a first birth per 100 women delivering singleton, term, vertex first births.

<sup>&</sup>lt;sup>3</sup>Born prior to 37 completed weeks of gestation based on the obstetric estimate; see Technical Notes.

<sup>&</sup>lt;sup>4</sup>Born between 34 and 36 completed weeks of gestation based on the obstetric estimate; see Technical Notes.

<sup>&</sup>lt;sup>5</sup>Birthweight of less than 2,500 grams (5 lb 8 oz).

<sup>&</sup>lt;sup>6</sup>Birthweight of less than 1,500 grams (3 lb 4 oz).

<sup>7</sup>Includes births to race and origin groups not shown separately, such as white-Hispanic and black-Hispanic women, and births with origin not stated.

<sup>&</sup>lt;sup>6</sup>Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Forty-nine states and the District of Columbia reported multiple-race data in 2015. The multiple-race data for these states were bridged to the single-race categories of the OMB standards for comparability with other states; see Technical Notes. Multiple-race reporting areas vary for 2014–2015; see Technical Notes.

<sup>&</sup>lt;sup>9</sup>Includes persons of Hispanic and non-Hispanic origin and origin not stated, according to the mother's reported race; see Technical Notes.

<sup>&</sup>lt;sup>10</sup>Includes all persons of Hispanic origin of any race; see Technical Notes.

Table 7. Total count of records and completeness of preliminary file of live births: United States and each state and territory, preliminary 2015

[By place of occurrence. Data are based on a continuous file of records received from the states]

	Live births				
Area	Counts of records	Percent completeness			
nited States <sup>1</sup>	3,969,359	99.533			
abama	58,007	100.000			
aska	11,160	100.000			
zona	86,390	100.000			
ansas	37,538	100.000			
lifornia	492,284	99.956			
olorado	67,109	100.000			
nnecticut	37,238	99.954			
elaware	11,506	100.000			
strict of Columbia	14,609	100.000			
orida	224,522	100.000			
eorgia	132,635	100.000			
waii	18,416	99.935			
aho	22,469	100.000			
nois	154,156	100.000			
liana	84,933	99.978			
va	39,479	99.985			
nsas	40,228	100.000			
ntucky	53,373	99.811			
uisiana	64,608	99.981			
ine	12,382	99.992			
aryland	70,300	100.000			
assachusetts	72,077	100.000			
chigan	111,845	99.418			
nnesota	69,062	100.000			
ssissippi	37,580	100.000			
ssouri	76,122	99.926			
ontana	12,521	100.000			
ebraska	27,110	100.000			
evada	35,924	100.000			
w Hampshire	12,476	100.000			
w Jersey	88,903	88.223			
w Mexico	24,048	98.155			
w York	237,800	99.997			
New York excluding New York City	116,227	99.995			
New York City	121,573	100.000			
rth Carolina	122,642	100.000			
rth Dakota	12,839	100.000			
iio	140,014	100.000			
dahoma	51,834	99.981			
egon	46,016	99.972			
ennsylvania	139,899	99.256			
node Island	11,524	100.000			
uth Carolina	54,734	99.991			
outh Dakota	12,963	100.000			
nnessee	83,171	95.431			
Xas	412,382	99.988			
ah	51,721	99.996			
rmont	5,720	100.000			
ginia	102,110	99.990			
shington	88,880	100.000			
est Virginia	20,326	99.608			
sconsin	66,669	100.000			
yoming	7,105	99.958			
erto Rico	31,204	99.534			
gin Islands	0.000				
Iam	2,968	88.045			
nerican Samoa	905	85.539			
orthern Marianas	866	84.902			

<sup>---</sup> Data not available.

<sup>&</sup>lt;sup>1</sup>Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas.

NOTE: Percent completeness = Number of records in preliminary file  $^{\star}$  100 / Count of records.

## **Technical Notes**

#### Nature and sources of data

Preliminary data for 2015 are based on nearly all births for that year (99.53%) (Table 7), with levels for 27 states and the District of Columbia at 100%. Preliminary 2015 data are based on the continuous receipt and processing of statistical records through February 11, 2016, by the National Center for Health Statistics (NCHS). NCHS receives the data from the state's vital registration systems through the Vital Statistics Cooperative Program. In this report, U.S. totals include only events occurring within the 50 states and the District of Columbia. Data for Puerto Rico, Guam, American Samoa, and Northern Marianas are included in tables showing data by state, but are not included in U.S. totals (Tables 3 and 7, and see state-specific Internet tables at <a href="http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65">http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65</a> 03 tables.pdf). Data for the Virgin Islands were not available as of the release of the 2015 preliminary file. Accordingly, data for this territory are not included in this report. (NOTE: For releases of preliminary birth data prior to 2014, a criterion of at least 75% of a state's records for the year was used (6). Starting with the release of the 2014 preliminary birth data, a criterion of at least 85% of a state's records for the year was used.) Detailed information on reporting completeness and imputation procedures may be found in "User Guide to the 2014 Natality Public Use File" (7).

To produce the preliminary estimates shown in this report, records in the file were weighted using independent control counts of all 2014 births by state of occurrence. Detailed information on weighting and the reliability of estimates is also available elsewhere (6).

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

This report includes selected 2015 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 (2,7-9). Forty-eight states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming); the District of Columbia; Guam; Puerto Rico; and Northern Marianas had implemented the revised birth certificate as of January 1, 2015. One additional state, New Jersey, which implemented the revised birth certificate starting in 2014, but after January 1 (in July) and only for selected facilities, had not completed the implementation of the revised birth certificate as of January 1, 2015. The 48 revised states and the District of Columbia that implemented the revision as of January 1, 2015, represent 96.5% of all births in 2015.

Data items exclusive to either the 1989 or the 2003 birth certificate revisions are not shown in this report. A forthcoming report and data release based on 2015 final data will present selected data exclusive to the 2003 revised certificate.

# Age of mother

For information on and discussion of age of mother, see "User Guide to the 2014 Natality Public Use File" (7).

# 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 and Asian or Pacific Islander) 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 for white mothers and black mothers, given the substantial differences in fertility and maternal and infant health characteristics between Hispanic and non-Hispanic white women and Hispanic and non-Hispanic black women. Items asking for the Hispanic origin of the mother have been included on the birth certificates of all states and the District of Columbia, the Virgin Islands, and Guam since 1993, on the birth certificate of Puerto Rico starting in 2005, and on the birth certificate of Northern Marianas starting in 2010 (7). American Samoa does 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). Information on this change is presented elsewhere (8,11–14).

In 2015, the multiple-race reporting areas were the 48 fully revised states (see "1989 and 2003 U.S. Standard Certificates of Live Birth" section above) and the District of Columbia, as well as New Jersey, which was not fully revised as of January 1, 2015. Puerto Rico, which revised its birth certificate in 2005, began to report race according to the 2003 revision in 2015. The 49 states and the District of Columbia accounted for 99.1% of U.S. births in 2015. Data from the vital records of the remaining 2 areas, Connecticut (which has not implemented the revised birth certificate) and unrevised parts of New Jersey, are based on the 1989 revision of the certificate that follows the 1977 OMB standard, allowing only a single race to be reported (11,12).

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 (12–14). Information detailing the processing and tabulation of data by race is presented elsewhere (7). A previous report describes multiple-race birth data for 2003 (15).

#### Marital status

For information on and discussion of marital status, see "User Guide to the 2014 Natality Public Use File" (7).

# Method of delivery, gestation, and birthweight

For information on and discussion of method of delivery and birthweight, see "User Guide to the 2014 Natality Public Use File" (7).

Beginning with the 2014 data year, NCHS transitioned to a new standard for estimating the gestational age of the newborn. The new measure—the obstetric estimate of gestation at delivery (OE) replaces the measure based on the date of the last normal menses (LMP) (3). Accordingly, gestational age data shown in this report are based on the OE. However, LMP-based data are also available for all relevant report tables from: http://www.cdc.gov/nchs/data/nvsr/ nvsr65/nvsr65 03 tables.pdf. National data based on OE data are available only from data year 2007 forward. Gestational age estimates differ somewhat between the OE- and LMP-based measures. For example, the 2015 OE-based preterm birth rate for the United States is 9.62%, compared with the LMP-based rate of 11.29%. In general, both measures show similar trends in the rate of preterm birth from 2007 to 2014. Information on and discussion of the reasons for the change, and a detailed comparison of the two measures, are presented elsewhere (3).

## Population denominators

U.S. national birth and fertility rates for 2015 shown in this report are based on population estimates derived from the 2010 census as of July 1, 2015 (16).

Information on the national estimates of births to unmarried women (i.e., methods of determining marital status) and the computation of preliminary birth rates for unmarried women is presented elsewhere (2,7,17). The birth rate for unmarried women for 2015 is estimated based on the population distributions by marital status, derived from the 2015 March (Annual Social and Economic) Supplement of the U.S. Census Bureau, and applied to the national population estimates as of July 1, 2015, which are derived from the 2010 census (16–18).

Postcensal population estimates by age, sex, and race and Hispanic origin for 2015 at the national and state levels were not available as of the preparation of this report. Accordingly, birth and fertility rates by race and Hispanic origin and fertility rates by state could not be shown in this report. These rates will be shown in the 2015 final birth report.

# Computing rates and percentages and reliability of estimates

For information on and further discussion of computing rates and percentages and the relative standard errors of the data, see "Births: Preliminary Data for 2005" (6).

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