

## Newly Released Data From the Revised U.S. Birth Certificate, 2011

by Michelle J.K. Osterman, M.H.S.; Joyce A. Martin, M.P.H.; Sally C. Curtin, M.A.; T.J. Mathews, M.S.; Elizabeth C. Wilson, M.P.H.; and Sharon Kirmeyer, Ph.D., Division of Vital Statistics

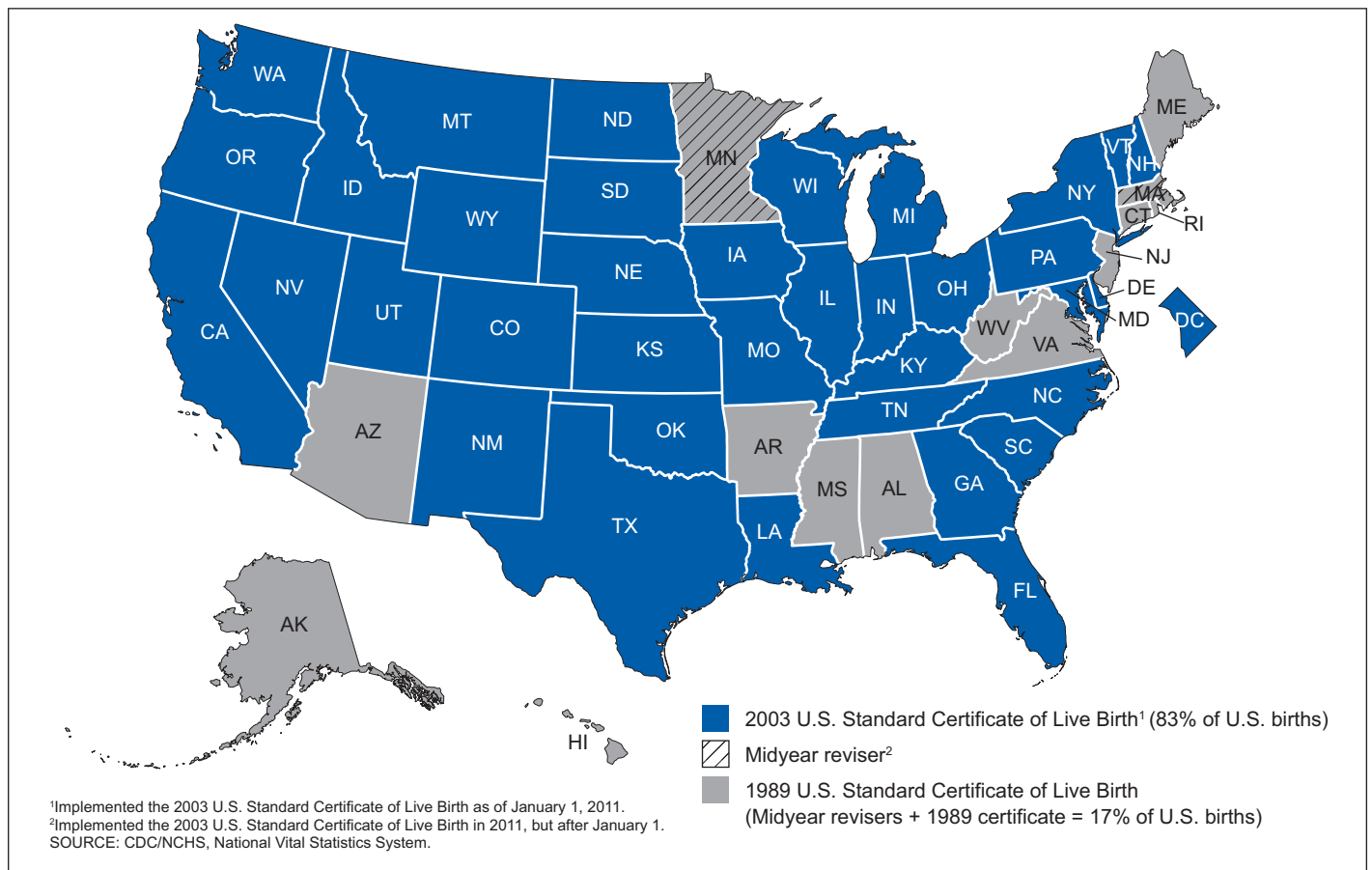


Figure 1. Birth certificate revision status, by reporting area: United States, 2011

## Abstract

**Objectives**—This report is the first release of multistate data for selected items exclusive to the 2003 revision of the U.S. Standard Certificate of Live Birth. Included is information for prepregnancy body mass index, smoking and quitting smoking in the 3 months prior to pregnancy, receipt of food from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during pregnancy, pregnancy resulting from infertility treatment, source of payment for delivery, and maternal morbidities.

**Methods**—Descriptive statistics are presented for 100% of 2011 births to residents of the 36 states, the District of Columbia (D.C.), and Puerto Rico that had implemented the revised birth certificate by January 1, 2011. This reporting area is not a random sample, and results are not generalizable to the United States as a whole.

**Results**—The 3,267,934 births to residents of the 36-state and D.C. reporting area represented 83% of all 2011 U.S. births. Levels of prepregnancy obesity ranged from 18.0% in Utah to 28.6% in South Carolina. Hispanic women were the least likely to smoke in the 3 months prior to pregnancy and were the most likely to quit smoking prior to pregnancy. Women under age 20 were more than twice as likely to receive WIC food during pregnancy as women aged 35 and over in nearly all states and D.C. The percentage of births resulting from infertility treatment ranged from 0.3% in New Mexico to over 3.5% in Maryland and Utah. The percentage of deliveries covered by Medicaid ranged from 28.8% in North Dakota to 64.2% in Louisiana.

**Keywords:** prepregnancy BMI • infertility treatment • WIC • payment for delivery

## Introduction

This report presents data for selected items exclusive to the 2003 U.S. Standard Certificate of Live Birth (1) for the states and territories that implemented the 2003 revision of the birth certificate as of January 1, 2011 (Figure 1). The 2011 “revised reporting area” includes 36 states and the District of Columbia (D.C.), representing 83% of all 2011 U.S. births. Because of the lack of a national reporting area, data presented in this report are not representative of the United States as a whole (see Methods section), and results are not generalizable. However, to the extent that results for the total reporting area are largely consistent with those for the individual reporting areas, the total results may provide some insight into national patterns for these data items.

This is the first presentation of multistate data for a number of items new to the birth certificate: mother’s prepregnancy body mass index (BMI), tobacco use and quitting in the 3 months prior to pregnancy, receipt of food from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during pregnancy, infertility treatment, source of payment for the delivery, and maternal morbidities. See the 2003 U.S. Standard Certificate of Live Birth for items discussed in this report (1); more information on the revision is available elsewhere (2). This report is a supplement to “Births: Final Data for 2011” (3), which presents national data for items considered comparable between the revisions.

Information on items available in the public-use file but not presented in this report or in “Births: Final Data for 2011” (3) (e.g., type of infertility treatment, infections present and/or treated during

pregnancy, time of birth, and infant breastfed) can be found in the “User Guide to the 2011 Natality Public Use File” (4). In addition to the tabulations in this report, more detailed analysis is possible using the 2011 natality public-use file (5), which can be downloaded from [http://www.cdc.gov/nchs/data\\_access/Vitalstatsonline.htm](http://www.cdc.gov/nchs/data_access/Vitalstatsonline.htm). Data can also be extracted from Vital Stats (6), an interactive online data access and analysis tool.

## Methods

Data are based on 100% of births to residents of the 36 states and D.C. that implemented the 2003 revision of the birth certificate as of January 1, 2011. The 36 states included are California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming. The 3,267,934 births to residents of this reporting area represent 83% of 2011 U.S. births.

Northern Marianas and Puerto Rico also implemented the revised birth certificate by January 1, 2011; and Massachusetts, Minnesota, and Guam implemented the revised certificate in 2011, but after January 1. Data for residents of these reporting areas are not included here, although data for Puerto Rico are shown in selected state-specific tables (see [Technical Notes](#) at the end of this report).

Because this 36-state and D.C. reporting area is not a random sample, the results presented in this report are not generalizable to the United States as a whole. In particular, note that the race and Hispanic-origin distributions of births for the reporting area are substantively different from those for the entire United States. Also, Hispanic groups are overrepresented in these data, whereas non-Hispanic white and non-Hispanic black populations are underrepresented. Further, the Hispanic population composition in the reporting area differs from that of the United States, with relatively more births to Mexican and Cuban women and fewer births to Puerto Rican and Central and South American women. See Table D in the user guide (4). In addition, differences between the 36-state and D.C. reporting area and the United States in the distributions of births by maternal age, marital status, and infant characteristics, while generally statistically significant, are smaller. Note that the reporting area for smoking status excludes Michigan; and the reporting area for maternal morbidities excludes Delaware. See [Technical Notes](#).

Tables 1–9 show data for selected items based on the 2003 revised birth certificate. Results are presented for the three largest single-race and Hispanic-origin groups (non-Hispanic single-race white, non-Hispanic single-race black, and Hispanic). Rates based on fewer than 20 births are not shown because they lack sufficient reliability for analytic purposes (4).

The items included in this report are presented for the first time for the revised reporting area. Only limited information is available about the quality of these data (7–9). A recent report (8) examines the quality of source-of-payment data based on medical record review in two states. Another study (9) assesses the quality of maternal prepregnancy weight and height (components of BMI) in Florida. The quality of data on maternal morbidities is discussed in the user guide (4). A forthcoming report (10) will address the reporting of source-of-payment

information based on data for 2010. Assessment of the quality of data for other items included in this report is currently under way.

All differences noted in the text are statistically significant at the 0.05 level unless otherwise specified (4).

## Results

### Prepregnancy BMI

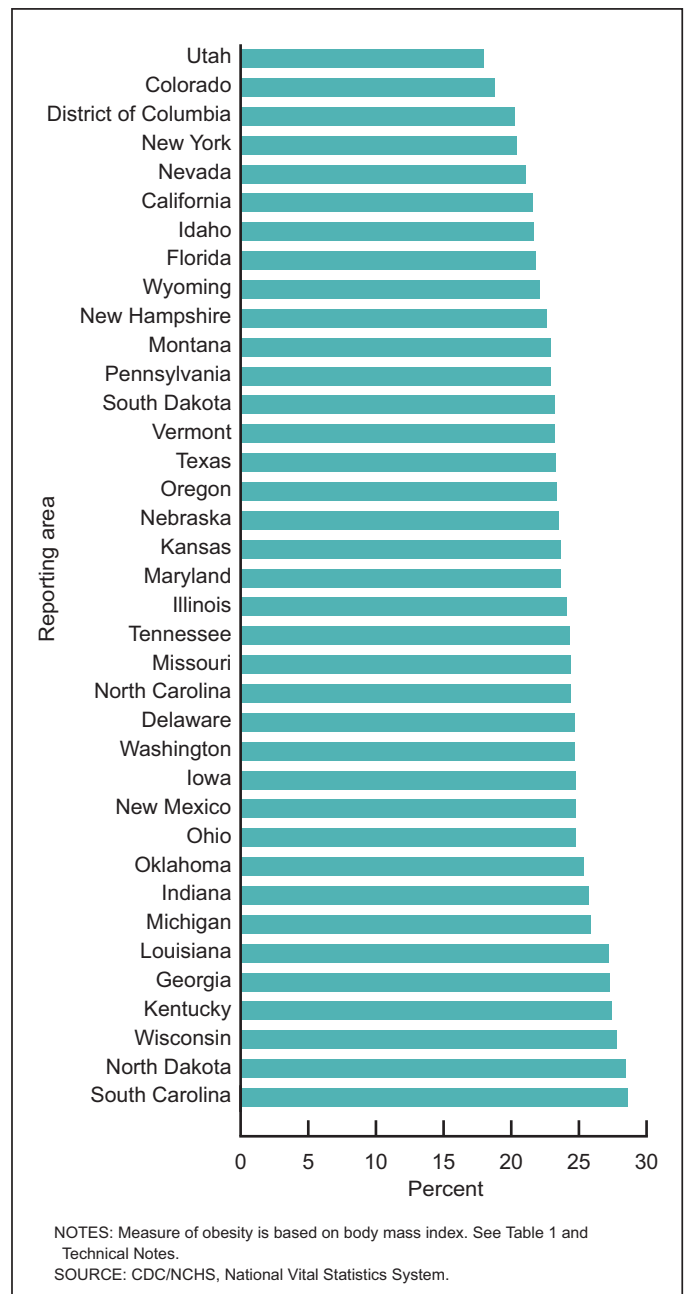
Overall, 23.4% of mothers in the 36-state and D.C. reporting area were obese (BMI of 30 or more; see [Technical Notes](#)) before pregnancy began ([Table 1](#)). Levels of obesity ranged from a low of 18.0% in Utah to a high of 28.6% in South Carolina ([Figure 2](#)).

- BMI varied with maternal age ([Table 2](#)). For the total reporting area and for nearly all states and D.C., mothers under age 20 were less likely to be obese than mothers aged 20 and over. The only exception to this pattern was seen for Vermont, where there was no significant difference in levels of obesity between the two age groups.
- Obesity varied by race and Hispanic origin for the reporting area. For the total reporting area and for most jurisdictions, non-Hispanic white women were less likely to be obese than non-Hispanic black and Hispanic women ([Table 2](#)). Non-Hispanic white women were less likely to be obese than non-Hispanic black women in 31 states (of 35 states for which reliable rates could be calculated) and D.C. and were less likely to be obese than Hispanic women in 33 states and D.C. All differences for the remaining states were not significant.

### Smoking in the 3 months prior to pregnancy

In 2011, 11.5% of mothers in a 35-state and D.C. reporting area (excludes Michigan, see [Technical Notes](#)) smoked in the 3 months before pregnancy ([Table 3](#)), ranging from a low of 3.3% in California to a high of 25.4% in Kentucky. Eleven states had at least 20.0% of mothers who smoked in the 3 months prior to pregnancy ([Table 3](#) and [Figure 3](#)).

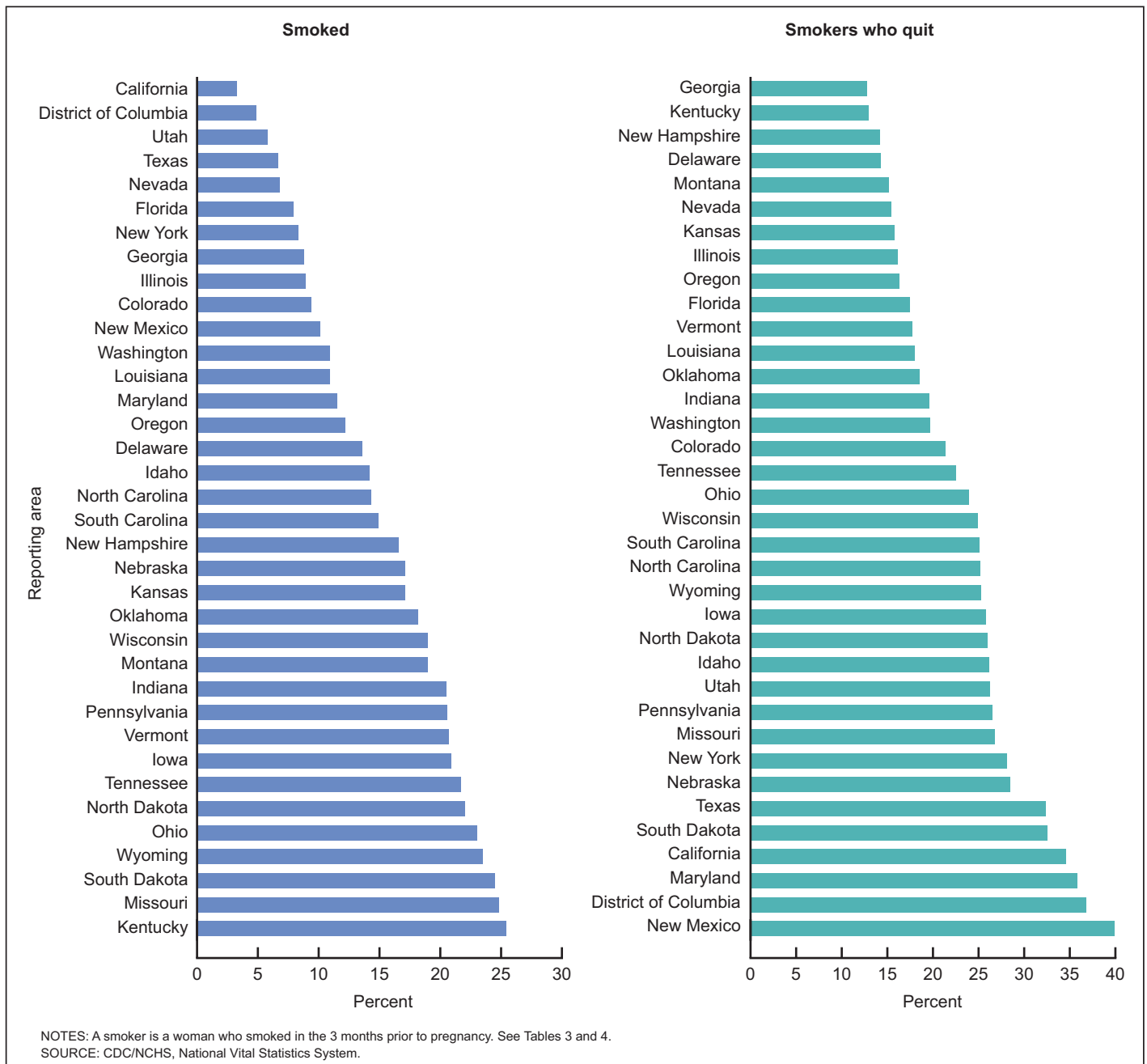
- For the total reporting area, the highest rates of smoking in the 3 months prior to pregnancy were for mothers under age 25; rates then declined with advancing age of mother. Of the 31 states with reliable rates, mothers aged 20–24 were at least 60% more likely to smoke in the 3 months prior to pregnancy than mothers aged 40–54.
- Smoking in the 3 months prior to pregnancy varied by race and Hispanic origin for the reporting area. Overall, non-Hispanic white women were more likely to have smoked in the 3 months prior to pregnancy than non-Hispanic black and Hispanic women. This pattern was observed in most states. Non-Hispanic white women were more likely to smoke than Hispanic women in 30 states (of 33 with reliable rates) and were more likely to smoke than non-Hispanic black women in 26 states (of 30 with reliable rates).



**Figure 2. Prepregnancy obesity, by reporting area: 36 states and the District of Columbia, 2011**

### Quitting smoking in the 3 months prior to pregnancy

Of the women who smoked in the 3 months prior to pregnancy in the 35-state and D.C. reporting area (excludes Michigan), 23.8% reported that they quit in the 3 months prior to pregnancy ([Table 4](#)). Quitting prior to pregnancy ranged from 12.8% in Georgia to 39.9% in New Mexico. Five states and D.C. had a quit rate of 30.0% or more ([Figure 3](#)). Data on smoking and quitting during pregnancy are available in Documentation Table 4 of the user guide (4).



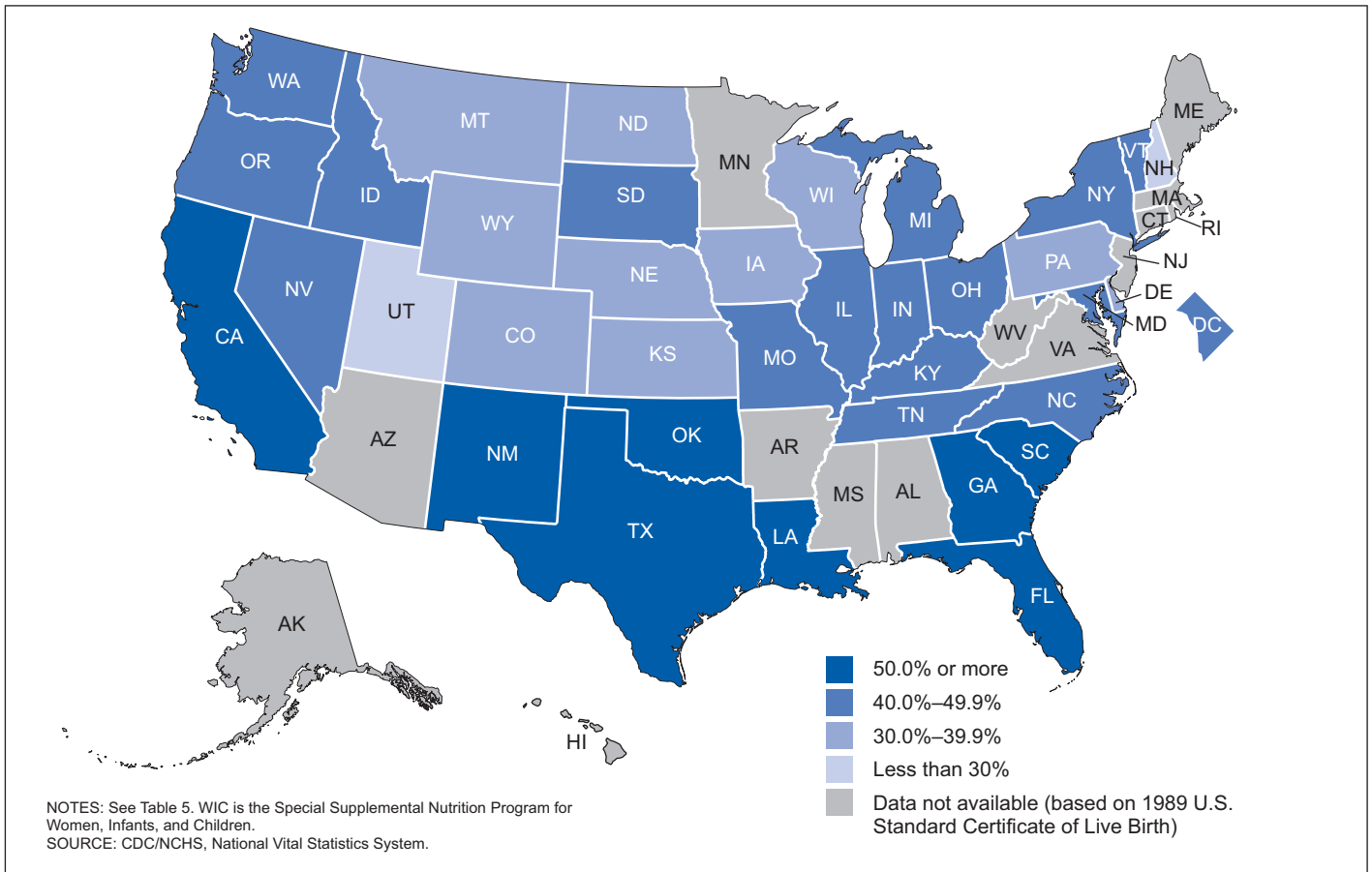
**Figure 3. Smoking in the 3 months prior to pregnancy and quitting prior to pregnancy, by reporting area: 35 states and the District of Columbia, 2011**

- For the 35-state reporting area and D.C., at least one in five women in each age group quit smoking prior to pregnancy. This pattern (i.e., similar rates of quitting by age) was observed for most states.
- Overall, Hispanic women were the most likely to quit smoking prior to pregnancy. By state, Hispanic women were more likely than non-Hispanic black women to quit in all states with enough smokers to calculate a rate (24 states), and were more likely than non-Hispanic white women to quit in all but 2 states where rates could be calculated (31 states; differences in 2 states were not significant).

### Mother received WIC food for herself during this pregnancy

Overall, 47.8% of mothers in the 36-state and D.C. reporting area received WIC food during pregnancy (Table 5). Levels of WIC food receipt ranged from a low of 28.1% in New Hampshire to a high of 55.9% in New Mexico. More than one-half of mothers in 8 states received WIC food during pregnancy (Figure 4).

- For the total reporting area and for all states and D.C., receipt of WIC food declined with advancing age of the mother through age group 30–34. Mothers under age 20 were more than twice as likely



**Figure 4. Mother received WIC food during pregnancy, by reporting area: 36 states and the District of Columbia, 2011**

to receive WIC food as mothers aged 35 and over in all states except New Mexico (where WIC food receipt for mothers under age 20 was at least 80% higher than for those aged 35 and over).

- Receipt of WIC food varied by race and Hispanic origin for the reporting area. Overall, and by state, non-Hispanic black and Hispanic women were more likely to receive WIC food during pregnancy than non-Hispanic white women. The only exception to this pattern was in Vermont, where there was no difference in WIC food receipt between non-Hispanic white and Hispanic women.

### Pregnancy resulted from infertility treatment

Just over 1% (1.4%) of all births in the 36 states and D.C. reporting area resulted from the use of infertility treatment. State levels ranged from 0.3% in New Mexico to over 3.5% in Maryland and Utah; rates were 2.0% or higher in 8 states and D.C. (Table 6 and Figure 5).

- Birth resulting from infertility therapy typically increased with advancing age of the mother. By state, levels ranged from 0.1% to 2.5% for women in their early 20s, compared with 3.3% to 17.1% for women aged 40 and over.
- Non-Hispanic white women were more than twice as likely as non-Hispanic black and Hispanic women to give birth using infertility therapies for the reporting area and for all states for which the number of events was large enough to compute reliable rates

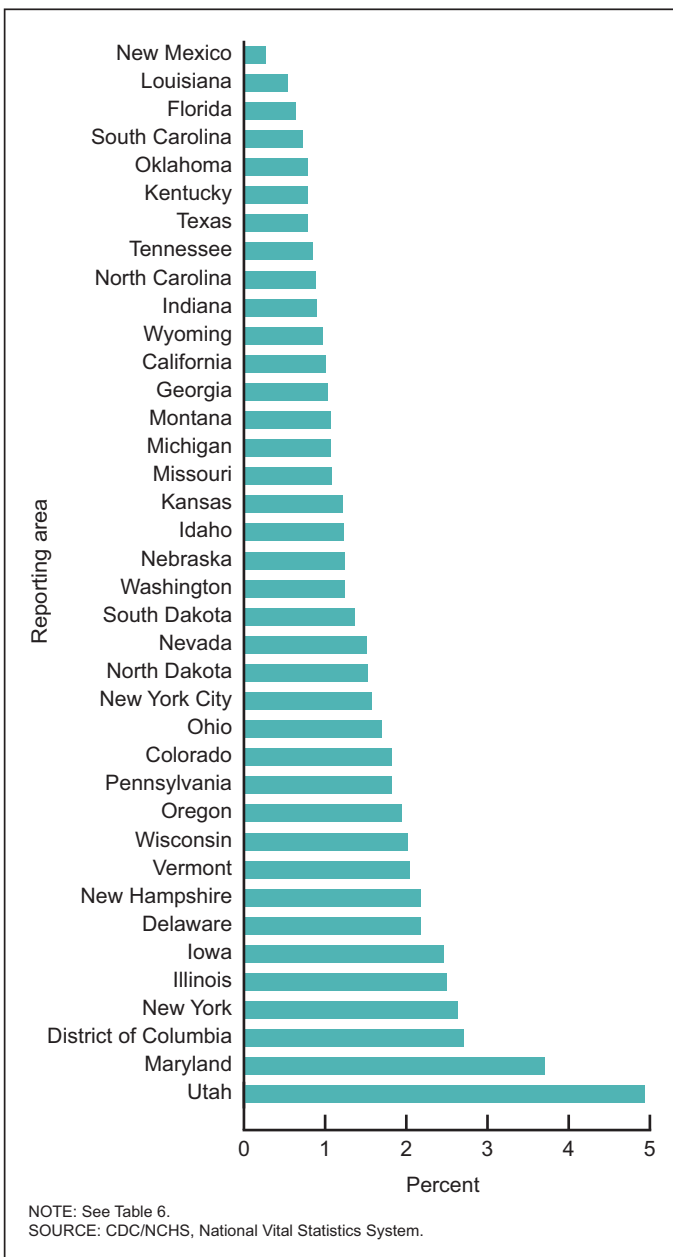
(18 states for non-Hispanic white compared with non-Hispanic black, and 19 states for non-Hispanic white compared with Hispanic).

- Twins were more likely than singletons to be the result of infertility therapy for each of the 36 states and D.C. (see Table on page 6). Triplets and higher-order multiple births were more likely to be associated with these therapies for all states for which reliable rates could be computed (27 states).

### Principal source of payment for the delivery

More than 9 of 10 births in the total reporting area (36 states and D.C.) were insured by either private insurance (46.1%) or Medicaid (44.9%). “Other” payment sources (4.8%) and self-pay (4.2%) accounted for less than 10.0% of all births (Table 7).

- Private insurance was the most common payment source in the majority of states (23 states), whereas Medicaid was the most common source in 11 states and D.C. Births insured by these two payment sources were not significantly different in 2 states (Illinois and Kentucky).
- Medicaid-insured births varied widely by state, ranging from less than 30.0% of births in North Dakota (28.8%) and Utah (29.4%) to almost two-thirds of births in Louisiana (64.2%) (Figure 6).
- Medicaid-insured births for the total reporting area, and for most states (33 and D.C.), declined with age through age 39



**Figure 5. Pregnancy resulted from infertility treatment, by reporting area: 36 states and the District of Columbia, 2011**

(Table 8). By state, births covered by Medicaid ranged from 59.8% (North Dakota) to 93.0% (Louisiana) for teen mothers, compared with 13.4% (New Hampshire) to 40.5% (New Mexico) for mothers aged 35–39.

- Non-Hispanic white mothers were less likely to have Medicaid as a payment source for their deliveries than were non-Hispanic black and Hispanic mothers for almost all states (Table 8). Medicaid insurance was lower for non-Hispanic white mothers than for non-Hispanic black mothers for all states except Montana, where the difference was not significant. Compared with Hispanic mothers, non-Hispanic white mothers had lower percentages of Medicaid insurance in all states except Kentucky and Vermont (differences not significant).

**Table. Pregnancy resulted from infertility therapy, by plurality and reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	Total	Percent		
		Singletons	Twins	Triplets and higher
Total <sup>1</sup>	1.4	0.9	14.1	42.8
California	1.0	0.6	13.7	39.0
Colorado	1.8	1.2	20.1	61.8
Delaware	2.2	1.8	13.0	*
District of Columbia	2.7	1.8	26.6	*
Florida	0.6	0.4	7.9	21.5
Georgia	1.0	0.7	8.8	29.8
Idaho	1.2	0.7	14.3	65.8
Illinois	2.5	1.5	24.9	56.6
Indiana	0.9	0.6	8.6	43.3
Iowa	2.5	1.7	22.1	77.1
Kansas	1.2	0.8	12.0	*
Kentucky	0.8	0.5	7.1	49.3
Louisiana	0.5	0.3	6.9	37.9
Maryland	3.7	2.7	27.3	48.9
Michigan	1.1	0.7	9.1	33.9
Missouri	1.1	0.7	10.7	32.1
Montana	1.1	0.7	13.4	*
Nebraska	1.2	0.7	13.4	58.1
Nevada	1.5	0.9	20.2	45.5
New Hampshire	2.2	1.3	23.0	*
New Mexico	0.3	0.2	3.3	*
New York	2.1	1.2	21.6	60.6
North Carolina	0.9	0.6	8.7	26.8
North Dakota	1.5	1.1	11.9	*
Ohio	1.7	1.2	13.5	46.8
Oklahoma	0.8	0.5	8.3	34.4
Oregon	1.9	1.2	21.6	45.5
Pennsylvania	1.8	1.2	17.2	53.6
South Carolina	0.7	0.5	7.3	30.0
South Dakota	1.4	1.0	13.3	*
Tennessee	0.8	0.6	7.2	43.5
Texas	0.8	0.4	10.5	38.1
Utah	4.9	4.1	29.1	68.6
Vermont	2.0	1.5	20.7	*
Washington	1.2	0.9	12.7	*
Wisconsin	2.0	1.4	18.1	59.8
Wyoming	1.0	0.6	14.7	*
Puerto Rico	0.4	0.2	7.5	*

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

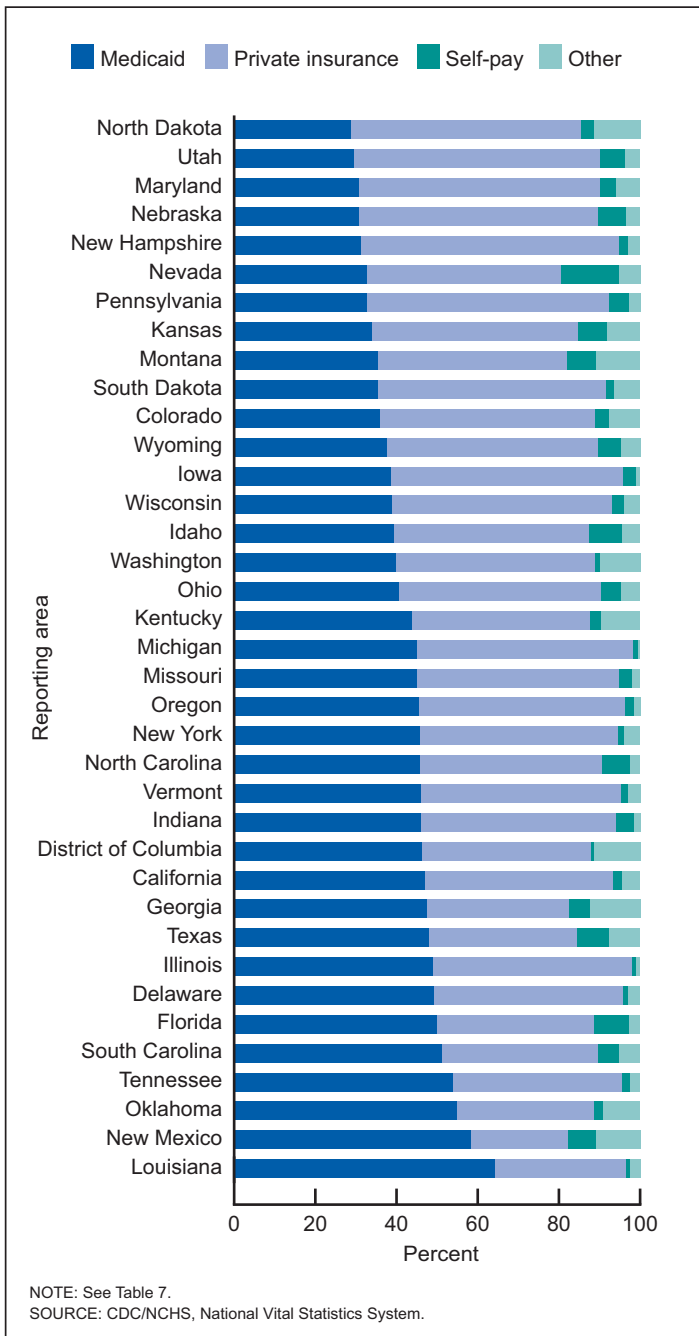
<sup>1</sup>Excludes data for Puerto Rico.

SOURCE: CDC/NCHS, National Vital Statistics System.

### Maternal morbidity

Of the six maternal morbidities included on the 2003 birth certificate revision (maternal transfusion, third- or fourth-degree perineal laceration, ruptured uterus, unplanned hysterectomy, admission to the intensive care unit, and unplanned operating room procedure), third- or fourth-degree perineal laceration was the most commonly reported, occurring in just under 1% of births (867.0 per 100,000) in the reporting area (35 states and D.C.; data excluded for Delaware, see Technical Notes) (Table 9). This was the most common morbidity reported in each of the 35 states.

- Ruptured uterus (tearing of the uterine wall; 26.2 per 100,000) and unplanned hysterectomy (37.4 per 100,000) were the rarest morbidities. Reliable rates for these morbidities could be computed for only one-half of the states (18 states) because of small numbers.



**Figure 6. Source of payment for the delivery, by reporting area: 36 states and the District of Columbia, 2011**

Ruptured uterus and unplanned hysterectomy were the rarest morbidities for nearly all (17 of 18) states.

- Rates for all the morbidities showed considerable variation by state. This may be due to actual variation in the incidence of these morbidities and also to the small number of cases, particularly for uterine rupture and unplanned hysterectomy.

## Summary

This is the first presentation of data for several items that are exclusive to the 2003 U.S. Standard Certificate of Live Birth. These data provide valuable information, particularly at the state level, on

topics that may affect maternal and child health. Data are also available for a number of other items not previously released, including time of birth, quitting smoking during pregnancy, infections present and/or treated during pregnancy, and infant breastfed (4). Because of the lack of national data or a random sample of births, these results are not generalizable to the U.S. as a whole. However, the number of states using the revised certificate continues to increase each year. For 2012, 38 states and D.C. will have adopted the 2003 revision (covering approximately 86% of all U.S. births). For 2013, 44 states and D.C. will use the revised certificate, representing 95% of all births. By 2015, it is expected that data for all reporting areas will be based on the 2003 U.S. standard certificate, providing national data for these and many other important demographic and medical and health items, such as mother's educational attainment, prenatal care, type of infertility treatment, and infant breastfed.

## References

1. National Center for Health Statistics. U.S. Standard Certificate of Live Birth. 2003. Available from: <http://www.cdc.gov/nchs/data/dvs/birth11-03final-ACC.pdf>.
2. National Center for Health Statistics. Report of the panel to evaluate the U.S. standard certificates. 2000. Available from: [http://www.cdc.gov/nchs/data/dvs/panelreport\\_acc.pdf](http://www.cdc.gov/nchs/data/dvs/panelreport_acc.pdf).
3. Martin JA, Hamilton BE, Ventura SJ, et al. Births: Final data for 2011. National vital statistics reports; vol 62 no 1. Hyattsville, MD: National Center for Health Statistics. 2013. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62\\_01.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_01.pdf).
4. National Center for Health Statistics. User guide to the 2011 natality public use file. Annual product, 2013. Available from: [http://www.cdc.gov/nchs/data\\_access/VitalStatsOnline.htm](http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm).
5. National Center for Health Statistics. Natality public use file. Published annually. Available from: [http://www.cdc.gov/nchs/data\\_access/VitalStatsOnline.htm](http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm).
6. National Center for Health Statistics. VitalStats. Available from: <http://www.cdc.gov/nchs/VitalStats.htm>.
7. Foley MM. An examination of the quality of the 2003 birth certificate data in Pennsylvania [dissertation 3176827]. Philadelphia, PA: Temple University. 2005.
8. Martin JA, Wilson EC, Osterman MJK, et al. Assessing the quality of medical and health data from the 2003 birth certificate revision: Results from two states. National vital statistics reports; vol 62 no 2. Hyattsville, MD: National Center for Health Statistics. 2013. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62\\_02.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_02.pdf).
9. Park S, Sappenfield WM, Bish C, Bensyl DM, Goodman D, Menges J. Reliability and validity of birth certificate prepregnancy weight and height among women enrolled in prenatal WIC program: Florida, 2005. *Matern Child Health J* 15(7):851–9. 2011.
10. Curtin SC, Osterman MJK, Uddin SF, et al. Source of payment for the delivery: Births in a 33-state and District of Columbia reporting area, 2010. National vital statistics reports; vol 62 no 5. Hyattsville, MD: National Center for Health Statistics. Forthcoming.
11. National Center for Health Statistics. NCHS data release and access policy for micro-data and compressed vital statistics files. Available from: [http://www.cdc.gov/nchs/nvss/dvs\\_data\\_release.htm](http://www.cdc.gov/nchs/nvss/dvs_data_release.htm).
12. U.S. Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. Federal Register 62FR58781–58790. 1997. Available from: [http://www.whitehouse.gov/omb/fedreg\\_1997standards](http://www.whitehouse.gov/omb/fedreg_1997standards).

13. Hamilton BE, Ventura SJ. Characteristics of births to single- and multiple-race women: California, Hawaii, Pennsylvania, Utah, and Washington, 2003. National vital statistics reports; vol 55 no 15. Hyattsville, MD: National Center for Health Statistics. 2007. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr55/nvsr55\\_15.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr55/nvsr55_15.pdf).
14. Zhang Z, Macaluso M, Cohen B, Schieve L, Nannini A, Chen M, et al. Accuracy of assisted reproductive technology information on the Massachusetts birth certificate, 1997–2000. Fertil Steril 94(5):1657–61. 2010.
15. National Center for Health Statistics. Guide to completing the facility worksheets for the Certificate of Live Birth and Report of Fetal Death (2003 rev). 2006. Available from: <http://www.cdc.gov/nchs/data/dvs/GuidetoCompleteFacilityWks.pdf>.
16. National Center for Health Statistics. User guide to the 2010 natality public use file. Annual product 2012. Available from: [http://www.cdc.gov/nchs/data\\_access/VitalStatsOnline.htm](http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm).

## List of Detailed Tables

1. Maternal prepregnancy body mass index, by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011 . . . . .	9
2. Prepregnancy obesity, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011 . . . . .	10
3. Smoking in the 3 months prior to pregnancy, by race and Hispanic origin, by age of mother, and by reporting area: 35 states and the District of Columbia, 2011 . . . . .	11
4. Quitting smoking prior to pregnancy, by race and Hispanic origin, by age of mother, and by reporting area: 35 states and the District of Columbia, 2011 . . . . .	12
5. Mother received WIC food during this pregnancy, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011 . . . . .	13
6. Pregnancy resulted from infertility therapy, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011 . . . . .	14
7. Principal source of payment for the delivery, by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011 . . . . .	15
8. Births insured by Medicaid, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011 . . . . .	16
9. Maternal morbidity, by reporting area: 35 states, the District of Columbia, and Puerto Rico, 2011 . . . . .	17



**Table 1. Maternal prepregnancy body mass index, by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	Total	BMI <sup>1</sup>			
		Underweight (BMI less than 18.5)	Normal (BMI 18.5–24.9)	Overweight (BMI 25.0–29.9)	Obese (BMI greater than 30.0)
		Percent			
Total <sup>2</sup> . . . . .	100.0	3.9	47.3	25.3	23.4
California . . . . .	100.0	3.8	48.5	26.2	21.6
Colorado . . . . .	100.0	4.1	52.3	24.8	18.8
Delaware . . . . .	100.0	4.5	45.1	25.7	24.7
District of Columbia . . . . .	100.0	4.3	52.7	22.7	20.3
Florida . . . . .	100.0	4.8	48.3	25.1	21.8
Georgia . . . . .	100.0	3.7	42.6	26.4	27.3
Idaho . . . . .	100.0	3.3	50.1	24.8	21.7
Illinois . . . . .	100.0	3.5	46.0	26.4	24.1
Indiana . . . . .	100.0	4.2	45.0	25.2	25.7
Iowa . . . . .	100.0	3.2	46.5	25.6	24.8
Kansas . . . . .	100.0	3.5	46.8	26.0	23.7
Kentucky . . . . .	100.0	4.6	43.7	24.3	27.4
Louisiana . . . . .	100.0	4.4	43.8	24.6	27.2
Maryland . . . . .	100.0	3.5	46.5	26.3	23.7
Michigan . . . . .	100.0	3.5	45.1	25.5	25.9
Missouri . . . . .	100.0	4.2	47.3	24.1	24.4
Montana . . . . .	100.0	3.1	49.0	25.0	22.9
Nebraska . . . . .	100.0	3.3	48.4	24.9	23.5
Nevada . . . . .	100.0	4.7	48.8	25.4	21.1
New Hampshire . . . . .	100.0	3.5	50.1	23.8	22.6
New Mexico . . . . .	100.0	4.0	43.2	28.1	24.8
New York . . . . .	100.0	4.2	50.0	25.4	20.4
North Carolina . . . . .	100.0	4.2	46.4	25.0	24.4
North Dakota . . . . .	100.0	2.6	41.0	27.9	28.5
Ohio . . . . .	100.0	4.2	46.9	24.1	24.8
Oklahoma . . . . .	100.0	4.5	45.2	24.8	25.4
Oregon . . . . .	100.0	3.2	48.5	24.9	23.4
Pennsylvania . . . . .	100.0	3.9	49.2	24.1	22.9
South Carolina . . . . .	100.0	4.1	42.5	24.8	28.6
South Dakota . . . . .	100.0	3.6	47.8	25.5	23.2
Tennessee . . . . .	100.0	4.8	46.5	24.3	24.3
Texas . . . . .	100.0	4.0	47.4	25.3	23.3
Utah . . . . .	100.0	4.3	54.9	22.7	18.0
Vermont . . . . .	100.0	3.1	49.4	24.3	23.2
Washington . . . . .	100.0	2.9	46.4	25.9	24.7
Wisconsin . . . . .	100.0	2.6	43.1	26.5	27.8
Wyoming . . . . .	100.0	3.6	50.1	24.3	22.1
Puerto Rico . . . . .	100.0	7.4	46.9	25.2	20.5

<sup>1</sup>BMI is body mass index; for calculation, see Technical Notes.<sup>2</sup>Excludes data for Puerto Rico.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 2. Prepregnancy obesity, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	Total	Race and Hispanic origin			Age of mother in years					
		Non-Hispanic white	Non-Hispanic black	Hispanic	Under 20	20–24	25–29	30–34	35–39	40–54
					Percent					
Total <sup>1</sup>	23.4	21.8	32.6	25.2	15.0	23.9	24.8	23.6	24.7	25.1
California	21.6	17.1	29.4	26.8	13.6	22.7	23.5	21.4	21.2	22.2
Colorado	18.8	16.6	24.2	24.5	11.6	19.9	20.3	18.1	19.3	19.4
Delaware	24.7	21.8	33.3	25.4	15.3	23.4	24.8	26.6	29.0	26.0
District of Columbia	20.3	4.8	30.0	20.6	17.0	26.7	27.9	16.2	14.2	13.7
Florida	21.8	19.3	30.5	20.2	13.7	21.8	23.0	22.1	23.1	23.8
Georgia	27.3	23.5	35.9	24.6	18.6	28.2	28.8	27.1	29.1	30.3
Idaho	21.7	20.7	19.2	27.2	13.9	20.4	22.2	23.0	26.0	28.0
Illinois	24.1	21.9	34.1	26.4	15.9	25.1	25.4	23.7	25.6	25.6
Indiana	25.7	24.9	33.9	26.0	15.9	25.6	26.4	27.4	28.3	30.9
Iowa	24.8	25.0	29.5	25.5	16.0	25.3	25.3	24.6	29.1	23.7
Kansas	23.7	23.4	28.8	25.8	14.2	24.2	24.8	24.5	25.7	28.2
Kentucky	27.4	27.1	36.1	23.8	18.3	28.0	28.4	28.4	31.1	31.8
Louisiana	27.2	23.2	34.7	22.0	17.2	26.2	29.3	29.4	31.3	33.7
Maryland	23.7	19.8	33.6	22.0	17.1	25.0	24.6	23.0	23.8	26.8
Michigan	25.9	24.4	34.5	27.7	17.1	26.2	26.7	26.1	29.1	28.9
Missouri	24.4	23.5	31.5	24.1	14.6	24.2	25.5	25.6	27.1	29.8
Montana	22.9	21.3	*	26.6	12.9	22.4	23.9	23.3	27.7	26.7
Nebraska	23.5	22.7	30.4	25.7	14.6	23.2	23.5	23.5	28.3	31.9
Nevada	21.1	19.5	24.2	23.7	11.0	20.8	22.5	22.4	22.7	24.4
New Hampshire	22.6	23.2	22.0	22.6	16.1	23.1	23.9	22.0	23.1	20.4
New Mexico	24.8	19.1	23.6	26.1	13.0	23.8	27.0	28.2	29.8	27.6
New York	20.4	19.5	30.3	21.9	15.4	20.6	21.7	19.8	20.5	21.1
North Carolina	24.4	21.1	35.4	22.6	16.1	25.2	25.5	24.0	26.6	28.0
North Dakota	28.5	27.2	22.9	31.9	16.6	27.6	27.7	30.2	39.6	29.0
Ohio	24.8	23.7	32.5	26.3	15.7	25.1	26.1	24.8	27.9	28.6
Oklahoma	25.4	24.3	30.8	26.0	15.1	25.1	26.7	27.9	30.6	30.8
Oregon	23.4	22.6	27.7	27.4	15.3	24.6	24.8	22.6	24.1	23.1
Pennsylvania	22.9	21.8	31.8	23.7	15.1	22.9	24.2	22.5	24.6	25.1
South Carolina	28.6	23.2	40.5	25.0	18.6	29.3	30.2	29.1	31.1	30.9
South Dakota	23.2	22.2	13.9	24.6	10.2	22.4	24.2	24.6	29.1	28.8
Tennessee	24.3	22.6	33.0	21.3	15.2	24.4	26.0	24.9	27.9	27.7
Texas	23.3	20.5	29.4	25.4	13.3	23.2	25.1	24.8	26.0	26.3
Utah	18.0	17.0	25.0	21.7	12.7	15.5	17.5	19.4	24.0	25.5
Vermont	23.2	23.7	*	*	20.9	25.8	25.1	21.8	20.6	15.6
Washington	24.7	24.1	30.9	29.8	16.6	26.5	25.5	24.0	25.1	27.0
Wisconsin	27.8	26.7	37.0	29.9	19.7	27.3	28.3	27.8	31.5	30.8
Wyoming	22.1	21.8	*	22.2	13.8	21.4	22.2	24.9	26.1	20.6
Puerto Rico	20.5	---	---	20.4	10.3	18.8	24.1	25.0	27.3	32.4

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

--- Data not available.

<sup>1</sup>Excludes data for Puerto Rico.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 3. Smoking in the 3 months prior to pregnancy, by race and Hispanic origin, by age of mother, and by reporting area: 35 states and the District of Columbia, 2011**

Reporting area	Total	Race and Hispanic origin			Age of mother in years					
		Non-Hispanic white	Non-Hispanic black	Hispanic	Under 20	20–24	25–29	30–34	35–39	40–54
					Percent					
Total . . . . .	11.5	16.9	9.7	3.0	14.5	17.7	11.8	7.6	5.8	5.2
California . . . . .	3.3	6.8	5.9	1.4	3.8	4.9	3.7	2.5	1.9	1.9
Colorado . . . . .	9.4	11.1	9.1	6.2	14.6	15.8	9.7	5.6	4.5	5.5
Delaware . . . . .	13.6	17.6	11.8	4.5	14.4	19.5	14.3	11.0	5.6	10.0
District of Columbia . . . . .	4.9	1.4	8.2	*	3.8	8.7	6.9	3.6	1.5	*
Florida . . . . .	7.9	13.5	4.6	2.3	9.0	11.3	8.4	5.8	4.5	5.1
Georgia . . . . .	8.8	13.9	5.4	1.7	9.8	13.1	9.0	5.9	4.5	4.1
Idaho . . . . .	14.2	15.6	14.1	6.2	22.3	20.7	12.7	8.7	8.3	7.5
Illinois . . . . .	8.9	12.4	9.5	1.9	11.1	15.1	9.6	5.6	4.4	4.1
Indiana . . . . .	20.5	23.3	16.6	5.5	26.1	29.8	19.3	13.1	11.3	10.0
Iowa . . . . .	20.9	22.4	23.4	8.7	33.4	34.0	17.9	13.2	12.3	9.8
Kansas . . . . .	17.1	19.5	18.9	7.0	21.7	25.7	15.8	10.8	9.3	10.0
Kentucky . . . . .	25.4	27.8	18.8	6.2	29.5	33.8	24.2	17.6	15.5	16.6
Louisiana . . . . .	10.9	14.8	7.0	3.4	10.4	13.1	10.9	9.3	7.2	8.4
Maryland . . . . .	11.5	17.2	9.1	3.0	15.2	19.7	13.1	7.6	5.1	4.8
Missouri . . . . .	24.8	27.2	20.0	11.1	31.7	35.1	23.2	17.3	14.2	12.5
Montana . . . . .	19.0	17.2	*	16.8	29.0	27.9	16.5	12.6	12.5	*
Nebraska . . . . .	17.1	19.4	12.9	7.1	22.5	26.4	16.9	11.3	9.0	9.9
Nevada . . . . .	6.8	10.8	8.7	2.3	7.6	9.2	6.8	5.4	5.0	5.5
New Hampshire . . . . .	16.6	18.0	*	8.3	31.0	31.4	16.5	9.6	7.9	6.0
New Mexico . . . . .	10.1	15.5	13.9	8.4	10.1	12.7	10.4	8.4	5.9	5.2
New York . . . . .	8.3	12.9	6.7	3.6	14.1	13.5	9.2	5.7	4.2	3.8
North Carolina . . . . .	14.3	18.1	13.7	2.7	16.2	21.3	14.5	9.3	7.9	7.3
North Dakota . . . . .	22.0	20.2	*	17.3	36.9	33.8	19.3	13.6	13.3	*
Ohio . . . . .	23.0	25.4	18.1	12.6	29.5	33.8	22.6	15.0	12.8	11.0
Oklahoma . . . . .	18.2	20.9	16.3	5.8	21.2	23.5	17.0	12.7	12.0	11.2
Oregon . . . . .	12.2	15.0	12.9	3.7	20.3	20.0	12.0	7.5	5.8	5.4
Pennsylvania . . . . .	20.6	23.3	16.9	13.2	26.6	31.7	21.4	13.8	11.4	10.5
South Carolina . . . . .	14.9	19.5	10.0	4.0	16.1	20.1	14.9	10.5	9.1	9.0
South Dakota . . . . .	24.5	21.6	12.9	16.7	38.8	37.0	20.9	16.0	13.6	16.2
Tennessee . . . . .	21.7	27.2	12.7	4.5	23.7	30.0	21.0	14.9	13.2	10.9
Texas . . . . .	6.7	13.3	6.3	2.3	6.3	9.9	7.1	4.5	3.5	3.3
Utah . . . . .	5.8	6.3	8.9	3.1	11.3	9.1	5.0	4.0	3.0	3.0
Vermont . . . . .	20.7	21.2	*	*	38.2	36.8	21.8	10.3	8.0	*
Washington . . . . .	10.9	13.7	10.3	4.2	18.4	17.9	11.1	6.9	5.2	4.8
Wisconsin . . . . .	19.0	20.4	19.3	9.4	27.3	30.3	18.8	12.2	10.9	9.6
Wyoming . . . . .	23.5	24.2	*	15.9	37.0	34.2	19.8	14.4	11.7	*

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

NOTE: Excludes Michigan and Puerto Rico; see Technical Notes.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 4. Quitting smoking prior to pregnancy, by race and Hispanic origin, by age of mother, and by reporting area: 35 states and the District of Columbia, 2011**

Reporting area	Total	Race and Hispanic origin			Age of mother in years					
		Non-Hispanic white	Non-Hispanic black	Hispanic	Under 20	20–24	25–29	30–34	35–39	40–54
					Percent					
Total . . . . .	23.8	22.4	23.1	39.2	22.6	22.3	24.6	26.7	24.3	20.0
California . . . . .	34.6	31.2	25.2	45.4	33.4	34.7	34.3	36.4	35.3	24.3
Colorado . . . . .	21.3	20.3	17.7	25.6	22.7	21.1	20.9	23.5	19.0	*
Delaware . . . . .	14.3	13.5	13.5	*	*	15.0	13.4	17.6	*	*
District of Columbia . . . . .	36.8	*	35.4	*	*	41.3	40.7	23.0	*	*
Florida . . . . .	17.5	15.6	16.9	33.6	19.6	16.7	17.7	17.7	17.9	15.1
Georgia . . . . .	12.8	12.1	12.5	28.3	10.5	12.9	12.7	14.4	12.9	*
Idaho . . . . .	26.2	24.9	*	35.3	22.5	25.1	29.7	25.4	24.1	*
Illinois . . . . .	16.1	16.1	12.0	29.1	17.3	14.4	17.2	18.1	13.9	12.3
Indiana . . . . .	19.6	18.8	23.0	34.2	20.8	18.7	19.8	20.8	18.8	17.4
Iowa . . . . .	25.8	25.5	22.4	38.9	25.3	23.8	28.5	27.5	23.3	*
Kansas . . . . .	15.7	15.8	6.4	26.4	16.7	15.1	16.3	15.3	18.2	*
Kentucky . . . . .	12.9	12.3	18.2	31.8	12.5	11.7	13.7	15.1	13.1	14.5
Louisiana . . . . .	18.0	18.3	16.0	30.9	17.0	17.0	18.5	19.5	20.1	*
Maryland . . . . .	35.8	34.3	35.1	58.2	30.3	33.8	37.4	39.5	36.5	30.8
Missouri . . . . .	26.8	26.8	25.3	35.8	25.6	24.0	27.9	33.2	25.2	16.4
Montana . . . . .	15.2	15.9	*	*	16.7	12.9	15.5	17.3	19.7	*
Nebraska . . . . .	28.4	28.1	18.7	39.1	25.4	28.0	29.3	30.0	25.9	*
Nevada . . . . .	15.4	13.4	15.1	22.7	14.0	18.4	15.5	14.1	11.3	*
New Hampshire . . . . .	14.2	14.2	*	*	11.8	12.3	14.9	17.1	16.7	*
New Mexico . . . . .	39.9	31.8	*	44.7	45.7	41.8	39.6	35.5	32.6	*
New York . . . . .	28.1	26.0	28.0	41.8	23.8	24.1	28.7	34.4	31.7	28.0
North Carolina . . . . .	25.2	23.5	28.0	43.1	25.9	25.6	24.5	26.1	23.1	18.6
North Dakota . . . . .	26.0	27.2	*	45.3	22.7	22.6	30.4	28.3	27.4	*
Ohio . . . . .	23.9	23.3	26.0	32.7	20.9	21.9	24.9	28.4	26.4	22.1
Oklahoma . . . . .	18.5	18.2	15.3	31.4	19.3	18.3	18.8	19.1	15.3	*
Oregon . . . . .	16.3	15.6	*	26.3	16.8	15.0	16.6	17.6	18.5	*
Pennsylvania . . . . .	26.5	26.4	22.9	33.7	22.5	23.5	28.2	30.7	28.4	25.2
South Carolina . . . . .	25.1	23.2	29.4	45.7	22.7	25.2	25.3	26.7	26.4	*
South Dakota . . . . .	32.6	30.9	*	29.8	36.9	31.0	33.1	35.0	23.1	*
Tennessee . . . . .	22.5	21.8	23.5	43.8	22.4	20.7	23.1	26.6	21.3	22.4
Texas . . . . .	32.4	28.4	30.3	49.6	31.7	31.2	33.2	34.5	32.5	24.9
Utah . . . . .	26.2	25.5	*	32.3	29.1	27.5	26.2	22.7	23.9	*
Vermont . . . . .	17.7	17.4	*	*	21.7	13.7	16.8	28.4	*	*
Washington . . . . .	19.6	18.9	15.0	28.7	18.3	19.8	20.0	19.4	19.9	19.4
Wisconsin . . . . .	24.9	25.7	16.4	32.4	22.1	23.0	25.9	28.3	25.6	18.9
Wyoming . . . . .	25.3	24.2	*	33.6	24.3	25.5	26.1	26.3	*	*

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

NOTE: Excludes Michigan and Puerto Rico; see Technical Notes.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 5. Mother received WIC food during this pregnancy, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	Total	Race and Hispanic origin			Age of mother in years					
		Non-Hispanic white	Non-Hispanic black	Hispanic	Under 20	20–24	25–29	30–34	35–39	40–54
					Percent					
Total <sup>1</sup>	47.8	33.0	67.9	71.4	81.2	68.8	43.9	31.1	29.7	29.7
California	54.3	26.1	69.6	76.2	87.7	77.7	55.0	38.9	35.6	34.3
Colorado	33.0	19.8	53.1	60.2	71.7	53.8	30.3	18.9	17.4	16.9
Delaware	35.7	25.4	45.5	67.6	61.6	52.7	33.8	22.4	20.2	19.5
District of Columbia	44.5	2.4	59.2	77.5	76.9	67.4	54.3	27.9	21.3	14.5
Florida	54.0	39.9	73.0	64.5	83.7	73.8	50.9	38.3	37.0	36.8
Georgia	51.5	38.1	66.4	64.9	81.9	71.1	47.4	33.6	30.4	28.1
Idaho	44.2	38.0	69.5	73.1	80.6	60.4	39.7	27.1	28.8	28.3
Illinois	41.6	26.6	66.4	66.3	77.7	68.0	39.0	24.9	23.5	23.4
Indiana	46.9	40.0	73.0	75.1	81.3	67.6	38.6	28.0	28.2	28.8
Iowa	37.6	31.5	72.2	75.7	80.5	60.4	29.9	20.9	22.9	23.3
Kansas	39.0	29.8	63.3	70.0	71.8	57.8	31.6	22.8	22.3	22.6
Kentucky	49.5	46.9	65.4	69.5	81.0	68.1	41.1	28.3	28.1	28.0
Louisiana	55.2	42.5	72.6	61.8	81.8	70.4	47.8	36.5	35.0	34.2
Maryland	41.9	24.1	59.5	69.6	83.2	69.3	41.1	26.5	22.7	22.3
Michigan	46.7	38.9	70.3	69.7	80.6	70.7	42.3	26.7	27.0	26.2
Missouri	46.6	40.0	71.6	70.3	84.6	69.1	38.4	25.9	25.7	24.9
Montana	35.8	30.8	48.0	47.5	67.5	54.2	30.1	19.8	20.3	19.8
Nebraska	36.3	25.5	70.9	72.1	75.1	58.3	29.6	20.9	23.4	26.1
Nevada	40.7	23.0	53.5	61.3	68.8	53.7	35.7	30.2	30.1	28.5
New Hampshire	28.1	26.4	51.0	57.1	73.6	54.3	26.6	13.5	11.5	11.3
New Mexico	55.9	34.2	54.9	66.1	77.8	66.7	48.8	43.0	43.0	42.6
New York	48.0	30.1	69.7	68.9	81.0	72.4	51.2	33.8	30.4	30.2
North Carolina	49.1	34.8	69.3	73.5	83.0	69.9	43.9	31.1	27.1	29.1
North Dakota	31.6	23.8	74.2	46.8	73.1	50.5	24.6	15.1	21.4	20.9
Ohio	42.8	35.9	69.5	64.9	79.7	65.6	36.4	23.3	21.2	21.7
Oklahoma	53.9	45.2	69.6	75.5	83.1	69.6	44.0	35.5	34.8	35.6
Oregon	45.7	37.2	61.2	77.3	82.0	67.9	43.3	30.1	28.8	28.8
Pennsylvania	39.9	29.2	68.0	73.4	78.4	64.3	36.3	22.6	20.9	22.6
South Carolina	53.9	39.9	76.7	68.4	84.7	73.3	47.3	33.5	32.0	30.7
South Dakota	40.0	28.5	60.1	62.5	78.2	62.1	31.5	23.1	23.2	26.1
Tennessee	49.2	43.3	62.0	68.7	79.7	66.3	42.3	30.1	28.1	28.5
Texas	53.5	29.5	62.8	71.8	80.8	69.6	48.2	37.5	36.5	36.5
Utah	28.3	21.5	57.0	58.2	65.2	40.2	24.1	19.4	19.8	20.4
Vermont	42.9	42.7	73.2	38.0	82.6	71.9	42.7	24.5	18.3	19.7
Washington	41.5	32.2	56.8	73.8	79.5	63.9	39.3	26.8	24.5	23.9
Wisconsin	37.2	26.6	75.2	71.2	79.9	62.8	31.9	20.8	20.7	21.2
Wyoming	34.4	30.0	52.5	55.1	69.4	47.8	27.1	20.8	17.7	19.1
Puerto Rico	87.1	---	---	87.5	95.1	93.3	87.3	75.6	68.9	69.0

--- Data not available.

<sup>1</sup>Excludes data for Puerto Rico.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 6. Pregnancy resulted from infertility therapy, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	Total	Race and Hispanic origin			Age of mother in years					
		Non-Hispanic white	Non-Hispanic black	Hispanic	Under 20	20-24	25-29	30-34	35-39	40-54
					Percent					
Total <sup>1</sup>	1.4	2.0	0.4	0.4	0.0	0.2	0.9	1.9	3.2	6.8
California	1.0	1.9	0.4	0.3	*	0.1	0.4	1.1	2.2	6.4
Colorado	1.8	2.4	*	0.5	*	0.2	1.0	2.3	3.9	10.9
Delaware	2.2	3.1	*	*	*	0.1	1.5	3.8	4.7	9.3
District of Columbia	2.7	7.9	*	*	*	*	*	2.4	6.6	17.1
Florida	0.6	1.0	0.2	0.4	*	0.1	0.3	1.0	1.6	3.3
Georgia	1.0	1.7	0.3	0.4	*	0.1	0.6	1.6	2.9	6.0
Idaho	1.2	1.4	*	*	*	0.3	1.1	1.8	2.7	7.5
Illinois	2.5	3.7	0.5	0.7	*	0.2	1.5	3.4	5.7	11.5
Indiana	0.9	1.1	0.2	*	*	0.2	0.8	1.6	2.1	2.9
Iowa	2.5	2.8	*	0.7	*	0.3	2.3	4.0	5.0	9.7
Kansas	1.2	1.5	*	0.3	*	*	1.1	2.1	3.0	3.9
Kentucky	0.8	0.9	*	*	*	0.1	0.8	1.3	1.9	4.5
Louisiana	0.5	0.9	0.2	*	*	*	0.5	1.2	1.3	3.5
Maryland	3.7	5.4	1.8	1.3	*	0.6	2.2	4.7	8.0	13.8
Michigan	1.1	1.3	0.2	0.5	*	0.1	0.9	1.6	2.5	4.4
Missouri	1.1	1.3	0.2	*	*	0.2	0.9	1.9	2.8	4.2
Montana	1.1	1.2	*	*	*	*	0.6	2.0	2.6	*
Nebraska	1.2	1.6	*	*	*	*	1.1	1.9	2.7	*
Nevada	1.5	2.4	*	0.6	*	0.3	1.0	2.0	3.8	*
New Hampshire	2.2	2.2	*	*	*	*	1.1	2.9	4.9	*
New Mexico	0.3	0.6	*	*	*	*	0.2	0.6	*	*
New York	1.6	3.3	0.8	0.6	*	0.3	1.1	2.6	4.2	8.8
North Carolina	0.9	1.3	0.3	0.3	*	0.1	0.6	1.4	2.1	4.6
North Dakota	1.5	1.8	*	*	*	*	1.1	2.7	3.4	*
Ohio	1.7	2.0	0.4	0.7	*	0.2	1.4	2.8	4.2	7.6
Oklahoma	0.8	1.1	*	*	*	*	0.8	1.4	2.2	4.3
Oregon	1.9	2.3	*	0.6	*	*	1.2	2.6	4.5	9.5
Pennsylvania	1.8	2.3	0.4	0.6	*	0.2	1.2	2.6	4.3	8.0
South Carolina	0.7	1.1	0.2	*	*	*	0.5	1.3	2.2	3.7
South Dakota	1.4	1.8	*	*	*	0.5	1.4	2.1	2.6	*
Tennessee	0.8	1.1	0.1	*	*	0.1	0.7	1.5	2.2	4.3
Texas	0.8	1.5	0.3	0.3	*	0.1	0.5	1.3	2.0	4.9
Utah	4.9	5.6	*	2.1	*	2.5	5.4	6.0	7.4	10.4
Vermont	2.0	2.1	*	*	*	*	1.0	2.3	5.4	*
Washington	1.2	1.4	0.4	0.5	*	0.1	0.7	1.6	2.8	7.4
Wisconsin	2.0	2.4	0.4	0.7	*	0.2	1.6	3.0	4.3	6.9
Wyoming	1.0	1.2	*	*	*	*	0.9	1.7	*	*
Puerto Rico	0.4	---	---	*	*	*	0.2	0.7	2.1	*

0.0 Quantity more than zero but less than 0.05.

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

--- Data not available.

<sup>1</sup>Excludes data for Puerto Rico.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 7. Principal source of payment for the delivery, by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	All births	Medicaid	Private insurance	Self-pay <sup>1</sup>	Other
Percent					
Total <sup>2</sup> . . . . .	100.0	44.9	46.1	4.2	4.8
California . . . . .	100.0	46.9	46.5	2.1	4.5
Colorado . . . . .	100.0	35.9	52.8	3.5	7.8
Delaware . . . . .	100.0	49.2	46.5	1.4	2.9
District of Columbia . . . . .	100.0	46.1	41.8	0.6	11.6
Florida . . . . .	100.0	49.8	38.9	8.6	2.6
Georgia . . . . .	100.0	47.3	35.1	5.1	12.6
Idaho . . . . .	100.0	39.3	48.0	8.2	4.5
Illinois . . . . .	100.0	49.0	48.8	1.0	1.2
Indiana . . . . .	100.0	46.0	48.0	4.5	1.5
Iowa . . . . .	100.0	38.6	57.2	3.0	1.2
Kansas . . . . .	100.0	33.8	50.8	7.2	8.2
Kentucky . . . . .	100.0	43.7	43.9	2.8	9.5
Louisiana . . . . .	100.0	64.2	32.3	0.9	2.7
Maryland . . . . .	100.0	30.6	59.6	3.7	6.0
Michigan . . . . .	100.0	45.0	53.1	1.3	0.5
Missouri . . . . .	100.0	45.0	49.8	3.1	2.1
Montana . . . . .	100.0	35.4	46.6	7.1	10.9
Nebraska . . . . .	100.0	30.7	58.9	6.8	3.6
Nevada . . . . .	100.0	32.7	47.6	14.5	5.2
New Hampshire . . . . .	100.0	31.1	63.7	2.1	3.0
New Mexico . . . . .	100.0	58.2	23.9	6.9	11.1
New York . . . . .	100.0	45.6	48.8	1.6	4.0
North Carolina . . . . .	100.0	45.8	44.7	6.9	2.6
North Dakota . . . . .	100.0	28.8	56.6	3.1	11.6
Ohio . . . . .	100.0	40.5	49.8	4.9	4.7
Oklahoma . . . . .	100.0	54.8	33.9	2.2	9.1
Oregon . . . . .	100.0	45.5	50.8	2.2	1.5
Pennsylvania . . . . .	100.0	32.7	59.5	5.1	2.8
South Carolina . . . . .	100.0	51.0	38.6	5.1	5.3
South Dakota . . . . .	100.0	35.4	56.0	2.2	6.4
Tennessee . . . . .	100.0	53.8	41.8	1.8	2.6
Texas . . . . .	100.0	47.9	36.6	7.8	7.7
Utah . . . . .	100.0	29.4	60.8	6.0	3.8
Vermont . . . . .	100.0	45.9	49.4	1.7	3.0
Washington . . . . .	100.0	39.7	49.2	1.2	9.9
Wisconsin . . . . .	100.0	38.9	54.1	2.9	4.1
Wyoming . . . . .	100.0	37.6	51.9	5.8	4.7
Puerto Rico . . . . .	100.0	73.4	25.5	1.1	*

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

<sup>1</sup>No third-party payer listed; uninsured.

<sup>2</sup>Excludes data for Puerto Rico.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Table 8. Births insured by Medicaid, by race and Hispanic origin, by age of mother, and by reporting area: 36 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	Total	Race and Hispanic origin			Age of mother in years					
		Non-Hispanic white	Non-Hispanic black	Hispanic	Under 20	20–24	25–29	30–34	35–39	40–54
					Percent					
Total <sup>1</sup>	44.9	32.7	66.8	61.4	76.1	66.4	41.8	28.0	26.1	26.6
California	46.9	23.5	56.4	66.0	75.9	68.0	47.8	33.0	30.5	29.7
Colorado	35.9	22.5	57.9	63.1	72.2	58.1	33.6	21.4	19.1	20.9
Delaware	49.2	35.8	67.2	80.7	79.1	72.9	47.3	30.5	29.1	29.0
District of Columbia	46.1	1.7	72.4	44.2	79.9	75.2	56.3	26.4	19.6	17.4
Florida	49.8	41.7	68.8	50.0	80.2	71.7	47.9	32.3	29.9	29.9
Georgia	47.3	36.5	65.2	42.6	76.7	67.8	43.4	28.4	25.5	24.6
Idaho	39.3	36.1	60.6	52.3	77.3	56.6	33.5	22.7	23.0	21.5
Illinois	49.0	30.9	78.3	77.0	85.7	78.4	47.4	30.4	28.4	28.6
Indiana	46.0	38.4	76.3	73.6	76.2	67.4	38.9	26.8	25.6	28.7
Iowa	38.6	33.9	81.2	59.8	79.6	64.6	31.3	20.3	20.4	23.8
Kansas	33.8	29.5	67.6	39.1	66.7	53.4	27.3	16.8	14.7	15.6
Kentucky	43.7	42.7	56.1	43.0	70.4	61.4	36.8	23.7	22.9	24.9
Louisiana	64.2	47.6	85.4	79.8	93.0	82.8	56.7	41.8	39.0	36.7
Maryland	30.6	18.7	45.1	42.6	63.0	51.9	30.4	18.3	15.6	15.5
Michigan	45.0	39.2	58.4	71.3	72.2	67.8	42.4	26.0	26.1	25.7
Missouri	45.0	37.7	77.2	58.8	81.5	68.1	37.4	24.2	23.1	22.6
Montana	35.4	30.7	36.0	51.0	65.9	54.9	29.9	19.8	15.9	15.6
Nebraska	30.7	24.4	68.3	40.9	64.4	52.8	25.5	15.3	16.4	17.6
Nevada	32.7	25.2	55.9	37.6	62.2	49.2	28.7	20.4	16.9	20.6
New Hampshire	31.1	30.6	48.5	43.6	60.1	57.9	31.4	17.6	13.4	14.7
New Mexico	58.2	42.9	54.2	59.7	75.2	69.6	53.6	43.0	40.5	43.3
New York	45.6	25.9	63.3	70.9	71.3	68.1	50.0	32.4	29.3	28.1
North Carolina	45.8	35.3	70.6	47.1	80.4	66.4	40.7	27.1	24.0	26.5
North Dakota	28.8	21.1	60.8	41.2	59.8	47.3	23.9	13.6	16.7	15.4
Ohio	40.5	33.9	71.4	45.2	71.8	64.1	35.7	20.9	18.1	19.8
Oklahoma	54.8	46.2	74.2	78.8	81.9	70.4	46.3	35.5	35.7	36.3
Oregon	45.5	37.4	66.5	74.3	77.1	68.0	43.8	30.5	27.9	30.1
Pennsylvania	32.7	24.2	58.5	56.3	63.4	55.3	30.1	17.2	15.3	16.3
South Carolina	51.0	40.3	72.5	46.7	81.5	71.1	44.6	30.3	26.9	27.8
South Dakota	35.4	24.0	62.2	47.2	65.8	56.9	28.6	18.9	19.7	19.6
Tennessee	53.8	45.5	76.9	69.2	83.3	73.1	46.9	32.6	30.0	32.5
Texas	47.9	33.2	62.6	57.5	76.7	66.9	42.9	29.5	26.7	27.4
Utah	29.4	23.1	63.9	59.2	70.9	44.4	24.6	19.2	19.3	23.4
Vermont	45.9	45.8	72.2	35.7	78.0	75.2	47.2	27.6	22.7	17.5
Washington	39.7	29.9	56.7	71.8	72.0	57.5	38.8	27.1	25.4	25.8
Wisconsin	38.9	28.6	78.9	73.2	74.4	65.1	35.0	22.3	22.3	25.1
Wyoming	37.6	32.8	47.5	56.3	67.8	52.9	29.9	23.8	20.3	22.9
Puerto Rico	73.4	---	---	73.5	95.2	89.7	67.2	45.0	38.2	41.1

-- - Data not available.

<sup>1</sup>Excludes data for Puerto Rico.

SOURCE: CDC/NCHS, National Vital Statistics System.



**Table 9. Maternal morbidity, by reporting area: 35 states, the District of Columbia, and Puerto Rico, 2011**

Reporting area	Maternal transfusion	3rd or 4th degree perineal laceration	Ruptured uterus	Unplanned hysterectomy	Admission to ICU	Unplanned operating room procedure
	Per 100,000					
Total <sup>1</sup> . . . . .	271.6	867.0	26.2	37.4	149.9	275.0
California . . . . .	135.5	645.6	12.2	25.1	97.4	95.8
Colorado . . . . .	209.1	661.2	*	61.5	67.7	201.4
District of Columbia . . . . .	*	877.0	*	*	*	*
Florida . . . . .	124.5	472.9	17.9	28.8	166.4	75.9
Georgia . . . . .	154.7	608.3	47.6	23.0	113.4	135.6
Idaho . . . . .	462.3	1,238.7	*	*	*	206.5
Illinois . . . . .	373.1	791.1	34.3	54.8	204.3	238.6
Indiana . . . . .	249.7	835.3	28.7	40.6	130.2	234.2
Iowa . . . . .	366.8	1,412.2	*	*	138.9	332.7
Kansas . . . . .	265.0	903.4	*	*	128.7	194.3
Kentucky . . . . .	243.5	679.7	*	*	105.4	516.1
Louisiana . . . . .	294.8	511.5	39.1	39.1	231.3	104.2
Maryland . . . . .	195.8	2,114.9	*	*	84.7	895.7
Michigan . . . . .	277.8	882.4	36.5	30.3	124.7	255.6
Missouri . . . . .	360.9	1,035.2	39.5	43.5	122.5	234.4
Montana . . . . .	456.7	664.3	*	*	*	307.2
Nebraska . . . . .	230.2	4,550.2	*	*	82.0	796.1
Nevada . . . . .	229.9	933.7	90.8	*	122.0	153.2
New Hampshire . . . . .	404.9	1,077.0	*	*	*	542.6
New Mexico . . . . .	217.0	742.9	*	*	327.3	125.0
New York . . . . .	436.6	1,010.8	24.1	52.8	132.6	247.0
North Carolina . . . . .	224.6	808.9	33.4	39.2	224.6	218.7
North Dakota . . . . .	326.7	1,380.4	*	*	*	274.0
Ohio . . . . .	289.6	1,152.5	31.2	52.0	148.5	1,861.0
Oklahoma . . . . .	239.2	741.0	38.9	*	103.1	134.2
Oregon . . . . .	483.0	1,209.7	*	*	161.7	587.1
Pennsylvania . . . . .	362.1	732.0	19.7	43.7	128.2	217.7
South Carolina . . . . .	170.9	915.4	*	*	108.1	108.1
South Dakota . . . . .	414.5	1,345.1	*	*	*	245.3
Tennessee . . . . .	193.1	979.4	30.3	35.3	73.2	116.1
Texas . . . . .	202.2	569.3	22.0	31.8	284.9	102.6
Utah . . . . .	1,244.5	1,314.8	*	58.6	125.0	207.1
Vermont . . . . .	396.6	1,801.4	*	*	*	710.6
Washington . . . . .	391.6	1,210.6	26.6	52.0	100.5	259.9
Wisconsin . . . . .	446.5	1,401.7	41.5	53.4	157.2	384.2
Wyoming . . . . .	594.9	797.7	*	*	*	378.6
Puerto Rico . . . . .	185.0	447.9	17.0	31.6	68.2	150.9

See footnotes at end of table.

**Table 9. Maternal morbidity, by reporting area: 35 states, the District of Columbia, and Puerto Rico, 2011—Con.**

Reporting area	Maternal transfusion	3rd or 4th degree perineal laceration	Ruptured uterus	Unplanned hysterectomy	Admission to ICU	Unplanned operating room procedure
	Number					
Total <sup>1</sup> . . . . .	8,774	28,005	847	1,209	4,842	8,883
California . . . . .	680	3,240	61	126	489	481
Colorado . . . . .	136	430	8	40	44	131
District of Columbia . . . . .	10	71	1	1	3	3
Florida . . . . .	264	1,003	38	61	353	161
Georgia . . . . .	195	767	60	29	143	171
Idaho . . . . .	103	276	5	6	17	46
Illinois . . . . .	599	1,270	55	88	328	383
Indiana . . . . .	209	699	24	34	109	196
Iowa . . . . .	140	539	13	18	53	127
Kansas . . . . .	105	358	13	14	51	77
Kentucky . . . . .	134	374	19	19	58	284
Louisiana . . . . .	181	314	24	24	142	64
Maryland . . . . .	141	1,523	16	18	61	645
Michigan . . . . .	312	991	41	34	140	287
Missouri . . . . .	274	786	30	33	93	178
Montana . . . . .	55	80	6	5	12	37
Nebraska . . . . .	59	1,166	6	6	21	204
Nevada . . . . .	81	329	32	15	43	54
New Hampshire . . . . .	50	133	5	10	15	67
New Mexico . . . . .	59	202	2	7	89	34
New York . . . . .	1,034	2,394	57	125	314	585
North Carolina . . . . .	269	969	40	47	269	262
North Dakota . . . . .	31	131	2	3	13	26
Ohio . . . . .	390	1,552	42	70	200	2,506
Oklahoma . . . . .	123	381	20	14	53	69
Oregon . . . . .	218	546	6	14	73	265
Pennsylvania . . . . .	514	1,039	28	62	182	309
South Carolina . . . . .	98	525	14	14	62	62
South Dakota . . . . .	49	159	4	2	9	29
Tennessee . . . . .	153	776	24	28	58	92
Texas . . . . .	763	2,148	83	120	1,075	387
Utah . . . . .	637	673	10	30	64	106
Vermont . . . . .	24	109	2	5	5	43
Washington . . . . .	339	1,048	23	45	87	225
Wisconsin . . . . .	301	945	28	36	106	259
Wyoming . . . . .	44	59	5	6	8	28
Puerto Rico . . . . .	76	184	7	13	28	62

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

<sup>1</sup>Excludes data for Puerto Rico.

NOTES: Excludes Delaware; see Technical Notes. ICU is intensive care unit.

SOURCE: CDC/NCHS, National Vital Statistics System.

## Technical Notes

### Sources of data

Data in this report are based on 100% of births to residents of the 36 states and the District of Columbia (D.C.) that had implemented the 2003 U.S. Standard Certificate of Live Birth as of January 1, 2011. The 36 states are California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming. The 3,267,934 births to residents in this reporting area represent 83% of all U.S. births for 2011.

Northern Marianas and Puerto Rico also had implemented the revised birth certificate by January 1, 2011. Data for Northern Marianas are not included in this report because a number of items are not reported by the territory, and those that are tend to have high levels of not-stated or missing data. See Table B in the “User Guide to the 2011 Natality Public Use File” (4). Massachusetts, Minnesota, and Guam implemented the revised certificate in 2011, but after January 1; therefore, data for residents of these reporting areas also are not shown.

### Generalizability of the data

Because births in the revised reporting area are not a random sample of all births, the findings are not generalizable to the entire United States. In particular, note that the race and Hispanic-origin distributions of births for the 36-state and D.C. reporting area are substantively different from those for the entire United States. Also, Hispanic groups are overrepresented in these data, whereas non-Hispanic white and non-Hispanic black populations are underrepresented. Further, the composition of the Hispanic population in the reporting area differs from that of the United States, with relatively more births to Mexican and Cuban women and fewer births to Puerto Rican and Central and South American women. See Table D in the user guide (4). Differences between the 36-state and D.C. reporting area and the United States in the distributions of births by maternal age, marital status, and infant characteristics, while generally statistically significant, are smaller.

### 2003 revision of the U.S. Standard Certificate of Live Birth

The 2003 revision of the birth certificate is seen as an important opportunity to improve data quality, primarily through the development of detailed, standardized data collection techniques. This is the first presentation of multistate data for selected items exclusive to the revised birth certificate: receipt of food from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during pregnancy, sources of payment for the delivery, mother’s body mass index (BMI; based on mother’s height and prepregnancy weight), infertility treatment, and the category of maternal morbidity (1). Additional tabulations for these and other items new to the birth certificate (e.g., type of infertility treatment, infections present and/or treated during pregnancy, time of birth, and infant breastfed) are

available in the user guide (4). More detailed analysis is possible using the 2011 natality public-use data file, which can be downloaded from [http://www.cdc.gov/nchs/data\\_access/vitalstatsonline.htm](http://www.cdc.gov/nchs/data_access/vitalstatsonline.htm) (5). Procedures for requesting a microdata file with state identifiers are described at [http://www.cdc.gov/nchs/nvss/dvs\\_data\\_release.htm](http://www.cdc.gov/nchs/nvss/dvs_data_release.htm) (11). Data can also be extracted from VitalStats (6).

### Hispanic origin

Race and Hispanic origin are reported separately on the birth certificate. Data shown by race include persons of Hispanic or non-Hispanic origin. Data shown for Hispanic persons include all persons of Hispanic origin of any race (4).

### Race of mother

Race of mother as collected on the 2003 U.S. Standard Certificate of Live Birth and presented in this report is consistent with the 1997 Office of Management and Budget standards (12). Detailed results are presented for the three largest single-race and Hispanic-origin groups (non-Hispanic single-race white, non-Hispanic single-race black, and Hispanic). For information on imputation of single race, see the user guide (4). For more information on single- and multiple-race reporting, see “Characteristics of births to single- and multiple-race women: California, Hawaii, Pennsylvania, Utah, and Washington, 2003” (13).

Because Puerto Rico does not report race consistent with the 2003 certificate, results for Puerto Rico for specific race groups are not shown.

### Age of mother

For a detailed explanation of the processing and tabulation of mother’s age, see the user guide (4).

### Prepregnancy BMI

The 2003 Standard Certificate of Live Birth includes the components needed to compute both prepregnancy BMI and maternal weight gain (i.e., maternal height, prepregnancy weight, and weight at delivery). BMI is calculated as weight in kilograms divided by height in meters squared ( $\text{kg}/\text{m}^2$ ) (4).

### Tobacco use during pregnancy

Data based on the 2003 revised smoking item are available for all of 2011 for 35 states (California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming) and D.C. Because the tobacco use item for Michigan does not follow the standard format, tobacco use data for Michigan are not comparable with either the 2003 revised or 1989 unrevised data and are not included in the NCHS data files (4). Tobacco use data for Puerto Rico are not shown due to concerns with data quality.

Women who report smoking in the 3 months prior to pregnancy but report no smoking during all three trimesters are considered to have

quit smoking before pregnancy. Women who smoked in the 3 months prior to pregnancy and during any trimester are considered to have not quit smoking before pregnancy. If a woman reported smoking in the 3 months prior to pregnancy, and reported not smoking during one or more trimesters, but smoking status was unknown for any trimester, quitting before pregnancy status was classified as “unknown.”

Women who report smoking any number of cigarettes during any trimester of pregnancy are considered “smokers” [data not shown in this report, but available in the user guide (4)]. Women who report smoking only in the first trimester or in the first and second trimesters, but not the third trimester, are considered to have quit smoking during pregnancy. If smoking status in the third trimester of pregnancy is unknown, quitting status is tabulated as “unknown.” Women with unknown smoking status for any trimester who report not smoking in the remaining trimesters are classified as “unknown” smoking status.

### Did mother get WIC food for herself during this pregnancy?

The WIC program is run by the U.S. Department of Agriculture. It is intended to help low-income pregnant women, infants, and children through age 5 years receive proper nutrition by providing vouchers for food, nutrition counseling, health care screenings, and referrals (4).

### Pregnancy resulted from infertility treatment

An item on the 2003 U.S. Standard Certificate of Live Birth asks whether the pregnancy resulted from infertility treatment. Data from Massachusetts, which included an infertility treatment item on the Massachusetts 1989-based birth certificate similar to the 2003 revision standard item, suggest that infertility treatment data have been underreported (14).

Information is also available on type of infertility treatment (not shown in this report). The item allows for the reporting of two general types of infertility treatment: (a) nonassisted reproductive technologies (or “non-ART therapies”) such as fertility-enhancing drugs, artificial insemination, and intrauterine insemination; and (b) assisted reproductive technologies (or “ART therapies”)—procedures in which both the egg and sperm are handled in the laboratory, for example, in vitro fertilization. Both ART and non-ART therapies may be selected (15). For 2011, 27 states and D.C. reported the type of infertility treatment used. For more information, see the user guide (4).

### Maternal morbidities

Information on six maternal morbidities is collected on the 2003 revised birth certificate: maternal transfusion, third- or fourth-degree perineal laceration, ruptured uterus, unplanned hysterectomy, admission to intensive care unit, and unplanned operating room procedure. More than one morbidity may be reported. Maternal morbidity data are not available for Delaware for 2011 because of concerns with data quality (4).

### Definitions of selected medical terms

For definitions, recommended sources, and detailed explanations for the items discussed in this report, see “Guide to Completing the Facility Worksheet for the Certificate of Live Birth and Report of Fetal Death” (15) and the user guide (4).

### Computations of percentages and percent distributions

Births for which a particular characteristic is unknown were subtracted from the figures for total births that were used as denominators, before percentages and percent distributions were computed. The [Table](#) on page 21 shows the percentage of births to residents of the revised reporting area that occurred outside the revised reporting area (i.e., in a jurisdiction that has not adopted the 2003 U.S. Standard Certificate of Live Birth). This percentage was 0.3% for the 36-state and D.C. reporting area for 2011, with levels ranging from 0.01% in Indiana and Michigan to 3.8% for D.C. (see [Table](#)). The percentage of records with missing information for each item is shown by state in [Table B](#) of the user guide (4).

The comparatively high level of missing data for D.C. reflects the fact that 3.8% of births to residents of D.C. occurred in states (mostly in Virginia) that have not yet implemented the 2003 revision of the birth certificate. For example, by residence, the percentage of unknowns for D.C. for WIC food receipt was 6.1% [see [Table B](#) in the user guide (4)]. However, when the unknown rate was examined by occurrence (i.e., only for births that occurred in D.C.) it decreased to 2.0% (data not shown).

### Random variation and significance testing for natality data

For information and discussion on random variation and significance testing for natality data, see “User Guide to the 2010 Natality Public Use File” (16).

**Table. Births to residents of revised reporting areas occurring in unrevised reporting areas: Total of 36 states and the District of Columbia, 2011**

Reporting area	Births to residents of revised <sup>1</sup> reporting areas occurring in unrevised <sup>2</sup> reporting areas	
	All births Number	Percent <sup>3</sup>
Total . . . . .	3,267,934	0.3
California . . . . .	502,120	0.0
Colorado . . . . .	65,055	0.0
Delaware . . . . .	11,257	0.3
District of Columbia . . . . .	9,295	3.8
Florida . . . . .	213,414	0.1
Georgia . . . . .	132,409	0.1
Idaho . . . . .	22,305	0.0
Illinois . . . . .	161,312	0.0
Indiana . . . . .	83,701	0.0
Iowa . . . . .	38,214	0.1
Kansas . . . . .	39,642	0.0
Kentucky . . . . .	55,370	0.5
Louisiana . . . . .	61,888	0.8
Maryland . . . . .	73,093	1.2
Michigan . . . . .	114,008	0.0
Missouri . . . . .	76,117	0.3
Montana . . . . .	12,069	0.0
Nebraska . . . . .	25,720	0.0
Nevada . . . . .	35,296	0.2
New Hampshire . . . . .	12,851	1.8
New Mexico . . . . .	27,289	0.4
New York . . . . .	241,312	1.1
North Carolina . . . . .	120,389	0.5
North Dakota . . . . .	9,527	0.3
Ohio . . . . .	137,918	1.2
Oklahoma . . . . .	52,272	1.6
Oregon . . . . .	45,155	0.0
Pennsylvania . . . . .	143,178	0.9
South Carolina . . . . .	57,393	0.0
South Dakota . . . . .	11,846	0.2
Tennessee . . . . .	79,588	0.4
Texas . . . . .	377,445	0.0
Utah . . . . .	51,223	0.1
Vermont . . . . .	6,078	0.1
Washington . . . . .	86,976	0.0
Wisconsin . . . . .	67,810	0.4
Wyoming . . . . .	7,399	0.0

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Reporting based on 2003 U.S. Standard Certificate of Live Birth.<sup>2</sup>Reporting based on 1989 U.S. Standard Certificate of Live Birth.<sup>3</sup>In tabulations, these records are coded as not stated.

SOURCE: CDC/NCHS, National Vital Statistics System.

**U.S. DEPARTMENT OF  
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention  
National Center for Health Statistics  
3311 Toledo Road, Room 5419  
Hyattsville, MD 20782

FIRST CLASS MAIL  
POSTAGE & FEES PAID  
CDC/NCHS  
PERMIT NO. G-284

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

---

National Vital Statistics Reports, Vol. 62, No. 4, December 10, 2013

---

**Contents**

Abstract . . . . .	2
Introduction . . . . .	2
Methods . . . . .	2
Results . . . . .	3
Pregnancy BMI . . . . .	3
Smoking in the 3 months prior to pregnancy . . . . .	3
Quitting smoking in the 3 months prior to pregnancy . . . . .	3
Mother received WIC food for herself during this pregnancy . . . . .	4
Pregnancy resulted from infertility treatment . . . . .	5
Principal source of payment for the delivery . . . . .	5
Maternal morbidity . . . . .	6
Summary . . . . .	7
References . . . . .	7
List of Detailed Tables . . . . .	8
Technical Notes . . . . .	19

**Acknowledgments**

This report was prepared under the general direction of Delton Atkinson, Acting Director of the Division of Vital Statistics (DVS), and Amy M. Branum, Chief of the Reproductive Statistics Branch (RSB). Nicholas F. Pace, Chief of the Information Technology Branch (ITB); Stephanie J. Ventura (Office of the DVS Director); and Brady E. Hamilton and Marie E. Thoma (RSB) provided statistical tables and content review. Steve J. Steimel and Annie S. Liu (ITB) prepared the natality file. Staff of the Data Acquisition, Classification, and Evaluation Branch evaluated the quality of, and acceptance procedures for, the state data files on which this report is based. The Registration Methods staff consulted with state vital statistics offices regarding the collection of birth certificate data. This report was edited and produced by NCHS Office of Information Services, Information Design and Publishing Staff: Barbara J. Wassell edited the report; typesetting was done by Jacqueline M. Davis; and graphics were produced by Michael W. Jones (contractor).

---

**Suggested citation**

Osterman MJK, Martin JA, Curtin SC, et al. Newly released data from the revised U.S. birth certificate, 2011. National vital statistics reports; vol 62 no 4. Hyattsville, MD: National Center for Health Statistics. 2013.

---

**Copyright information**

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

---

**National Center for Health Statistics**

Charles J. Rothwell, M.S., *Acting Director*  
Jennifer H. Madans, Ph.D., *Associate Director  
for Science*

**Division of Vital Statistics**

Delton Atkinson, M.P.H., M.P.H., P.M.P.,  
*Acting Director*

---

For e-mail updates on NCHS publication releases, subscribe online at: <http://www.cdc.gov/nchs/govdelivery.htm>.  
For questions or general information about NCHS: Tel: 1-800-CDC-INFO (1-800-232-4636) • TTY: 1-888-232-6348  
Internet: <http://www.cdc.gov/nchs> • Online request form: <http://www.cdc.gov/cdc-info/requestform.html>