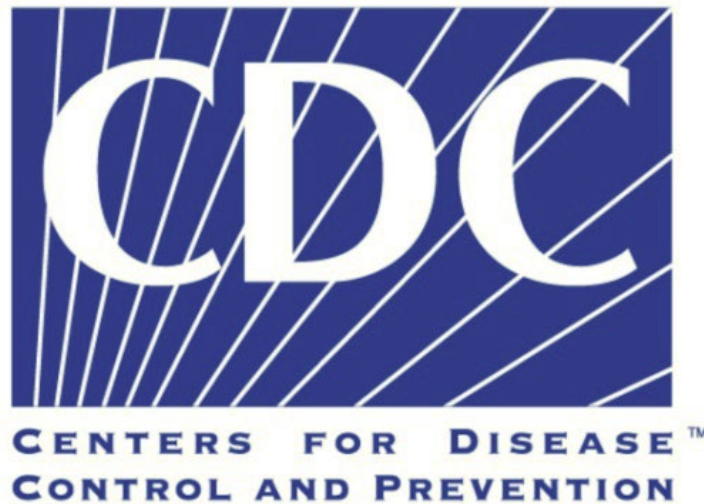


**User Guide  
to the  
2021 Natality  
Public Use File**



## **Acknowledgments**

The preparation of this User Guide was coordinated by Michelle J.K. Osterman in the Division of Vital Statistics (DVS) under the general direction of Joyce A. Martin, Lead Statistician, Reproductive Statistics Branch (RSB), DVS.

The Division of Vital Statistics Director, Steven Schwartz, managed the Vital Statistics Cooperative Program through which the vital registration offices of all states, the District of Columbia, New York City, Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands provided the data to the National Center for Health Statistics (NCHS).

The vital statistics computer file on which it is based was prepared by DVS staff. This Division also processed computer edits, designed and programmed the tabulations, reviewed the data, prepared documentation for this file, and was responsible for receipt and processing of the basic data file. Rajesh Virkar and Karen Knight provided overall direction. Important contributors were Legesse Alemu, Laci Banks-Walker, Senora Davis, Anne Driscoll, Catherine Forbes, Connie M. Gentry, Brady E. Hamilton, Margaret Jamison, Christina K. Jarman, David W. Justice, Virginia J. Justice, Kryn Krautheim, Jamie M. Lewis, Denise Little, Annie S. Liu, Susan L. McBroom, Jasmine N. Mickens, Enudio Mercado-Gonzalez, Michelle J.K. Osterman, Demetria Simmons, Steven J. Steimel, Pam Stephenson, and George C. Tolson.

Brady E. Hamilton and Danielle M. Ely reviewed and verified these technical notes.

NCHS acknowledges the essential role of the vital registration offices of all states and territories in maintaining the system through which vital statistics data are obtained and their cooperation in providing the information on which this publication is based.

## Table of Contents

<b>Control count of records</b>	<b>7</b>
<b>File layout</b>	<b>8</b>
<b>County codes</b>	<b>41</b>
<b>Detailed Technical Notes</b>	<b>47</b>
<b>Introduction</b>	<b>48</b>
<b>Definition of Live Birth</b>	<b>48</b>
<b>The Birth Registration Area</b>	<b>49</b>
Classification of births by occurrence and residence	50
Residence error	50
Population based rates	50
Geographic classification	50
<b>Standard Certificates of Live Birth</b>	<b>51</b>
2003 revision	51
Birth eLearning training	52
<b>Nativity data files</b>	<b>52</b>
Micro-data files	52
<b>Demographic Characteristics</b>	<b>53</b>
Hispanic origin and race	53
Hispanic origin	53
Race of mother and father	54
Age of mother	54
Imputation of age of mother	54
Extreme values of age	55
Mean age of mother	55
Not stated age or date of birth of mother	55
Age of father	55
Marital status	55
Inferential procedures	55
Imputation of marital status	56
Educational attainment	56
Mother	56
Father	57

Live-birth order and parity	57
Birth interval	57
<b>Medical and Public Services Utilization</b>	<b>58</b>
Prenatal care	58
WIC food during pregnancy	59
Obstetric procedures	59
Characteristics of labor and delivery	59
Place of birth	60
Planned home births	60
Time of birth	60
Attendant at birth	60
CNM/CM-attended births	61
Method of delivery	61
Trial of labor	61
Total cesarean rate	61
Low-risk cesarean rate	62
Primary cesarean and VBAC delivery rates	62
Payment source for the delivery	62
<b>Maternal Behavior and Health Characteristics</b>	<b>63</b>
Mother's body mass index (BMI)	63
Mother's height	63
Mother's pre-pregnancy weight	63
Mother's weight at delivery	64
Weight gain during pregnancy	64
Cigarette smoking before and during pregnancy	64
Quitting smoking before or during pregnancy	65
Risk factors in this pregnancy	65
Eclampsia	65
Pregnancy from infertility treatment	66
Infections present and/or treated during this pregnancy	66
Maternal morbidity	66
<b>Infant Health Characteristics</b>	<b>67</b>
Period of gestation	67
Birthweight	68

Apgar score	69
5-minute score	69
10-minute score	69
Abnormal conditions of the newborn	69
Congenital anomalies of the newborn	70
Down syndrome and suspected chromosomal disorder	70
Plurality	70
Infant breastfed	71
<b>Quality of Data</b>	<b>71</b>
Completeness of registration	72
Completeness of reporting	72
Quality control procedures	72
Comparison with medical records	72
Rarely occurring events	72
State-specific data quality issues for 2020	73
<b>Computation of Rates and Other Measures</b>	<b>74</b>
Population denominators	74
2021 population estimates	74
Population estimates for the specific Hispanic groups	75
Revised population estimates	75
Residential population base	75
Small populations as denominators	75
Net census undercounts and overcounts	76
Cohort fertility tables	76
Total fertility rates	76
Seasonal adjustment of rates	76
Computation of percentages, percentage distributions, and means	77
<b>Computation of Measures of Variability</b>	<b>77</b>
Random variation and significance testing for natality data	77
Specified Hispanic population groups	77
<b>References</b>	<b>78</b>
<b>Figures and Tables</b>	<b>85</b>
<b>Figure 1. U.S. Standard Certificate of Live Birth: 2003 Revision</b>	<b>85</b>

**Table A. Births by place of occurrence and residence for births occurring in the 50 states, the District of Columbia, and U.S. territories, 2020** 87

**Table B. Percent of birth records on which specified items were not stated: United States and each state and territory, New York City, and the District of Columbia, 2020** 89

**Table 1. Estimated total population, by race and Hispanic origin and specified Hispanic origin group and estimated female population, by age and race and Hispanic origin and specified Hispanic origin group of woman and standard errors by age and specified Hispanic origin group: United States, 2020** 94

**Table 2. Estimated total population, female population, and age-specific female population: United States, each state, and territory, July 1, 2020** 95

**Table 3. Population of birth- and death-registration states, 1900-1932, and United States, 1900-2020** 96

**Documentation Table 1. Number and percentage of live births by race of mother: United States, 2020** 97

**Additional detailed tables available with the release of the “Births: Final Data for 2020”**

**Control Count of Records**  
**2021 Natality**  
**File / Data Characteristics**

All Files:

Record format: Fixed Format

Code scheme: Numeric/Alphabetic/Blank

Record length: 1330

All Births:

	<u>United States</u>	<u>Territories</u>
Record count	3,669,928	23,448
By occurrence	3,669,928	23,448
By residence	3,664,292	23,400
To foreign residents	5,636	48

# **2021 Natality Public Use File Documentation**



Position	Length	Field	Description	Values	Definition
1-8	6	FILLER	<b>Filler</b>	Blank	
9-12	4	DOB_YY	<b>Birth Year</b>	2021	Year of birth
13-14	2	DOB_MM	<b>Birth Month</b>	01 02 03 04 05 06 07 08 09 10 11 12	January February March April May June July August September October November December
15-18	4	FILLER	<b>Filler</b>	Blank	
19-22	4	DOB_TT	<b>Time of Birth</b>	0000-2359 9999	Time of Birth Not Stated
23	1	DOB_WK	<b>Birth Day of Week</b>	1 2 3 4 5 6 7	Sunday Monday Tuesday Wednesday Thursday Friday Saturday
24-31	8	FILLER	<b>Filler</b>	Blank	
32	1	BFACIL	<b>Birth Place</b>	1 2 3 4 5 6 7 9	Hospital Freestanding Birth Center Home (intended) Home (not intended) Home (unknown if intended) Clinic / Doctor's Office Other Unknown
33	1	F_FACILITY	<b>Reporting Flag for Birth Place</b>	0 1	Non-Reporting Reporting
34-49	16	FILLER	<b>Filler</b>	Blank	

Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
50	1	BFACIL3	<b>Facility Recode</b>	1 2 3	In Hospital Not in Hospital Unknown or Not Stated
51-72	22	FILLER_B	<b>Filler</b>	Blank	
<hr/>					
73	1	MAGE_IMPFLG	<b>Mother's Age Imputed</b> Due to missing data, age imputed.	Blank 1	Age not imputed Age imputed
74	1	MAGE_REPFLG	<b>Reported Age of Mother Used Flag</b> Due to missing date of birth, reported age used.	Blank 1	Reported age not used Reported age used
75-76	2	MAGER	<b>Mother's Single Years of Age</b>	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	10 – 12 years 13 years 14 years 15 years 16 years 17 years 18 years 19 years 20 years 21 years 22 years 23 years 24 years 25 years 26 years 27 years 28 years 29 years 30 years 31 years 32 years 33 years 34 years 35 years 36 years 37 years 38 years 39 years 40 years 41 years 42 years 43 years

Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				44	44 years
				45	45 years
				46	46 years
				47	47 years
				48	48 years
				49	49 years
				50	50 years and over
77-78	2	MAGER14	<b>Mother's Age Recode 14</b>	01	Under 15 Years
				03	15 years
				04	16 years
				05	17 years
				06	18 years
				07	19 years
				08	20-24 years
				09	25-29 years
				10	30-34 years
				11	35-39 years
				12	40-44 years
				13	45-49 years
				14	50-54 years
79	1	MAGER9	<b>Mother's Age Recode 9</b>	1	Under 15 years
				2	15-19 years
				3	20-24 years
				4	25-29 years
				5	30-34 years
				6	35-39 years
				7	40-44 years
				8	45-49 years
				9	50-54 years
80-83	4	FILLER	<b>Filler</b>	Blank	
84	1	MBSTATE_REC	<b>Mother's Nativity</b>	1	Born in the U.S. (50 US States)
				2	Born outside the U.S. (includes possessions)
				3	Unknown or Not Stated
85-103	19	FILLER	<b>Filler</b>	Blank	
104	1	RESTATUS	<b>Residence Status</b> <u>United States</u>	1	RESIDENT: State and county of occurrence and residence are the same.
				2	INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different.

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				3	INTERSTATE NONRESIDENT: State of occurrence and residence are different but both are one of the 50 US states or District of Columbia.
				4	FOREIGN RESIDENT: The state of residence is not one of the 50 US states or District of Columbia.
			<u>U.S. Territories</u> For detailed geography codes see addendum.	1	RESIDENT: State and county of occurrence and residence are the same. (Unique to Guam, all US residents are considered residents of Guam and thus are assigned 1.)
				2	INTRATERRITORY NONRESIDENT: Territory of occurrence and residence are the same but county is different.
				3	INTERTERRITORY RESIDENT: Territory of occurrence and residence are different but both are US Territories.
				4	FOREIGN RESIDENT: The residence is not a US Territory.
105-106	2	MRACE31	<b>Mother's Race Recode 31</b> <u>United States and all Outlying Areas of</u> <u>the United States except Puerto Rico</u>	01	White (only) [only one race reported]
				02	Black (only)
				03	AIAN (American Indian or Alaskan Native) (only)
				04	Asian (only)
				05	NHOPI (Native Hawaiian or Other Pacific Islander) (only)
				06	Black and White
				07	Black and AIAN
				08	Black and Asian
				09	Black and NHOPI
				10	AIAN and White
				11	AIAN and Asian
				12	AIAN and NHOPI
				13	Asian and White
				14	Asian and NHOPI
				15	NHOPI and White
				16	Black, AIAN, and White
				17	Black, AIAN, and Asian
				18	Black, AIAN, and NHOPI
				19	Black, Asian, and White
				20	Black, Asian, and NHOPI
				21	Black, NHOPI, and White
				22	AIAN, Asian, and White
				23	AIAN, NHOPI, and White
				24	AIAN, Asian, and NHOPI
				25	Asian, NHOPI, and White
				26	Black, AIAN, Asian, and White
				27	Black, AIAN, Asian, and NHOPI
				28	Black, AIAN, NHOPI, and White
				29	Black, Asian, NHOPI, and White
				30	AIAN, Asian, NHOPI, and White

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				31	Black, AIAN, Asian, NHOPI, and White
107	2	MRACE6	<b>Mother's Race Recode 6</b> <u>United States and all Outlying Areas of the United States except Puerto Rico</u>	1 2 3 4 5 6	White (only) Black (only) AIAN (only) Asian (only) NHOPI (only) More than one race
108-109	2	MRACE15	<b>Mother's Race Recode 15</b> <u>United States and all Outlying Areas of the United States except Puerto Rico</u>	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15	White (only) Black (only) AIAN (only) Asian Indian (only) Chinese (only) Filipino (only) Japanese (only) Korean (only) Vietnamese (only) Other Asian (only) Hawaiian (only) Guamanian (only) Samoan (only) Other Pacific Islander (only) More than one race
110	1	FILLER	<b>Filler</b>	Blank	
111	1	MRACEIMP	<b>Mother's Race Imputed Flag</b>	Blank 1 2	Mother's race not imputed Unknown race imputed All other races, formerly coded 09, imputed.
112	1	MHISPX	<b>Mother's Hispanic Origin</b>	0 1 2 3 4 5 6 9	Non-Hispanic Mexican Puerto Rican Cuban Central or South American Dominican Other and Unknown Hispanic Origin unknown or not stated
113-114	2	FILLER	<b>Filler</b>	Blank	
115	1	MHISP_R	<b>Mother's Hispanic Origin Recode</b>	0	Non-Hispanic

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				1	Mexican
				2	Puerto Rican
				3	Cuban
				4	Central and South American
				5	Other and Unknown Hispanic origin
				9	Hispanic origin not stated
116	1	F_MHISP	<b>Reporting Flag for Mother's Origin</b>	0	Non-Reporting
				1	Reporting
117	1	MRACEHISP	<b>Mother's Race/Hispanic Origin</b> Based on single/multiple-race (fields 105-106, 107, and 108-109).	1	Non-Hispanic White (only)
				2	Non-Hispanic Black (only)
				3	Non-Hispanic AIAN (only)
				4	Non-Hispanic Asian (only)
				5	Non-Hispanic NHOPI (only)
				6	Non-Hispanic more than one race
				7	Hispanic
				8	Origin unknown or not stated
118	1	FILLER	<b>Filler</b>	Blank	
119	1	MAR_P	<b>Paternity Acknowledged</b>	Y	Yes
				N	No
				U	Unknown
				X	Not Applicable
120	1	DMAR	<b>Marital Status</b> <u>United States and all Outlying Areas of</u> <u>the United States except Puerto Rico</u>  <u>Puerto Rico</u>	1	Married
				2	Unmarried
				1	Yes
				2	Unmarried parents living together
				3	Unmarried parents not living together
				9	Unknown or not stated
121	1	MAR_IMP	<b>Mother's Marital Status Imputed</b>	Blank	Marital Status not imputed
				1	Marital Status imputed
122	1	FILLER	<b>Filler</b>	Blank	
123	1	F_MAR_P	<b>Reporting Flag for Paternity Acknowledged</b>	0	Non-Reporting
				1	Reporting
124	1	MEDUC	<b>Mother's Education</b>	1	8 <sup>th</sup> grade or less
				2	9 <sup>th</sup> through 12 <sup>th</sup> grade with no diploma
				3	High school graduate or GED completed

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				4	Some college credit, but not a degree.
				5	Associate degree (AA,AS)
				6	Bachelor's degree (BA, AB, BS)
				7	Master's degree (MA, MS, MEng, MEd, MSW, MBA)
				8	Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD)
				9	Unknown
125	1	FILLER	<b>Filler</b>	Blank	
126	1	F_MEDUC	<b>Reporting Flag for Education of Mother</b>	0	Non-Reporting
				1	Reporting
127-141	15	FILLER_M	<b>Filler M</b>	Blank	
<hr/>					
142	1	FAGERPT_FLG	<b>Father's Reported Age Used</b>	Blank	Father's reported age not used
				1	Father's reported age used
143-146	4	FILLER	<b>Filler</b>	Blank	
147-148	2	FAGECOMB	<b>Father's Combined Age</b>	09-98	Father's combined age in years
				99	Unknown or not stated
149-150	2	FAGEREC11	<b>Father's Age Recode 11</b>	01	Under 15 years
				02	15-19 years
				03	20-24 years
				04	25-29 years
				05	30-34 years
				06	35-39 years
				07	40-44 years
				08	45-49 years
				09	50-54 years
				10	55-98 years
				11	Not stated
151-152	2	FRACE31	<b>Father's Race Recode 31</b>	01	White (only) [only one race reported]
				02	Black (only)
				03	AIAN (American Indian or Alaskan Native) (only)
				04	Asian (only)
				05	NHOPI (Native Hawaiian or Other Pacific Islander) (only)
				06	Black and White
				07	Black and AIAN
				08	Black and Asian
				09	Black and NHOPI

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				10	AIAN and White
				11	AIAN and Asian
				12	AIAN and NHOPI
				13	Asian and White
				14	Asian and NHOPI
				15	NHOPI and White
				16	Black, AIAN, and White
				17	Black, AIAN, and Asian
				18	Black, AIAN, and NHOPI
				19	Black, Asian, and White
				20	Black, Asian, and NHOPI
				21	Black, NHOPI, and White
				22	AIAN, Asian, and White
				23	AIAN, NHOPI, and White
				24	AIAN, Asian, and NHOPI
				25	Asian, NHOPI, and White
				26	Black, AIAN, Asian, and White
				27	Black, AIAN, Asian, and NHOPI
				28	Black, AIAN, NHOPI, and White
				29	Black, Asian, NHOPI, and White
				30	AIAN, Asian, NHOPI, and White
				31	Black, AIAN, Asian, NHOPI, and White
				99	Unknown or Not Stated
153	1	FRACE6	<b>Father's Race Recode 6</b>	1	White (only)
				2	Black (only)
				3	AIAN (only)
				4	Asian (only)
				5	NHOPI (only)
				6	More than one race
				9	Unknown or Not Stated
154-155	2	FRACE15	<b>Father's Race Recode 15</b>	01	White (only)
				02	Black (only)
				03	AIAN (only)
				04	Asian Indian (only)
				05	Chinese (only)
				06	Filipino (only)
				07	Japanese (only)
				08	Korean (only)
				09	Vietnamese (only)
				10	Other Asian (only)
				11	Hawaiian (only)
				12	Guamanian (only)
				13	Samoan (only)
				14	Other Pacific Islander (only)

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.



Position	Length	Field	Description	Values	Definition
				15	More than one race
				99	Unknown or Not Stated
156-158	3	FILLER	<b>Filler</b>		
159	1	FHISPX	<b>Father's Hispanic Origin</b>	0	Non-Hispanic
				1	Mexican
				2	Puerto Rican
				3	Cuban
				4	Central or South American
				5	Dominican
				6	Other and Unknown Hispanic
				9	Origin unknown or not stated
160	1	FHISP_R	<b>Father's Hispanic Origin Recode</b>	0	Non-Hispanic
				1	Mexican
				2	Puerto Rican
				3	Cuban
				4	Central and South American
				5	Other and Unknown Hispanic origin
				9	Hispanic origin not stated
161	1	F_FHISP	<b>Reporting Flag for Father's Origin</b>	0	Non-Reporting
				1	Reporting
162	1	FRACEHISP	<b>Father's Race/Hispanic Origin</b> Based on single/multiple-race (fields 151-152, 153, and 154-155).	1	Non-Hispanic White (only)
				2	Non-Hispanic Black (only)
				3	Non-Hispanic AIAN (only)
				4	Non-Hispanic Asian (only)
				5	Non-Hispanic NHOPI (only)
				6	Non-Hispanic more than one race
				7	Hispanic
				8	Origin unknown or not stated
				9	Race unknown or not stated (Non-Hispanic)
163	1	FEDUC	<b>Father's Education</b> Use reporting flag in field 165	1	8 <sup>th</sup> grade or less
				2	9 <sup>th</sup> through 12 <sup>th</sup> grade with no diploma
				3	High school graduate or GED completed
				4	Some college credit, but not a degree.
				5	Associate degree (AA,AS)
				6	Bachelor's degree (BA, AB, BS)
				7	Master's degree (MA, MS, MEng, MEd, MSW, MBA)
				8	Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD)
				9	Unknown

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
164	1	FILLER	<b>Filler</b>	Blank	
165	1	f_FEDUC	<b>Reporting Flag for Education of Father</b>	0 1	Non-Reporting Reporting
166-170	5	FILLER_F	<b>Filler</b>	Blank	
<hr/>					
171-172	2	PRIORLIVE	<b>Prior Births Now Living</b>	00-30 99	Number of children still living from previous live births. Unknown or not stated
173-174	2	PRIORDEAD	<b>Prior Births Now Dead</b>	00-30 99	Number of children dead from previous live births. Unknown or not stated
175-176	2	PRIORTERM	<b>Prior Other Terminations</b>	00-30 99	Number other terminations Unknown or not stated
177-178	2	FILLER	<b>Filler</b>	Blank	
179	1	LBO_REC	<b>Live Birth Order Recode</b>	1-7 8 9	Number of live birth order. 8 or more live births Unknown or not stated
180-181	2	FILLER	<b>Filler</b>	Blank	
182	1	TBO_REC	<b>Total Birth Order Recode</b>	1-7 8 9	Number of total birth order. 8 or more total births Unknown or not stated
183-197	15	FILLER	<b>Filler</b>	Blank	
198-200	3	ILLB_R	<b>Interval Since Last Live Birth Recode</b> Use reporting flag in field 126	000-003 004-300 888 999	Plural delivery Months since last live birth Not applicable / 1 <sup>st</sup> live birth Unknown or not stated
201-202	2	ILLB_R11	<b>Interval Since Last Live Birth Recode 11</b> Use reporting flag in field 126	00 01 02 03 04 05 06 07 08	Zero to 3 months (plural delivery) 4 to 11 months 12 to 17 months 18 to 23 months 24 to 35 months 36 to 47 months 48 to 59 months 60 to 71 months 72 months and over

Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				88	Not applicable (1 <sup>st</sup> live birth)
				99	Unknown or not stated
203-205	3	FILLER	<b>Filler</b>	Blank	
206-208	3	ILOP_R	<b>Interval Since Last Other Pregnancy Recode</b> Use reporting flag in field 126	000-003	Plural delivery
				004-300	Months since last live birth
				888	Not applicable / 1 <sup>st</sup> natality event
				999	Unknown or not stated
209-210	2	ILOP_R11	<b>Interval Since Last Other Pregnancy Recode 11</b> Use reporting flag in field 126	00	Zero to 3 months (plural delivery)
				01	4 to 11 months
				02	12 to 17 months
				03	18 to 23 months
				04	24 to 35 months
				05	36 to 47 months
				06	48 to 59 months
				07	60 to 71 months
				08	72 months and over
				88	Not applicable (1 <sup>st</sup> natality event)
				99	Unknown or not stated
211-213	3	FILLER	<b>Filler</b>	Blank	
214-216	3	ILP_R	<b>Interval Since Last Pregnancy Recode</b> Use reporting flag in field 126	000-003	Plural delivery
				004-300	Months since last live birth
				888	Not applicable / no previous pregnancy
				999	Unknown or not stated
217-218	2	ILP_R11	<b>Interval Since Last Pregnancy Recode 11</b> Use reporting flag in field 126	00	Zero to 3 months (plural delivery)
				01	4 to 11 months
				00	12 to 17 months
				01	18 to 23 months
				02	24 to 35 months
				03	36 to 47 months
				04	48 to 59 months
				05	60 to 71 months
				06	72 months and over
				88	Not applicable (no previous pregnancy)
				99	Unknown or not stated
219-223	5	FILLER_P		Blank	
<hr/>					
224-225	2	PRECARE	<b>Month Prenatal Care Began</b>	00	No prenatal care

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Position	Length	Field	Description	Values	Definition
				01-10 99	Month prenatal care began Unknown or not stated
226	1	F_MPCB	<b>Reporting Flag for Month Prenatal Care Began</b>	0 1	Non-Reporting Reporting
227	1	PRECARE5	<b>Month Prenatal Care Began Recode</b>	1 2 3 4 5	1 <sup>st</sup> to 3 <sup>rd</sup> month 4 <sup>th</sup> to 6 <sup>th</sup> month 7 <sup>th</sup> to final month No prenatal care Unknown or not stated
228-237	10	FILLER	<b>Filler</b>	Blank	
238-239	2	PREVIS	<b>Number of Prenatal Visits</b>	00-98 99	Number of prenatal visits Unknown or not stated
240-241	2	FILLER	<b>Filler</b>	Blank	
242-243	2	PREVIS_REC	<b>Number of Prenatal Visits Recode</b>	01 02 03 04 05 06 07 08 09 10 11 12	No visits 1 to 2 visits 3 to 4 visits 5 to 6 visits 7 to 8 visits 9 to 10 visits 11 to 12 visits 13 to 14 visits 15 to 16 visits 17 to 18 visits 19 or more visits Unknown or not stated
244	1	F_TPCV	<b>Reporting Flag for Total Prenatal Care Visits</b>	0 1	Non-Reporting Reporting
245-250	6	FILLER	<b>Filler</b>	Blank	
<hr/>					
251	1	WIC	<b>WIC</b>	Y N U	Yes No Unknown or not stated
252	1	F_WIC	<b>Reporting Flag for WIC</b>	0 1	Non-Reporting Reporting

Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
253-254	2	CIG_0	<b>Cigarettes Before Pregnancy</b>	00-97 98 99	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated
255-256	2	CIG_1	<b>Cigarettes 1<sup>st</sup> Trimester</b>	00-97 98 99	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated
257-258	2	CIG_2	<b>Cigarettes 2<sup>nd</sup> Trimester</b>	00-97 98 99	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated
259-260	2	CIG_3	<b>Cigarettes 3<sup>rd</sup> Trimester</b>	00-97 98 99	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated
261	1	CIG0_R	<b>Cigarettes Before Pregnancy Recode</b>	0 1 2 3 4 5 6	Nonsmoker 1-5 6-10 11-20 21-40 41 or more Unknown or not stated
262	1	CIG1_R	<b>Cigarettes 1<sup>st</sup> Trimester Recode</b>	0 1 2 3 4 5 6	Nonsmoker 1-5 6-10 11-20 21-40 41 or more Unknown or not stated
263	1	CIG2_R	<b>Cigarettes 2<sup>nd</sup> Trimester Recode</b>	0 1 2 3 4 5 6	Nonsmoker 1-5 6-10 11-20 21-40 41 or more Unknown or not stated
264	1	CIG3_R	<b>Cigarettes 3<sup>rd</sup> Trimester Recode</b>	0 1 2 3 4 5	Nonsmoker 1-5 6-10 11-20 21-40 41 or more

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Position	Length	Field	Description	Values	Definition
				6	Unknown or not stated
265	1	F_CIGS_0	<b>Reporting Flag for Cigarettes before Pregnancy</b>	0 1	Non-Reporting Reporting
266	1	F_CIGS_1	<b>Reporting Flag for Cigarettes 1<sup>st</sup> Trimester</b>	0 1	Non-Reporting Reporting
267	1	F_CIGS_2	<b>Reporting Flag for Cigarettes 2<sup>nd</sup> Trimester</b>	0 1	Non-Reporting Reporting
268	1	F_CIGS_3	<b>Reporting Flag for Cigarettes 3<sup>rd</sup> Trimester</b>	0 1	Non-Reporting Reporting
269	1	CIG_REC	<b>Cigarette Recode</b>	Y N U	Yes No Unknown or not stated
270	1	F_TOBACO	<b>Reporting Flag for Tobacco use</b>	0 1	Non-Reporting Reporting
271-279	9	FILLER_R	<b>Filler</b>	Blank	
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280-281	2	M_Ht_In	<b>Mother's Height in Total Inches</b>	30-78 99	Height in inches Unknown or not stated
282	1	F_M_HT	<b>Reporting Flag for Mother's Height</b>	0 1	Non-Reporting Reporting
283-286	4	BMI	<b>Body Mass Index</b> Use reporting flag in field 282	13.0-69.9 99.9	Body Mass Index Unknown or not stated
287	1	BMI_R	<b>Body Mass Index Recode</b> Use reporting flag in field 282	1 2 3 4 5 6 9	Underweight <18.5 Normal 18.5-24.9 Overweight 25.0-29.9 Obesity I 35.0-34.9 Obesity II 35.0-39.9 Extreme Obesity III ≥ 40.0 Unknown or not stated
288-291	4	FILLER	<b>Filler</b>	Blank	
292-294	3	PWgt_R	<b>Pre-pregnancy Weight Recode</b>	075-375	Weight in pounds

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Position	Length	Field	Description	Values	Definition
				999	Unknown or not stated
295	1	F_PWGT	<b>Reporting Flag for Pre-pregnancy Weight</b>	0 1	Non-Reporting Reporting
296-298	3	FILLER	<b>Filler</b>	Blank	
299-301	3	DWgt_R	<b>Delivery Weight Recode</b>	100-400 999	Weight in pounds Unknown or not stated
302	1	FILLER	<b>Filler</b>	Blank	
303	1	F_DWGT	<b>Reporting Flag for Delivery Weight</b>	0 1	Non-Reporting Reporting
304-305	2	WTGAIN	<b>Weight Gain</b>	00-97 98 99	Weight gain in pounds 98 pounds and over Unknown or not stated
306	1	WTGAIN_REC	<b>Weight Gain Recode</b>	1 2 3 4 5 9	Less than 11 pounds 11 to 20 pounds 21 to 30 pounds 31 to 40 pounds 41 to 98 pounds Unknown or not stated
307	1	F_WTGAIN	<b>Reporting Flag for Weight Gain</b>	0 1	Non-Reporting Reporting
308-312	5	FILLER_W	<b>Filler</b>	Blank	
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313-342	30	<b><u>Risk Factors</u></b>			
313	1	RF_PDIAB	<b>Pre-pregnancy Diabetes</b>	Y N U	Yes No Unknown or not stated
314	1	RF_GDIAB	<b>Gestational Diabetes</b>	Y N U	Yes No Unknown or not stated
315	1	RF_PHYPE	<b>Pre-pregnancy Hypertension</b>	Y N	Yes No

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Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
316	1	RF_GHYPE	<b>Gestational Hypertension</b>	Y N U	Yes No Unknown or not stated
317	1	RF_EHYPE	<b>Hypertension Eclampsia</b>	Y N U	Yes No Unknown or not stated
318	1	RF_PPTERM	<b>Previous Preterm Birth</b>	Y N U	Yes No Unknown or not stated
319	1	F_RF_PDIAB	<b>Reporting Flag for Pre-pregnancy Diabetes</b>	0 1	Non-Reporting Reporting
320	1	F_RF_GDIAB	<b>Reporting Flag for Gestational Diabetes</b>	0 1	Non-Reporting Reporting
321	1	F_RF_PHYPER	<b>Reporting Flag for Pre-pregnancy Hypertension</b>	0 1	Non-Reporting Reporting
322	1	F_RF_GHYPER	<b>Reporting Flag for Gestational Hypertension</b>	0 1	Non-Reporting Reporting
323	1	F_RF_ECLAMP	<b>Reporting Flag for Hypertension Eclampsia</b>	0 1	Non-Reporting Reporting
324	1	F_RF_PPB	<b>Reporting Flag for Previous Preterm Birth</b>	0 1	Non-Reporting Reporting
325	1	RF_INFTR	<b>Infertility Treatment Used</b>	Y N U	Yes No Unknown or not stated
326	1	RF_FEDRG	<b>Fertility Enhancing Drugs</b>	Y N X U	Yes No Not applicable Unknown or not stated
327	1	RF_ARTEC	<b>Asst. Reproductive Technology</b>	Y N X U	Yes No Not applicable Unknown or not stated

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Position	Length	Field	Description	Values	Definition
328	1	f_RF_INFT	<b>Reporting Flag for Infertility Treatment</b>	0 1	Non-Reporting Reporting
329	1	F_RF_INF_DRG	<b>Reporting Flag for Fertility Enhance Drugs</b>	0 1	Non-Reporting Reporting
330	1	F_RF_INF_ART	<b>Reporting Flag for Reproductive Technology</b>	0 1	Non-Reporting Reporting
331	1	RF_CESAR	<b>Previous Cesarean</b>	Y N U	Yes No Unknown or not stated
332-333	2	RF_CESARN	<b>Number of Previous Cesareans</b>	00 01-30 99	None Number of previous cesareans Unknown or not stated
334	1	FILLER	<b>Filler</b>	Blank	
335	1	F_RF_CESAR	<b>Reporting Flag for Previous Cesarean</b>	0 1	Non-Reporting Reporting
336	1	F_RF_NCESAR	<b>Reporting Flag for Number of Previous Cesareans</b>	0 1	Non-Reporting Reporting
337	1	NO_RISKS	<b>No Risk Factors Reported</b>	1 0 9	True False Not Reported
338-342	5	FILLER_RF	<b>Filler</b>	Blank	
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343-358	15	<b><u>Infections Present</u></b>			
343	1	IP_GON	<b>Gonorrhea</b>	Y N U	Yes No Unknown or not stated
344	1	IP_SYPH	<b>Syphilis</b>	Y N U	Yes No Unknown or not stated
345	1	IP_CHLAM	<b>Chlamydia</b>	Y N	Yes No

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Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
346	1	IP_HEPB	<b>Hepatitis B</b>	Y N U	Yes No Unknown or not stated
347	1	IP_HEPC	<b>Hepatitis C</b>	Y N U	Yes No Unknown or not stated
348	1	F_IP_GONOR	<b>Reporting Flag for Gonorrhea</b>	0 1	Non-Reporting Reporting
349	1	F_IP_SYPH	<b>Reporting Flag for Syphilis</b>	0 1	Non-Reporting Reporting
350	1	F_IP_CHLAM	<b>Reporting Flag for Chlamydia</b>	0 1	Non-Reporting Reporting
351	1	F_IP_HEPATB	<b>Reporting Flag for Hepatitis B</b>	0 1	Non-Reporting Reporting
352	1	F_IP_HEPATC	<b>Reporting Flag for Hepatitis C</b>	0 1	Non-Reporting Reporting
353	1	NO_INFEC	<b>No Infections Reported</b>	1 0 9	True False Not Reported
354-358	5	FILLER_IP	<b>Filler_IP</b>	Blank	

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359-370	12	<b><u>Obstetric Procedures</u></b>			
359	1	FILLER	<b>Filler</b>	Blank	
360	1	OB_ECVS	<b>Successful External Cephalic Version</b>	Y N U	Yes No Unknown or not stated
361	1	OB_ECVF	<b>Failed External Cephalic Version</b>	Y N U	Yes No Unknown or not stated

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Position	Length	Field	Description	Values	Definition
362	1	FILLER	<b>Filler</b>	Blank	
363	1	F_OB_SUCC	<b>Reporting Flag for Successful External Cephalic Version</b>	0 1	Non-Reporting Reporting
364	1	F_OB_FAIL	<b>Reporting Flag for Failed External Cephalic Version</b>	0 1	Non-Reporting Reporting
365-382	17	FILLER_OB	<b>Filler_OB</b>	Blank	
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383-400	18	<b><u>Characteristics of Labor and Delivery</u></b>			
383	1	LD_INDL	<b>Induction of Labor</b>	Y N U	Yes No Unknown or not stated
384	1	LD_AUGM	<b>Augmentation of Labor</b>	Y N U	Yes No Unknown or not stated
385	1	LD_STER	<b>Steroids</b>	Y N U	Yes No Unknown or not stated
386	1	LD_ANTB	<b>Antibiotics</b>	Y N U	Yes No Unknown or not stated
387	1	LD_CHOR	<b>Chorioamnionitis</b>	Y N U	Yes No Unknown or not stated
388	1	LD_ANES	<b>Anesthesia</b>	Y N U	Yes No Unknown or not stated
389	1	F_LD_INDL	<b>Reporting Flag for Induction of Labor</b>	0 1	Non-Reporting Reporting
390	1	F_LD_AUGM	<b>Reporting Flag for Augmentation of Labor</b>	0 1	Non-Reporting Reporting
391	1	F_LD_STER	<b>Reporting Flag for Steroids</b>	0	Non-Reporting

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Position	Length	Field	Description	Values	Definition
				1	Reporting
392	1	F_LD_ANTB	<b>Reporting Flag for Antibiotics</b>	0	Non-Reporting
				1	Reporting
393	1	F_LD_CHOR	<b>Reporting Flag for Chorioamnionitis</b>	0	Non-Reporting
				1	Reporting
394	1	F_LD_ANES	<b>Reporting Flag for Anesthesia</b>	0	Non-Reporting
				1	Reporting
395	1	NO_LBRDLV	<b>No Characteristics of Labor Reported</b>	1	True
				0	False
				9	Not Reported
396-400	5	FILLER_LD	<b>Filler</b>	Blank	
<hr/>					
401-414	14	<b><u>Method of Delivery</u></b>			
401	1	ME_PREP	<b>Fetal Presentation at Delivery</b>	1	Cephalic
				2	Breech
				3	Other
				9	Unknown or not stated
402	1	ME_ROUT	<b>Final Route &amp; Method of Delivery</b>	1	Spontaneous
				2	Forceps
				3	Vacuum
				4	Cesarean
				9	Unknown or not stated
403	1	ME_TRIAL	<b>Trial of Labor Attempted (if cesarean)</b>	Y	Yes
				N	No
				X	Not applicable
				U	Unknown or not stated
404	1	F_ME_PREP	<b>Reporting Flag for Fetal Presentation</b>	0	Non-Reporting
				1	Reporting
405	1	F_ME_ROUT	<b>Reporting Flag for Final Route and Method of Deliver</b>	0	Non-Reporting
				1	Reporting
406	1	F_ME_TRIAL	<b>Reporting Flag for Trial of Labor Attempted</b>	0	Non-Reporting
				1	Reporting

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Position	Length	Field	Description	Values	Definition
407	1	RDMETH_REC	<b>Delivery Method Recode</b>	1 2 3 4 5 6 9	Vaginal (excludes vaginal after previous C-section) Vaginal after previous c-section Primary C-section Repeat C-section Vaginal (unknown if previous c-section) C-section (unknown if previous c-section) Not stated
408	1	DMETH_REC	<b>Delivery Method Recode</b>	1 2 9	Vaginal C-Section Unknown
409	1	F_DMETH_REC	<b>Reporting Flag for Method of Delivery Recode</b>	0 1	Non-Reporting Reporting
410-414	5	FILLER_ME	<b>Filler</b>	Blank	
<hr/>					
415-432	18	<b><u>Maternal Morbidity</u></b>			
415	1	MM_MTR	<b>Maternal Transfusion</b>	Y N U	Yes No Unknown or not stated
416	1	MM_PLAC	<b>Perineal Laceration</b>	Y N U	Yes No Unknown or not stated
417	1	MM_RUPT	<b>Ruptured Uterus</b>	Y N U	Yes No Unknown or not stated
418	1	MM_UHYST	<b>Unplanned Hysterectomy</b>	Y N U	Yes No Unknown or not stated
419	1	MM_AICU	<b>Admit to Intensive Care</b>	Y N U	Yes No Unknown or not stated
420	1	FILLER	<b>Filler</b>	Blank	
421	1	F_MM_MTR	<b>Reporting Flag for Maternal Transfusion</b>	0 1	Non-Reporting Reporting

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Position	Length	Field	Description	Values	Definition
422	1	F_MM_PLAC	<b>Reporting Flag for Perineal Laceration</b>	0 1	Non-Reporting Reporting
423	1	F_MM_RUPT	<b>Reporting Flag for Ruptured Uterus</b>	0 1	Non-Reporting Reporting
424	1	F_MM_UHYST	<b>Reporting Flag for Unplanned Hysterectomy</b>	0 1	Non-Reporting Reporting
425	1	F_MM_AICU	<b>Reporting Flag for Admission to Intensive Care</b>	0 1	Non-Reporting Reporting
426	1	FILLER	<b>Filler</b>	Blank	
427	1	NO_MMORB	<b>No Maternal Morbidity Reported</b>	1 0 9	True False Not Reported
428-432	5	FILLER_MM	<b>Filler</b>	Blank	
<hr/>					
433	1	ATTEND	<b>Attendant at Birth</b>	1 2 3 4 5 9	Doctor of Medicine (MD) Doctor of Osteopathy (DO) Certified Nurse Midwife/Certified Midwife (CNM/CM) Other Midwife Other Unknown or not stated
434	1	MTRAN	<b>Mother Transferred</b> Use reporting flag in field 126	Y N U	Yes No Unknown
435	1	PAY	<b>Payment Source for Delivery</b>	1 2 3 4 5 6 8 9	Medicaid Private Insurance Self-Pay Indian Health Service CHAMPUS/TRICARE Other Government (Federal, State, Local) Other Unknown
436	1	PAY_REC	<b>Payment Recode</b>	1 2 3 4	Medicaid Private Insurance Self Pay Other

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Position	Length	Field	Description	Values	Definition
				9	Unknown
437	1	F_PAY	<b>Reporting Flag for Source of Payment</b>	0 1	Non-Reporting Reporting
438	1	F_PAY_REC	<b>Reporting Flag for Payment Recode</b>	0 1	Non-Reporting Reporting
439-443	5	FILLER_A	<b>Filler</b>	Blank	
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444-445	2	APGAR5	<b>Five Minute APGAR Score</b>	00-10 99	A score of 0-10 Unknown or not stated
446	1	APGAR5R	<b>Five Minute APGAR Recode</b>	1 2 3 4 5	A score of 0-3 A score of 4-6 A score of 7-8 A score of 9-10 Unknown or not stated
447	1	F_APGAR5	<b>Reporting Flag for Five minute APGAR</b>	0 1	Non-Reporting Reporting
448-449	2	APGAR10	<b>Ten Minute APGAR Score</b> Use reporting flag in field 126	00-10 88 99	A score of 0-10 Not applicable Unknown or not stated
450	1	APGAR10R	<b>Ten Minute APGAR Recode</b> Use reporting flag in field 126	1 2 3 4 5	A score of 0-3 A score of 4-6 A score of 7-8 A score of 9-10 Not stated/not applicable
451-453	3	FILLER	<b>Filler</b>	Blank	
454	1	DPLURAL	<b>Plurality Recode</b>	1 2 3 4	Single Twin Triplet Quadruplet or higher
455	1	FILLER	<b>Filler</b>	Blank	
456	1	IMP_PLUR	<b>Plurality Imputed</b>	Blank 1	Plurality is not imputed Plurality is imputed

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Position	Length	Field	Description	Values	Definition
457-458	2	FILLER	<b>Filler</b>	Blank	
459	1	SETORDER_R	<b>Set Order Recode</b> Use reporting flag in field 126	1 2 3 4 5 9	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> 5 <sup>th</sup> to 16 <sup>th</sup> Unknown or not stated
460-474	15	FILLER	<b>Filler</b>	Blank	
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475	1	SEX	<b>Sex of Infant</b>	M F	Male Female
476	1	IMP_SEX	<b>Imputed Sex</b>	Blank 1	Infant Sex not Imputed Infant Sex is Imputed
477-478	2	DLMP_MM	<b>Last Normal Menses Month</b>	01 02 03 04 05 06 07 08 09 10 11 12 99	January February March April May June July August September October November December Unknown or not stated
479-480	2	FILLER	<b>Filler</b>	Blank	
481-484	4	DLMP_YY	<b>Last Normal Menses Year</b>	nnnn 9999	Year of last normal menses Unknown or not stated
485-487	3	FILLER	<b>Filler</b>	Blank	
488	1	COMPGST_IMP	<b>Combined Gestation Imputation Flag</b>	Blank 1	Combined Gestation is not imputed Combined Gestation is imputed
489	1	OBGEST_FLG	<b>Obstetric Estimate of Gestation Used Flag</b>	Blank 1	Obstetric Estimate is not used Obstetric Estimate is used

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Position	Length	Field	Description	Values	Definition
490-491	2	COMBGEST	<b>Combined Gestation – Detail in Weeks</b>	17-47 99	17 <sup>th</sup> through 47 <sup>th</sup> week of Gestation Unknown
492-493	2	GESTREC10	<b>Combined Gestation Recode 10</b>	01 02 03 04 05 06 07 08 09 10 99	Under 20 weeks 20-27 weeks 28-31 weeks 32-33 weeks 34-36 weeks 37-38 weeks 39 weeks 40 weeks 41 weeks 42 weeks and over Unknown
494	1	GESTREC3	<b>Combined Gestation Recode 3</b>	1 2 3	Under 37 weeks 37 weeks and over Not stated
495-497	3	FILLER	<b>Filler</b>	Blank	
498	1	LMPUSED	<b>Combined Gestation Used Flag</b>	Blank 1	Combined gestation not used Combined gestation used
499-500	2	OEGest_Comb	<b>Obstetric Estimate Edited</b> (NCHS standard item)	17-47 99	Weeks of gestation Not stated
501-502	2	OEGest_R10	<b>Obstetric Estimate Recode10</b> (NCHS standard item)	01 02 03 04 05 06 07 08 09 10 99	Under 20 weeks 20-27 weeks 28-31 weeks 32-33 weeks 34-36 weeks 37-38 weeks 39 weeks 40 weeks 41 weeks 42 weeks and over Unknown
503	1	OEGest_R3	<b>Obstetric Estimate Recode 3</b> (NCHS Standard Item)	1 2 3	Under 37 weeks 37 weeks and over Not stated

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504-507	4	DBWT	<b>Birth Weight – Detail in Grams (Edited)</b>	0227-8165	Number of grams
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Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				9999	Not stated birth weight
508	1	FILLER	<b>Filler</b>	Blank	
509-510	2	BWTR12	<b>Birth Weight Recode 12</b>	01 02 03 04 05 06 07 08 09 10 11 12	0227 - 0499 grams 0500 – 0999 grams 1000 - 1499 grams 1500 – 1999 grams 2000 – 2499 grams 2500 – 2999 grams 3000 – 3499 grams 3500 – 3999 grams 4000 – 4499 grams 4500 – 4999 grams 5000 – 8165 grams Not Stated
511	1	BWTR4	<b>Birth Weight Recode 4</b>	1 2 3 4	0227 - 1499 grams 1500 – 2499 grams 2500 - 8165 grams Unknown or not stated
512-516	5	FILLER_G	<b>Filler</b>	Blank	
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517-536	20	<b><u>Abnormal Conditions of the Newborn</u></b>			
517	1	AB_AVEN1	<b>Assisted Ventilation (immediately)</b>	Y N U	Yes No Unknown or not stated
518	1	AB_AVEN6	<b>Assisted Ventilation &gt; 6 hrs</b>	Y N U	Yes No Unknown or not stated
519	1	AB_NICU	<b>Admission to NICU</b>	Y N U	Yes No Unknown or not stated
520	1	AB_SURF	<b>Surfactant</b>	Y N U	Yes No Unknown or not stated
521	1	AB_ANTI	<b>Antibiotics for Newborn</b>	Y N	Yes No

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Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
522	1	AB_SEIZ	Seizures	Y N U	Yes No Unknown or not stated
523	1	FILLER	Filler	Blank	
524	1	F_AB_VENT	Reporting Flag for Assisted Ventilation (immediately)	0 1	Non-Reporting Reporting
525	1	F_AB_VENT6	Reporting Flag for Assisted Ventilation >6 hrs	0 1	Non-Reporting Reporting
526	1	F_AB_NIUC	Reporting Flag for Admission to NICU	0 1	Non-Reporting Reporting
527	1	F_AB_SURFAC	Reporting Flag for Surfactant	0 1	Non-Reporting Reporting
528	1	F_AB_ANTIBIO	Reporting Flag for Antibiotics	0 1	Non-Reporting Reporting
529	1	F_AB_SEIZ	Reporting Flag for Seizures	0 1	Non-Reporting Reporting
530	1	FILLER	Filler	Blank	
531	1	NO_ABNORM	No Abnormal Conditions Checked	1 0 9	True False Not Reported
532-536	5	FILLER_AB	Filler	blank	
<hr/>					
537-566	30	<b><u>Congenital Anomalies of the Newborn</u></b>			
537	1	CA_ANEN	Anencephaly	Y N U	Yes No Unknown or not stated
538	1	CA_MNSB	Meningomyelocele / Spina Bifida	Y N U	Yes No Unknown or not stated

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Position	Length	Field	Description	Values	Definition
539	1	CA_CCHD	<b>Cyanotic Congenital Heart Disease</b>	Y N U	Yes No Unknown or not stated
540	1	CA_CDH	<b>Congenital Diaphragmatic Hernia</b>	Y N U	Yes No Unknown or not stated
541	1	CA_OMPH	<b>Omphalocele</b>	Y N U	Yes No Unknown or not stated
542	1	CA_GAST	<b>Gastroschisis</b>	Y N U	Yes No Unknown or not stated
543	1	F_CA_ANEN	<b>Reporting Flag for Anencephaly</b>	0 1	Non-Reporting Reporting
544	1	F_CA_MENIN	<b>Reporting Flag for Meningomyelocele/Spina Bifida</b>	0 1	Non-Reporting Reporting
545	1	F_CA_HEART	<b>Reporting Flag for Cyanotic Congenital Heart Disease</b>	0 1	Non-Reporting Reporting
546	1	F_CA_HERNIA	<b>Reporting Flag for Congenital Diaphragmatic Hernia</b>	0 1	Non-Reporting Reporting
547	1	F_CA_OMPHA	<b>Reporting Flag for Omphalocele</b>	0 1	Non-Reporting Reporting
548	1	F_CA_GASTRO	<b>Reporting Flag for Gastroschisis</b>	0 1	Non-Reporting Reporting
549	1	CA_LIMB	<b>Limb Reduction Defect</b>	Y N U	Yes No Unknown or not stated
550	1	CA_CLEFT	<b>Cleft Lip w/ or w/o Cleft Palate</b>	Y N U	Yes No Unknown or not stated
551	1	CA_CLPAL	<b>Cleft Palate alone</b>	Y N U	Yes No Unknown or not stated

Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
552	1	CA_DOWN	<b>Down Syndrome</b>	C P N U	Confirmed Pending No Unknown
553	1	CA_DISOR	<b>Suspected Chromosomal Disorder</b>	C P N U	Confirmed Pending No Unknown
554	1	CA_HYPO	<b>Hypospadias</b>	Y N U	Yes, anomaly reported No, anomaly not reported Unknown
555	1	F_CA_LIMB	<b>Reporting Flag for Limb Reduction Defect</b>	0 1	Non-Reporting Reporting
556	1	F_CA_CLEFTLP	<b>Reporting Flag for Cleft Lip with or without Cleft Palate</b>	0 1	Non-Reporting Reporting
557	1	F_CA_CLEFT	<b>Reporting Flag for Cleft Palate Alone</b>	0 1	Non-Reporting Reporting
558	1	F_CA_DOWNS	<b>Reporting Flag for Down Syndrome</b>	0 1	Non-Reporting Reporting
559	1	F_CA_CHROM	<b>Reporting Flag for Suspected Chromosomal Disorder</b>	0 1	Non-Reporting Reporting
560	1	F_CA_HYPOS	<b>Reporting Flag for Hypospadias</b>	0 1	Non-Reporting Reporting
561	1	NO_CONGEN	<b>No Congenital Anomalies Checked</b>	1 0 9	True False Not Reported
562-566	5	FILLER_CA	<b>Filler</b>	Blank	
<hr/>					
567	1	ITRAN	<b>Infant Transferred</b> Use reporting flag in field 126	Y N U	Yes No Unknown or not stated
568	1	ILIVE	<b>Infant Living at Time of Report</b> Use reporting flag in field 126	Y N	Yes No

Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
569	1	BFED	<b>Infant Breastfed at Discharge</b>	Y N U	Yes No Unknown or not stated
570	1	F_BFED	<b>Reporting Flag for Breastfed at Discharge</b>	0 1	Non-Reporting Reporting
571-1330	760	FILLER_X	<b>Filler</b>	Blank	

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Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
<b>ADDENDUM</b>					
Detailed geographic information for the territories.					
24-25	2	OCTERR	<b>Mother's Occurrence Territory/Possession</b>	<u>Outlying Areas of the United States</u> AS American Samoa GU Guam MP Northern Marianas PR Puerto Rico VI Virgin Islands US United States (births to residents of the 50 states or DC) XX Not Applicable ZZ Not Classifiable	
28-30	3	OCNTYFIPS	<b>Occurrence FIPS County</b>	<u>Puerto Rico</u> 021 Bayamo'n 025 Caguas 031 Carolina 097 Mayaguez 113 Ponce 127 San Juan 999 County of less than 100,000  <u>Other Outlying Areas of the United States</u> 000 No county level geography 999 County of less than 100,000	
31	1	OCNTYPOP	<b>Occurrence County Pop</b>	0 County of 1,000,000 or more 1 County of 500,000 to 1,000,000 2 County of 250,000 to 500,000 3 County of 100,000 to 250,000 4 County of 50,000 to 100,000 5 County of 25,000 to 50,000 6 County of 10,000 to 25,000 9 County less than 10,000	
80-81	2	MBCNTRY	<b>Mother's Birth Country</b>	AA-ZZ	See Geographic Documentation
85-86	2	MRCNTRY	<b>Mother's Residence Country</b>	AA-ZZ	See Geographic Documentation
89-90	2	MRTERR	<b>Mother's Residence Territory</b>	<u>Outlying Areas of the United States</u> AS American Samoa GU Guam MP Northern Marianas PR Puerto Rico	

Data from non-reporting areas for an item are represented by Blanks ("not on certificate") that are not otherwise indicated in the Values and Definitions.

Position	Length	Field	Description	Values	Definition
				VI	Virgin Islands
				US	United States (births to residents of the 50 states or DC)
				XX	Not Applicable
				ZZ	Not Classifiable
91-93	3	RCNTY	<b>Residence FIPS county</b>	<u>Puerto Rico</u>	
				021	Bayamo'n
				025	Caguas
				031	Carolina
				097	Mayaguez
				113	Ponce
				127	San Juan
				999	County of less than 100,000
				<u>Other Outlying Areas of the United States</u>	
				000	No county level geography
				999	County of less than 100,000
99	1	RCNTY_POP	<b>Population of Residence County</b>	0	County of 1,000,000 or more
				1	County of 500,000 to 1,000,000
				2	County of 250,000 to 500,000
				3	County of 100,000 to 250,000
				4	County of 50,000 to 100,000
				5	County of 25,000 to 50,000
				6	County of 10,000 to 25,000
				9	County less than 10,000
				Z	Foreign resident
100	1	RCITY_POP	<b>Population of Residence City</b>	0	City of 1,000,000 or more
				1	City of 500,000 to 1,000,000
				2	City of 250,000 to 500,000
				3	City of 100,000 to 250,000
				4	City of 50,000 to 100,000
				5	City of 25,000 to 50,000
				6	City of 10,000 to 25,000
				9	All other areas in the US
				Z	Foreign resident
103	1	RECTYPE	<b>Record Type</b>	1	RESIDENT: Territory and county of occurrence and residence are the same.
				2	NONRESIDENT: Territory and county of occurrence and residence are different.

Data from non-reporting areas for an item are represented by Blanks (“not on certificate”) that are not otherwise indicated in the Values and Definitions.



**Country Codes**  
**(Alphabetical by Code)**

Code	Geopolitical Entity
AA	ARUBA
AC	ANTIGUA AND BARBUDA
AE	UNITED ARAB EMIRATES
AF	AFGHANISTAN
AG	ALGERIA
AJ	AZERBAIJAN
AL	ALBANIA
AM	ARMENIA
AN	ANDORRA
AO	ANGOLA
AQ	AMERICAN SAMOA
AR	ARGENTINA
AS	AUSTRALIA
AT	ASHMORE AND CARTIER ISLANDS
AU	AUSTRIA
AV	ANGUILLA
AY	ANTARCTICA
BA	BAHRAIN
BB	BARBADOS
BC	BOTSWANA
BD	BERMUDA
BE	BELGIUM
BF	BAHAMAS, THE
BG	BANGLADESH
BH	BELIZE
BK	BOSNIA AND HERZEGOVINA
BL	BOLIVIA
BM	BURMA
BN	BENIN
BO	BELARUS
BP	SOLOMON ISLANDS
BR	BRAZIL
BS	BASSAS DA INDIA
BT	BHUTAN
BU	BULGARIA
BV	BOUVET ISLAND
BX	BRUNEI
BY	BURUNDI
CA	CANADA
CB	CAMBODIA
CD	CHAD
CE	SRI LANKA
CF	CONGO
CG	CONGO
CH	CHINA
CI	CHILE
CJ	CAYMAN ISLANDS
CK	COCOS (KEELING) ISLANDS
CL	CENTRAL AND SOUTHERN LINE ISLANDS
CM	CAMEROON
CN	COMOROS
CO	COLOMBIA
CQ	NORTHERN MARIANAS ISLANDS
CR	CORAL SEA ISLANDS

**Country Codes**  
**(Alphabetical by Code)**

Code	Geopolitical Entity
CS	COSTA RICA
CT	CENTRAL AFRICAN REPUBLIC
CU	CUBA
CV	CAPE VERDE
CW	COOK ISLANDS
CY	CYPRUS
CZ	CZECHOSLOVAKIA
DA	DENMARK
DJ	DJIBOUTI
DM	DAHOMEY [BENIN]
DO	DOMINICA
DQ	JARVIS ISLAND
DR	DOMINICAN REPUBLIC
EB	EAST BERLIN
EC	ECUADOR
EG	EGYPT
EI	IRELAND
EK	EQUATORIAL GUINEA
EN	ESTONIA
EQ	CANTON AND ENDERBERRY ISLANDS
ER	ERITREA
ES	EL SALVADOR
ET	ETHIOPIA
EU	EUROPA ISLAND
EZ	CZECH REPUBLIC
FG	FRENCH GUIANA
FI	FINLAND
FJ	FIJI
FK	FALKLAND ISLANDS
FM	MICRONESIA, FEDERATED STATES OF
FO	FAROE ISLANDS
FP	FRENCH POLYNESIA
FR	FRANCE
FS	FRENCH SOUTHERN AND ANTARCTIC LANDS
FT	FRENCH TERRITORY OF THE AFFARS AND ISSAS
GA	GAMBIA, THE
GB	GABON
GC	EAST GERMANY (GERMAN DEMOCRATIC REPUBLIC)
GE	WEST GERMANY (FEDERAL REPUBLIC OF GERMANY)
GG	GEORGIA
GH	GHANA
GI	GIBRALTAR
GJ	GRENADA
GK	GUERNSEY
GL	GREENLAND
GM	GERMANY
GN	GILBERT AND ELLICE ISLANDS
GO	GLORIOSO ISLANDS
GP	GUADELOUPE
GQ	GUAM
GR	GREECE
GS	GILBERT ISLANDS
GT	GUATEMALA
GV	GUINEA

**Country Codes**  
**(Alphabetical by Code)**

Code	Geopolitical Entity
GY	GUYANA
GZ	GAZA STRIP
HA	HAITI
HK	HONG KONG
HM	HEARD ISLAND AND MCDONALD ISLANDS
HO	HONDURAS
HQ	HOWLAND ISLAND
HR	CROATIA
HU	HUNGARY
IC	ICELAND
ID	INDONESIA
IM	ISLE OF MAN
IN	INDIA
IO	BRITISH INDIAN OCEAN TERRITORY
IP	CLIPPERTON ISLAND
IQ	US MISCELLANEOUS PACIFIC ISLANDS
IR	IRAN
IS	ISRAEL
IT	ITALY
IU	ISRAEL-SYRIA DEMILITARIZED ZONE
IV	COTE D'IVOIRE
IW	ISRAEL-JORDAN DEMILITARIZED ZONE
IY	IRAQ-SAUDI ARABIA NEUTRAL ZONE
IZ	IRAQ
JA	JAPAN
JE	JERSEY
JM	JAMAICA
JN	JAN MAYEN
JO	JORDAN
JQ	JOHNSTON ISLAND
JS	SVALBARD AND JAN MAYEN
JU	JUAN DE NOVA ISLAND
KE	KENYA
KG	KYRGYZSTAN
KN	NORTH KOREA
KR	KIRIBATI
KS	SOUTH KOREA
KT	CHRISTMAS ISLAND
KU	KUWAIT
KZ	KAZAKHSTAN
LA	LAOS
LE	LEBANON
LG	LATVIA
LH	LITHUANIA
LI	LIBERIA
LO	SLOVAKIA
LQ	PALMYRA ATOLL
LS	LIECHTENSTEIN
LT	LESOTHO
LU	LUXEMBOURG
LY	LIBYA
MA	MADAGASCAR
MB	MARTINIQUE
MC	MACAU

**Country Codes**  
**(Alphabetical by Code)**

Code	Geopolitical Entity
MD	MOLDOVA
ME	SPANISH NORTH AFRICA
MF	MAYOTTE
MG	MONGOLIA
MH	MONTSERRAT
MI	MALAWI
MK	MACEDONIA, F.Y.R.O.
ML	MALI
MN	MONACO
MO	MOROCCO
MP	MAURITIUS
MQ	MIDWAY ISLAND
MR	MAURITANIA
MT	MALTA
MU	OMAN
MV	MALDIVES
MX	MEXICO
MY	MALAYSIA
MZ	MOZAMBIQUE
NA	NETHERLANDS ANTILLES
NC	NEW CALEDONIA
NE	NIUE
NF	NORFOLK ISLAND
NG	NIGER
NH	VANUATU
NI	NIGERIA
NL	NETHERLANDS
NO	NORWAY
NP	NEPAL
NR	NAURU
NS	SURINAME
NT	NETHERLANDS ANTILLES
NU	NICARAGUA
NZ	NEW ZEALAND
PA	PARAGUAY
PC	PITCAIRN ISLAND
PE	PERU
PF	PARACEL ISLANDS
PG	SPRATLY ISLANDS
PK	PAKISTAN
PL	POLAND
PM	PANAMA
PN	PANAMA
PO	PORTUGAL
PP	PAPUA NEW GUINEA
PQ	PANAMA CANAL ZONE
PS	PALAU
PT	TIMOR
PU	GUINEA-BISSAU
QA	QATAR
RE	REUNION
RH	SOUTHERN RHODESIA
RM	MARSHALL ISLANDS
RO	ROMANIA

**Country Codes**  
**(Alphabetical by Code)**

Code	Geopolitical Entity
RP	PHILIPPINES
RQ	PUERTO RICO
RS	RUSSIA
RW	RWANDA
SA	SAUDI ARABIA
SB	SAINT PIERRE AND MIQUELON
SC	SAINT KITTS AND NEVIS
SE	SEYCHELLES
SF	SOUTH AFRICA
SG	SENEGAL
SH	SAINT HELENA
SI	SLOVENIA
SK	SIKKIM
SL	SIERRA LEONE
SM	SAN MARINO
SN	SINGAPORE
SO	SOMALIA
SP	SPAIN
SQ	SWAN ISLANDS
SS	SPANISH SAHARA
ST	SAINT LUCIA
SU	SUDAN
SV	SVALBARD
SW	SWEDEN
SX	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
SY	SYRIA
SZ	SWITZERLAND
TC	UNITED ARAB EMIRATES
TD	TRINIDAD AND TOBAGO
TE	TROMELIN ISLAND
TH	THAILAND
TI	TAJIKISTAN
TK	TURKS AND CAICOS ISLANDS
TL	TOKELAU
TN	TONGA
TO	TOGO
TP	SAO TOME AND PRINCIPE
TQ	TRUST TERRITORY OF THE PACIFIC ISLANDS
TS	TUNISIA
TT	EAST TIMOR
TU	TURKEY
TV	TUVALU
TW	TAIWAN
TX	TURKMENISTAN
TZ	TANZANIA
UG	UGANDA
UK	UNITED KINGDOM
UP	UKRAINE
UR	UNION OF SOVIET SOCIALIST REPUBLICS
US	UNITED STATES
UV	BURKINA FASO
UY	URUGUAY
UZ	UZBEKISTAN
VC	SAINT VINCENT AND THE GRENADINES

**Country Codes**  
**(Alphabetical by Code)**

Code	Geopolitical Entity
VE	VENEZUELA
VI	BRITISH VIRGIN ISLANDS
VM	VIETNAM
VN	NORTH VIETNAM
VQ	UNITED STATES VIRGIN ISLANDS
VS	SOUTH VIETNAM
VT	HOLY SEE (VATICAN CITY)
WA	NAMIBIA
WB	WEST BERLIN
WE	WEST BANK
WF	WALLIS AND FUTUNA
WI	WESTERN SAHARA
WQ	WAKE ISLAND
WS	SAMOA
WZ	SWAZILAND
YE	YEMEN (SANA'A)
YI	YUGOSLAVIA
YM	YEMEN
YO	YUGOSLAVIA
YQ	RYUKYU ISLANDS, SOUTHERN
YS	YEMEN (ADEN)
ZA	ZAMBIA
ZI	ZIMBABWE

**DETAILED TECHNICAL NOTES**  
**UNITED STATES**  
**2021**  
**NATALITY**

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

**CENTERS FOR DISEASE CONTROL AND PREVENTION**  
**NATIONAL CENTER FOR HEALTH STATISTICS**

Hyattsville, Maryland: 2022

## Introduction

These Detailed Technical Notes, published by the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS), supplement the "Technical Notes" section of "Births: Final Data for 2021" [1], and are for use with the 2021 Natality public use data. The 2021 natality micro-data file may be downloaded at [http://www.cdc.gov/nchs/data\\_access/VitalStatsOnline.htm](http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm) [2]. The micro-data natality file does not include geographic detail (e.g., state or county of birth). Selected natality data, including some geographic data, are available in CDC WONDER (<http://wonder.cdc.gov>). CDC WONDER is an interactive online data access tool that provides selected natality data from 1995-2021. Beginning with the 2016 data, all items available in the public use file are available in CDC WONDER.

A review of 2003-based birth certificate revision items in 2014 and 2015 by a collaborative effort among representatives from several vital statistics jurisdictions: The National Association for Public Health Statistics and Information Systems (NAPHSIS), and NCHS, resulted in the decision to drop a number of items from the national birth certificate data file for reasons of poor data quality. For more information on this effort and for a full list of items that were dropped, see [https://www.cdc.gov/nchs/nvss/deleted\\_items\\_from\\_birth\\_fetal\\_death\\_files.htm](https://www.cdc.gov/nchs/nvss/deleted_items_from_birth_fetal_death_files.htm).

Key natality items are presented in "Births in the United States, 2021," which will accompany the release of the 2021 public use file [2]. Information on other items can be found in the upcoming 2021 final report and accompanying internet tables [1]. Additional discussion of selected items (e.g., primary and repeat cesarean delivery, changes in births by month, singleton preterm birth rates, gestational diabetes, and home births) is available in recent reports [3-7]. Assessments of the quality of many medical and health items are also available [8,9].

**Table B** presents a listing of items and the percentage of records that were not stated for all reporting areas: each state, New York City, the District of Columbia, plus Puerto Rico, Guam, the U.S. Virgin Islands, American Samoa, and the Northern Marianas. Note that American Samoa did not report for 2021.

## Definition of Live Birth

Every product of conception that gives a sign of life after birth, regardless of the length of the pregnancy, is considered a live birth. This concept is included in the definition set forth by the World Health Organization in 1950 as described in a United Nation's Handbook [10]. A slightly expanded definition of live birth was recommended by the 1992 and 2011 revisions of the Model State Vital



Statistics Act and Regulations [11,12], based on recommendations of a 1988 working group formed by the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists [13] and is consistent with that currently used by the WHO in the ICD-10 [14] and the United Nations:

“Live birth” means the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes, or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Heartbeats are to be distinguished from transient cardiac contractions; respirations are to be distinguished from fleeting respiratory efforts or gasps.

This definition distinguishes a live birth from a fetal death in precise terms [15,16]. The vast majority of registration areas use definitions of live births similar to this definition [15]. All states require the reporting of live births regardless of length of gestation or birth weight.

### **The Birth Registration Area**

The birth registration system of the United States includes the 50 states, the District of Columbia, the independent registration area of New York City, and Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (referred to as Northern Marianas). In statistical tabulations, “United States” refers only to the aggregate of the 50 states (including New York City) and the District of Columbia. Information on the history and development of the birth-registration area is available elsewhere [17].

Natality statistics for all states and the District of Columbia are based on information for all births registered in the reporting areas. The information is received on electronic files consisting of individual records processed by the states, the District of Columbia, New York City, Puerto Rico, the U.S. Virgin Islands, American Samoa, and the Northern Marianas. NCHS receives these files from the registration offices of all states, the two cities and four territories through the Vital Statistics Cooperative Program. Information for Guam for 2021 is obtained from images of original birth certificates, which are coded and keyed by NCHS. For historical information on the birth registration system, see the User Guide to the 2014 Natality Public Use File [18].

U.S. natality data are limited to births occurring within the United States, including those occurring to U.S. residents and nonresidents. Births to nonresidents of the United States have been excluded from most published tabulations by place of residence (for further discussion see “Classification by occurrence and residence”). Births occurring to U.S. citizens or residents outside the

United States are not included in the natality file. Data for Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Northern Marianas are limited to births registered in these areas.

### **Classification of births by occurrence and residence**

In tabulations by place of residence, births occurring within the United States to U.S. citizens and to residents who are not citizens are allocated to the usual place of residence of the mother in the United States, as reported on the birth certificate. Births to U.S. residents occurring outside this country are not included in tabulations by place of residence or place of occurrence.

The total count of births for the United States by place of residence and by place of occurrence will not be identical. Births to nonresidents of the United States are included in data by place of occurrence but excluded from data by place of residence, as previously indicated. See **Table A** for the number of births by residence and occurrence for the 50 states and the District of Columbia for 2021.

*Residence error:* According to a 1950 test (which has not been repeated), errors in residence reporting for the country as a whole tend to overstate the number of births to residents of urban areas and to understate the number of births to residents of other areas [19]. Recent experience, based on anecdotal evidence from the states, suggests that this is still a concern. This tendency has assumed special importance because of a concomitant development—the increased utilization of hospitals in cities by residents of nearby places—with the result that a number of births are erroneously reported as having occurred to residents of urban areas. Another factor that contributes to this overstatement of urban births is the customary practice of using city addresses for persons living outside the city limits. Residence error should be taken into particular consideration in interpreting tabulated data for small areas. Both birth and infant mortality patterns can be affected.

*Population-based rates:* One of the principal values of vital statistics data is realized through the presentation of rates that are computed by relating the vital events of a class to the population of a similarly defined class (e.g., 2021 births to women aged 20-24 years and the 2021 population of women aged 20-24). Vital statistics and population statistics, therefore, must be tabulated in comparable groups. Even when the variables common to both, such as geographic area, age, race, and sex, have been similarly classified and tabulated, significant discrepancies may result from differences between the enumeration method of obtaining population data and the registration method of obtaining vital statistics data [20].

*Geographic classification:* The geographic code structure for the 2021 natality file is given in the NCHS manual, “Vital Records Geographic Classification, 2014,” and in the country, county, and place

geographic code files [21,22]. The geographic code structure on the 2021 file is based on results of the 2010 Census of Population.

### **Standard Certificates of Live Birth**

The U.S. Standard Certificate of Live Birth, issued by the U.S. Department of Health and Human Services, has served for many years as the principal means for attaining uniformity in the content of the documents used to collect information on births in the United States. The U.S. Standard Certificate of Live Birth has historically been revised every 10-15 years. Most state certificates conform closely in content to the standard certificate, but are modified to the extent required by the particular state's needs or by special provisions of the state's vital statistics law.

*The 2003 revision:* In 2003, a revised U.S. Standard Certificate of Live Birth was adopted (**Figure 1**). For more information on the 2003 standard certificate and details regarding the certificate revision and links to the documents referenced below, see the NCHS website of the 2003 certificate revision at [http://www.cdc.gov/nchs/nvss/vital\\_certificate\\_revisions.htm](http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm). The 2003 birth certificate replaces the previous 1989 U.S. Standard Certificate of Live Birth [23,24]. Implementation of the 2003 U.S. Standard Certificate of Live Birth (revised) by the states and independent reporting areas was phased in from 2003 to 2016. All states and the District of Columbia had implemented the revised birth certificate as of January 1, 2016. Guam, Puerto Rico, the U.S. Virgin Islands, and the Northern Marianas had implemented the revised birth certificate as of January 1, 2017 (see User Guide to the 2015 Natality Public Use File [25] for a detailed implementation schedule).

The 2003 Revision of the U.S. Standard Certificate of Live Birth introduced substantial changes to data content and quality. Many key data items are common between revisions; however, a number of items were substantively modified. The 2003 revision also includes many new items never before collected on the Standard Certificate [23,24]. For details on data items comparable between revisions see the User Guide to the 2014 Natality Public Use File [18]. For a list of items that were dropped in 2014 for reasons of poor data quality, see [https://www.cdc.gov/nchs/nvss/deleted\\_items\\_from\\_birth\\_fetal\\_death\\_files.htm](https://www.cdc.gov/nchs/nvss/deleted_items_from_birth_fetal_death_files.htm).

A key aspect of the 2003 revision of the U.S. Standard Certificate of Live Birth was the re-engineering of the data collection and transmission system to improve data quality, speed of data collection and transmission, and to enhance standardization of data [23,26]. To encourage collection of data from the best sources, two worksheets were developed: the “Mother’s Worksheet” (available at <https://www.cdc.gov/nchs/data/dvs/moms-worksheet-2016.pdf>) [27] and the “Facility Worksheet”

(available at <https://www.cdc.gov/nchs/data/dvs/facility-worksheet-2016.pdf>) [28]. In the Mother's Worksheet, data are directly obtained from the mother and include items such as race, Hispanic origin and educational attainment. For the Facility Worksheet, data are obtained directly from the medical records of the mother and infant for items such as date of first prenatal care visit, pregnancy risk factors, and method of delivery. To assist hospital staff in completing the Facility Worksheet, a comprehensive instruction manual was developed: Guide to Completing the Facility Worksheets for the Certificate of Live Birth and Report of Fetal Death (2003 Revision) ("Guide to the Facility Worksheet"; available at <https://www.cdc.gov/nchs/data/dvs/GuidetoCompleteFacilityWks.pdf>) [29]. Detailed definitions and instructions for data items that are collected from the Facility Worksheet are in the "Guide to the Facility Worksheet".

*Birth eLearning training:* The first ever eLearning training, "Applying Best Practices for Reporting Medical and Health Information on Birth Certificates," on completing the medical and health information for the birth certificate was updated and re-launched in June 2021 (initial launch in October 2016). The training emphasizes the importance and uses of birth certificate data and best practices for collecting specific birth medical and health items. The audience for the training includes birth information specialists, physicians, nurses, and hospital administrators. Continuing education credits for nurses, physicians, and non-clinical staff are also available. The training is internet-based and approximately 60 minutes in length. It is available at [www.cdc.gov/nchs/training/BirthCertificateElearning](http://www.cdc.gov/nchs/training/BirthCertificateElearning).

Detailed descriptions of editing and computation methods of the items described below are available [30,31].

## **Natality data files**

*Micro-data files:* Natality micro-data files for data years 1968-2021 may be downloaded at [http://www.cdc.gov/nchs/data\\_access/VitalStatsOnline.htm](http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm). The general rules used to classify characteristics of live births are presented in several NCHS manuals [21,22,26,30,31]. These instructions are for states to use to collect and code the data items; they do not include NCHS edit recodes.

The 2003-2015 edits and natality micro-data files include data items common to both the 1989 and 2003 revisions of the U.S. Standard Certificate of Live Birth. The files also include items exclusive to the 2003 revision. See the file layout in this User Guide. Certain data items new to the 2003 revised certificate (e.g., maternal morbidity) are available beginning with data files 2009.

Beginning with the 2005 data year, the public release micro-data natality file no longer includes geographic detail (e.g., state or county of birth). Information on the data use policy is available at [http://www.cdc.gov/nchs/nvss/dvs\\_data\\_release.htm](http://www.cdc.gov/nchs/nvss/dvs_data_release.htm) [32].

## Demographic Characteristics

### Hispanic origin and race

*Hispanic origin:* Hispanic origin and race are reported separately on the birth certificate (**Figure 1**). It is recommended that this information be reported directly by the mother via the Mother's Worksheet [27].

For 1989 through 2017, data on the public use file and in NCHS reports for specified Hispanic groups are shown in most cases for five specified Hispanic groups: Mexican, Puerto Rican, Cuban, Central and South American, and "other and unknown Hispanic." Starting with 2018, data are presented for the additional Hispanic group, Dominican (see items MHISPX and FHISPX in file positions 112 and 159). This subgroup was previously included in "other and unknown Hispanic."

In tabulations of birth data by race and Hispanic origin, data for persons of Hispanic origin are not further classified by race because the vast majority of Hispanic women are reported as white. In tabulations of birth data by race only, data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race. In tabulations that include Hispanic origin, data for non-Hispanic persons are classified according to the race of the mother, due to substantial differences in fertility and maternal and infant health characteristics between Hispanic and non-Hispanic (single-race) white women. American Samoa does not currently collect information on Hispanic origin.

The Hispanic origin question asks respondents to select only one response. Occasionally, however, more than one Hispanic origin response is given, that is, a specified Hispanic group (Mexican, Puerto Rican, Cuban, Dominican, or Central and South American) in combination with one or more other specified Hispanic group. From 2003 through 2012, respondents who selected more than one Hispanic origin on the birth certificate were classified as "other Hispanic." Beginning with the 2013 data year, respondents who select more than one Hispanic origin are randomly assigned to a single Hispanic origin. This change was implemented to be consistent with the coding methods of the American Community Survey [33], on which the rates for the specified Hispanic groups from 2010 on are based (see "Population estimates for the specific Hispanic groups.")

The percentage of records for which Hispanic origin of the parents was not reported in 2021 is presented by reporting area in **Table B**.

*Race of mother and father:* Reported separately from Hispanic origin, the instructions are to check one or more races to indicate what the mother/father considers her/himself to be. It is recommended that this information be reported directly by the mother via the Mother's Worksheet [27]. The 2003 revision of the U.S. Standard Certificate of Live Birth allows the reporting of the five race categories either alone (i.e., single-race) or in combination (i.e., more than one race or multiple races) for each parent [24], in accordance with the revised standards issued by the Office of Management and Budget (OMB) in 1997 [34]. The five categories for race specified in the revised standards are: American Indian or Alaska Native (AIAN), Asian, Black or African American, Native Hawaiian or Other Pacific Islander (NHOPI), and White. Information on this change is presented elsewhere [35-37].

Starting in 2016, all states and the District of Columbia, in addition to Puerto Rico, the U.S. Virgin Islands, Guam and Northern Marianas, were reporting race according to the 1997 revised OMB standards, with 2.8% of mothers in the U.S. reporting more than one race in 2021 (**Documentation Table 1**).

Where race of the mother is not reported, if the race of the father is known, the race of the father is assigned to the mother. When information is not available for either parent, the race of the mother is imputed according to the specific race of the mother on the preceding record with a known race of mother. In 2021, race of mother was imputed for 7.0% of births (by occurrence).

### **Age of mother**

The age of mother is derived from the reported month and year of birth. It is recommended that this information be reported directly by the mother via the [Mother's Worksheet](#) [27]. For American Samoa, exact age of mother was reported.

*Imputation of age of mother:* Age of mother is imputed for ages 8 years or under and 65 years and over (mother's age 9 years is recoded as 10 years and ages 55-64 years are recoded to an age from 50-54 years). A review and verification of unedited data for several years showed that the vast majority of births reported as occurring to women aged 50 years and older were to women aged 50-54 years.

*Extreme values of age:* Data for single year of age of mother 9-11 and 55-64 years are not shown in the public use data files. Births to mothers 9-11 years are collapsed into the categories “12 years or under;” births to mothers 50-64 years into the category “50-54 years.”

*Mean age of mother:* Mean age is the arithmetic average of an age distribution. Trend data on the mean age of mother, derived directly from frequencies of births by age, are available at <https://www.cdc.gov/nchs/products/vsus.htm#natab2003>, [38] and for recent years, in **Table I-6** of the 2021 Final Report [1]. For information on median age of mother, see User Guide for the 2014 Natality Public Use File [18].

*Not stated age or date of birth of mother:* Beginning in 1964, birth records with date of birth of mother and/or age of mother not stated have had age imputed (491 records; 0.01% for 2021) according to the age of mother from the previous birth record of the same race and total-birth order (total of fetal deaths and live births). (See NCHS Instruction Manuals, Part 12 [31,39]).

### **Age of father**

Information on age of father is derived from the father’s date of birth and is recommended to be reported directly by the mother. See the [Mother’s Worksheet](#) [27]. Information on age of father is often missing for children born to unmarried mothers, greatly inflating the number in the “Not stated” category in all tabulations by age of father. If the age is under 10 years, it is considered not stated and grouped with those cases for which age is not stated on the certificate. See also the NCHS manual for detailed descriptions of editing and computation methods [30] and **Table B** for the percent of records for which father’s age is not stated.

### **Marital status**

National estimates of births to unmarried women are based on two methods of determining marital status: 1) direct question; and 2) inferential procedures (described below). For more details on the history of the two methods, see the User Guide for the 2014 Natality Public Use File [18].

It is recommended that information on marital status be reported directly by the mother using the Mother’s Worksheet [27]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31] and **Tables 9, 10, and I-7** of the 2021 Final Report [1].

*Inferential procedures:* Historical information on inferential procedures can be found in the 2014 User Guide [18]. In 2021, inferential procedures were used to compile birth statistics by marital status in full or in part for New York (excluding New York City). In New York, a birth is inferred as nonmarital

if either of these factors, listed in priority-of-use order, is present: a paternity acknowledgment was received or the father’s name is missing. In recent years, a number of states have extended their efforts to identify the fathers when the parents are not married in order to enforce child support obligations. The presence of a paternity acknowledgment, therefore, is the most reliable indicator that the birth is nonmarital in the states not reporting this information directly. Details of the changes in reporting procedures and the impact of the procedures on the data are described in previous reports [40,41].

*Imputation of marital status:* Mother’s marital status was not reported in 2021 on 11.5% of the birth records where this information is obtained exclusively by a direct question (i.e., in the 49 states, the District of Columbia, and New York City). Marital status was imputed for these records. If status was unknown and the father’s age was known, then the mother was considered married. If the status was unknown, and the father’s age unknown, then the mother was considered unmarried.

Beginning in 2017, NCHS cannot release record-level data on the marital status of the mother for births occurring in or to residents of California due to state statutory restrictions. Tabulated data on births by marital status for California were provided to NCHS by the state for the preparation of this report and national and state information on marital status is included in the 2021 Final Report [1].

## Educational attainment

*Mother:* Educational attainment is based on the highest degree or level of school completed at the time of the delivery. It is recommended that information on educational attainment of the mother be reported directly by the mother using the [Mother’s Worksheet](#) [27]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-8** of the 2021 Final Report [1], and **Table B** for the percent of records for which mother’s education is not stated.

Starting with the 2018 data, the following consistency checks for maternal age are applied to each level of educational attainment:

8th grade or less	Minimum age 9
9th through 12th grade, no diploma	Minimum age 13
High school graduate or GED completed	Minimum age 15
Some college credit, but not a degree	Minimum age 17
Associate degree	Minimum age 18
Bachelor’s degree	Minimum age 20
Master’s degree	Minimum age 21
Doctorate	Minimum age 23.



Where maternal age is not compatible with the level of educational attainment, educational attainment is edited to “Not stated.”

*Father:* The question on educational attainment of the father is parallel to that for the mother. Information on education of father is often missing on birth certificates of children born to unmarried mothers, greatly inflating the number in the “Not stated” category. While the overall percentage of “Not stated” records for the United States was 13.6% (**Table B**) in 2021, this information was missing for more than one-third of records for two states (Delaware and Wisconsin).

### **Live-birth order and parity**

Live-birth order and parity are determined from two items on the birth certificate, “Number of previous live births now living” and “Number of previous live births now dead.” Live-birth order and parity classifications refer to the total number of live births the mother has had including the 2021 birth. Fetal deaths are excluded.

Live-birth order indicates what number the present birth represents; for example, a baby born to a mother who has had two previous live births (even if one or both are not now living) has a live-birth order of three. Parity indicates how many live births a mother has had. Before delivery, a mother having her first baby has a parity of zero, and a mother having her third baby has a parity of two. After delivery the mother of a baby who is a first live birth has a parity of one, and the mother of a baby who is a third live birth has a parity of three.

It is recommended that this information be collected directly from the prenatal care record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for these items are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31] and **Table B** for the percent of records for which live birth order is not stated.

In computing birth rates by live-birth order, births tabulated as birth order not stated are distributed in the same proportion as births of known live-birth order.

### **Birth interval**

Birth intervals are computed for all births of second or higher order. The interval is computed from the infant’s date of birth (month and year) and the date of the last live birth (month and year). In a plural delivery, the second and higher order birth within a set is classified at an interval of 0-3 months.

It is recommended that this information be collected directly from the prenatal care record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for these items are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-10** of the 2021 Final Report [1], and **Table B** for the percent of records for which birth interval is not stated.

## Medical and Public Services Utilization

### Prenatal care

Information on the timing and number of prenatal care visits is collected from the items “Date of first prenatal visit” (with a checkbox for “No prenatal care”) and “Total number of prenatal visits for this pregnancy.” The public use file includes the month prenatal care began (ranging from months 1-10 of the pregnancy based on the obstetric estimate of gestation) as well as a recode for the trimester prenatal care began (1st, 2nd, or 3rd). “Date of the last prenatal care visit” is no longer available in the public use file due to concerns with data quality.

It is recommended that prenatal care information be collected directly from the prenatal care record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for these items are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table 16** of the 2021 Final Report [1], and **Table B** for the percent of records for which month prenatal care began and number of prenatal care visits is not stated.

In 2014, NCHS changed from the date of the last menstrual period (LMP) to the obstetric estimate (OE) to calculate gestational age [18]. Also in 2014, NCHS changed the way the month in which prenatal care began is calculated to use of the OE-based method. This change resulted in higher percentages of prenatal care beginning in the 1<sup>st</sup> trimester. For example, in 2014, the percentage of births with prenatal care beginning in the 1<sup>st</sup> trimester was 73.3% when based on LMP (data not available) compared with 76.6% when based on OE. By state, 1<sup>st</sup> trimester prenatal care based on OE was, on average, 5% higher than 1<sup>st</sup> trimester care based on LMP. Accordingly, prenatal care data based on the OE are not comparable with those based on the LMP.

## **WIC food during pregnancy**

It is recommended that information on receipt of WIC (The Special Supplemental Nutrition Program for Women, Infants, and Children) food for the mother during this pregnancy be reported directly by the mother using the [Mother's Worksheet](#) [27]. WIC is a program intended to help low-income pregnant women, infants, and children through age 5 receive proper nutrition by providing vouchers for food, nutrition counseling, health care screenings and referrals; it is administered by the U.S. Department of Agriculture [42]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-11** of the 2021 Final Report [1], and **Table B** for the percent of records for which receipt of WIC is not stated.

## **Obstetric procedures**

Two obstetric procedures: 1) successful external cephalic version and 2) failed external cephalic version are available in the 2021 natality public use file. The choice "None of the above" is available if external cephalic version is not applicable. If the item is not completed (i.e. none of the boxes are checked), it is classified as "Not stated." Cervical cerclage and tocolysis are no longer available in the public use file due to concerns with data quality.

It is recommended that this information on obstetric procedures be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-14** of the 2021 Final Report [1], and **Table B** for the percent of records for which obstetric procedures is not stated.

## **Characteristics of labor and delivery**

Six characteristics of labor and delivery are separately identified in a checkbox format: 1) induction of labor; 2) augmentation of labor; 3) steroids; 4) antibiotics received by the mother during labor; 5) clinical chorioamnionitis or maternal temperature  $\geq 38^{\circ}\text{C}$ ; and 6) epidural or spinal anesthesia during labor. The characteristics of labor and delivery item allows for the reporting of more than one characteristic and includes a choice of "None of the above." If the item is not completed (i.e., none of the boxes are checked), it is classified as "Not stated." Due to concerns with data quality, non-vertex presentation, moderate/heavy meconium staining of the amniotic fluid, and fetal intolerance of labor are no longer available in the public use file.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-15** of the 2021 Final Report [1], and **Table B** for the percent of records for which characteristics of labor and delivery is not stated.

### **Place of birth**

Five options for place of birth are identified in a checkbox format: 1) hospital; 2) freestanding birth center; 3) home birth (and a follow-up question “Planned to delivery at home? Yes/No,”); 4) clinic/doctor’s office and 5) other (must be specified). If the item is not completed (i.e., none of the boxes are checked), it is classified as “Not stated”.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Tables I-4 and I-5** of the 2021 Final Report [1], and **Table B** for the percent of records for which place of birth is not stated.

*Planned home births:* Information on whether the home birth was planned is reported by all 50 states and the District of Columbia for the first year for 2021. If the birth was a home birth (box checked) then the following question is asked in a checkbox format: Planned to deliver at home? Yes/No.

### **Time of birth**

Time of birth is based on a 24-hour (military) clock. It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Tables I-1** of the 2021 Final Report [1], and **Table B** for the percent of records for which time of birth is not stated.

### **Attendant at birth**

Five options for title of attendant at birth are identified in a checkbox format: 1) MD (medical doctor) 2) DO (osteopath) 3) CNM/CM (certified nurse midwife/certified midwife) 4) other midwife 5)

other (must be specified). If the item is not completed (i.e., none of the boxes are checked), it is classified as “Not stated”.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Tables I-4** of the 2021 Final Report [1], and **Table B** for the percent of records for which attendant at birth is not stated.

*CNM/CM-attended births:* There is evidence that the number of live births attended by CNM/CM is understated [43], largely due to difficulty in correctly identifying the birth attendant when more than one provider is present at the birth. (Anecdotal evidence suggests that some hospitals require that a physician be reported as the attendant even when no physician is physically present at midwife-attended births.)

## **Method of delivery**

Three options for fetal presentation at birth are identified in a checkbox format: 1) cephalic; 2) breech; and 3) other. Four options for final route and method of delivery are identified in a checkbox format: 1) vaginal/spontaneous; 2) vaginal/forceps; 3) vaginal/vacuum; and 4) cesarean. If either of the two items, fetal presentation at birth and final route and method of delivery, are not completed (i.e., none of the boxes are checked), they are classified as “Not stated”. The checkboxes, stating whether delivery with forceps or vacuum extraction was unsuccessful are no longer included in the public use files due to concerns with data quality.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-17** of the 2021 Final Report [1], and **Table B** for the percent of records for which fetal presentation and final route and method of delivery is not stated.

*Trial of labor:* If the final route and method of delivery was cesarean (box checked) then the question “If cesarean, was a trial of labor attempted?” Yes/ No is asked. See **Table I-17** of the 2021 Final Report [1].

*Total cesarean rate:* The overall cesarean delivery rate or total cesarean rate is computed as the percent of all births delivered by cesarean. See **Tables 17, 18, I-16 and I-17** of the 2021 Final Report [1].

*Low-risk cesarean rate:* The low-risk cesarean delivery rate is the number of singleton, term (37 or more weeks of gestation based on obstetric estimate), cephalic, cesarean deliveries to women having a first birth per 100 women delivering singleton, term, cephalic, first births. Obstetric estimate and live-birth order are discussed in more detail elsewhere. See **Tables 17, 18** and **I-16** of the 2021 Final Report [1].

*Primary cesarean and VBAC delivery rates:* The primary cesarean and vaginal birth after previous cesarean (VBAC) delivery rates are computed by using the information on vaginal and cesarean deliveries from the “Method of delivery” item as well as information on whether the mother had a previous cesarean from the “Risk factors in this pregnancy” item. The primary cesarean rate is computed as the number of women having a first cesarean delivery divided by all women giving birth who have never had a cesarean delivery. The denominator for the primary cesarean rate includes the sum of primary cesareans and vaginal births without a previous cesarean. The rate of VBAC delivery is computed by dividing all VBAC deliveries by the sum of VBAC and repeat cesarean deliveries, that is, women with a previous cesarean delivery. See **Tables 17** and **18** of the 2021 Final Report [1].

### **Payment source for delivery**

Four options for source of payment at delivery are identified in a checkbox format: 1) private insurance; 2) Medicaid; 3) self-pay; and 4) other (must be specified). If the item is not completed (i.e., none of the boxes are checked), it is classified as “Not stated”. The instructions are to check the box that best describes the principal source of payment for this delivery. Note that for 2018-2021, for Rhode Island, “other” sources of payment for the delivery includes only CHAMPUS/TRICARE, whereas “other” for other reporting areas combines several sources.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table 19** of the 2021 Final Report [1], and **Table B** for the percent of records for which source of payment is not stated.

More detailed information for the “other” category is available for 35 states and the District of Columbia, representing 59.5 percent of all U.S. births in 2021. For these states, the “Other” category is further delineated into the following groups: 1) Indian Health Service; 2) CHAMPUS/TRICARE; 3) Other government; and 4) other (must be specified). A reporting flag should be used to generate accurate numbers by residence for more detailed source of payment at delivery. The reporting flag (the file

position is specified in the file layout) will exclude births to residents of non-reporting states (Arizona, Arkansas, Florida, Illinois, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, North Carolina, Pennsylvania, Rhode Island, Texas, Vermont, and Virginia). More information on the use of reporting flags can be found in the introduction to the User Guide for the 2014 Natality Public Use File [18].

## **Maternal Behavior and Health Characteristics**

### **Mother's pre-pregnancy body mass index (BMI)**

BMI provides an indication of the mother's body fat based on her height and pre-pregnancy weight (see below). Mother's height and pre-pregnancy weight are discussed in more detail below. Mother's pre-pregnancy BMI is calculated as:

$$[\text{mother's pre-pregnancy weight (lb)} / [\text{mother's height (in)}]^2 ] \times 703$$

The currently used categories for BMI were established by the National Health, Lung and Blood Institute (NHBL) in the late 1990s [44]. See the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-9** of the 2021 Final Report [1].

### **Mother's height**

Mother's height is one of the measurements used to compute mother's pre-pregnancy BMI (see above). The range of acceptable values for this item is 1-8 feet and 1-11 inches.

It is recommended that information on the mother's height (in feet/inches) come from the [Mother's Worksheet](#) [27]. See the NCHS manual for detailed descriptions of editing and computation methods [30,31] and **Table B** for the percent of records for which mother's height is not stated.

### **Mother's pre-pregnancy weight**

Mother's pre-pregnancy weight is one of the measurements used to compute mother's pre-pregnancy BMI (see above). Mother's pre-pregnancy weight, along with mother's weight at delivery, is used to compute the mother's weight gain during delivery (see below). The range of values accepted for mother's pre-pregnancy weight is 50-400 pounds. All other values are edited to "Not stated".

It is recommended that information on the mother's pre-pregnancy weight (in pounds) be reported directly by the mother via the [Mother's Worksheet](#) [27]. See the NCHS manual for detailed

descriptions of editing and computation methods [30,31] and **Table B** for the percent of records for which mother's pre-pregnancy weight is not stated.

### **Mother's weight at delivery**

Mother's weight at delivery, along with mother's pre-pregnancy weight, is used to compute the mother's weight gain during pregnancy (see below). The range of values accepted for mother's weight at delivery is 100-450 pounds.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31] and **Table B** for the percent of records for which mother's weight at delivery is not stated.

### **Weight gain during pregnancy**

Information on weight gain during pregnancy is derived from mother's pre-pregnancy weight and mother's weight at delivery (see above). Mother's weight gain during pregnancy is calculated by subtracting the mother's pre-pregnancy weight from her weight at delivery. Weight gain during pregnancy is reported in pounds. A reported loss of weight is recorded as zero gain. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31].

### **Cigarette smoking before and during pregnancy**

The question asks for the number of cigarettes (or packs) smoked in the three months prior to becoming pregnant and in each trimester. All entries reporting packs of cigarettes are converted to the corresponding number of cigarettes (1 pack = 20 cigarettes). If the mother reports smoking in any of the three trimesters of pregnancy she is classified as a smoker (smoked anytime during pregnancy). Women with unknown smoking status for any trimester (except for births with gestational ages less than 27 weeks; see below) who report not smoking in other trimesters are classified as "Unknown smoking status."

For women whose pregnancies end prior to the 3rd trimester of pregnancy (less than 27 completed weeks), but for whom cigarette smoking is reported in the 3rd trimester of pregnancy, smoking status during the 3rd trimester of pregnancy is changed/edited to "Unknown." Women who give birth prior to the 3rd trimester who report smoking in the 1st or 2nd trimester are classified as



smokers. Women who give birth prior to the 3rd trimester of pregnancy who report no cigarettes in the 1st or 2nd trimester are classified as non-smokers.

*Quitting smoking before or during pregnancy:* Women who report smoking in the three 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 three months prior to pregnancy and during any trimester are considered to have not quit smoking before pregnancy. If a woman reported smoking in the three months prior to pregnancy, and reported not smoking during one or more trimesters, but smoking status was unknown for any of the other trimesters, quitting before pregnancy status is classified as “Unknown”. Women who report smoking only in the first trimester and/or second trimesters, but not the third trimester, are considered to have quit smoking during pregnancy. If smoking status during the third trimester of pregnancy is unknown, quitting status is tabulated as “Unknown” [31].

It is recommended that information on smoking before and during pregnancy be reported directly by the mother via the [Mother’s Worksheet](#) [27]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table 15** of the 2021 Final Report [1], and **Table B** for the percent of records for which cigarette smoking before and during pregnancy is not stated.

### **Risk factors in this pregnancy**

Six risk factors are separately identified in a checkbox format: 1) diabetes (pre-pregnancy or gestational); 2) hypertension (pre-pregnancy or gestational); 3) eclampsia; 4) previous preterm births; 5) pregnancy resulted from infertility treatment; and 6) mother had a previous cesarean delivery. This item allows for the reporting of more than one risk factor and includes a choice of “None of the above”. If the item is not completed (i.e., none of the boxes are checked), it is classified as “Not stated”. The checkbox “Other previous poor pregnancy outcome” is no longer available in the public use files because of concerns with data quality.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-12** of the 2021 Final Report [1], and **Table B** for the percent of records for which risk factors is not stated.

*Eclampsia:* Information on eclampsia is available for 49 states and the District of Columbia (excludes South Carolina), representing 98.4 percent of 2021 births. A reporting flag should be used to generate accurate numbers by residence for eclampsia. The reporting flag (the file position is specified

in the file layout) will exclude births to residents of non-reporting states. More information on the use of reporting flags can be found in the introduction to the User Guide for the 2014 Natality Public Use File [18].

*Pregnancy resulted from infertility treatment:* There is a general checkbox question about whether the pregnancy resulted from infertility treatment. If the answer is “Yes” (box checked) then the infertility treatments are grouped into two separate categories:

- Fertility enhancing drugs, artificial insemination, or intrauterine insemination
- Assisted reproductive technology (e.g., in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT), ZIFT).

A total of 49 states and the District of Columbia (excludes South Carolina), representing 98.4 percent of 2021 births, reported information on the type of infertility treatment used. The instructions are to check all that apply, meaning that one or both of these responses can be reported for the same birth. ART procedures are those in which both egg and sperm are handled in the laboratory.

A reporting flag should be used to generate accurate numbers by residence for type of infertility treatment used. The reporting flag (the file position is specified in the file layout) will exclude births to residents of non-reporting states. More information on the use of reporting flags can be found in the introduction to the User Guide for the 2014 Natality Public Use File [18].

### **Infections present and/or treated during this pregnancy**

Five infections are separately identified in a checkbox format: 1) gonorrhea; 2) syphilis; 3) chlamydia; 4) hepatitis B; and 5) hepatitis C. This is a checkbox item allowing for the reporting of more than one infection and includes a choice of “None of the above”. If the item is not completed (i.e. none of the boxes are checked), it is classified as “Not stated”.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-13** of the 2021 Final Report [1], and **Table B** for the percent of records for which infections present and/or treated during this pregnancy is not stated.

### **Maternal morbidity**

Five maternal morbidities are separately identified in a checkbox format: 1) maternal transfusion; 2) third or fourth degree perineal laceration; 3) ruptured uterus; 4) unplanned hysterectomy; and 5)

admission to intensive care unit. This item allows for the reporting of more than one morbidity and includes a choice of “None of the above”. If the item is not completed (i.e., none of the boxes are checked), it is classified as “Not stated”. The checkbox item “unplanned operating room procedure following delivery” is no longer included in the public use file because of concerns with data quality.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-18** of the 2021 Final Report [1], and **Table B** for the percent of records for which maternal morbidities is not stated.

## **Infant Health Characteristics**

### **Period of gestation**

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 data of the last normal menses (LMP) [45]. Accordingly, gestational age data in standard reports are based on the OE. However, LMP-based data are also available. National data based on the OE are available only from data year 2007 forward. Gestational age estimates differ somewhat between the OE- and LMP-based measures. For example, the 2021 OE-based preterm birth rate is 10.49% compared with the LMP-based rate of 12.28%. Of note, both preterm birth rates declined from 2007 to 2014 but rose from 2015 to 2019. Discussion of the reasons for the change, and a detailed comparison of the two measures, are presented elsewhere [45].

Births occurring before 37 completed weeks of gestation are considered to be preterm for purposes of classification consistent with the ICD-9 and ICD-10 definitions [14]. NCHS further categorizes births at less than 34 weeks as early preterm and births at 34-36 weeks as late preterm. Births occurring between 37 and 38 completed weeks are considered early term, between 39 and 40 completed weeks as full term, 41 completed weeks as late term, and at 42 completed weeks and over as post-term. These distinctions are consistent with the revised American College of Obstetrics and Gynecology revised term definitions [46].

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and

computation methods [30,31], **Tables 20, 21, I-19, and I-20** of the 2021 Final Report [1], and **Table B** for the percent of records for which period of gestation is not stated.

## Birthweight

Birthweight is reported in some areas in pounds and ounces and in other areas as grams. However, the metric system is used to tabulate and present the statistics to facilitate comparison with data published by other groups. The categories for birthweight are consistent with the recommendations in the International Statistical Classification of Diseases, Ninth Revision (ICD-9) and the International Statistical Classification of Diseases, Tenth Revision (ICD-10) [14,47]. The categories in gram intervals and their equivalents in pounds and ounces are as follows:

Less than 500 grams = 1 lb 1 oz or less  
500–999 grams = 1 lb 2 oz–2 lb 3 oz  
1,000–1,499 grams = 2 lb 4 oz–3 lb 4 oz  
1,500–1,999 grams = 3 lb 5 oz–4 lb 6 oz  
2,000–2,499 grams = 4 lb 7 oz–5 lb 8 oz  
2,500–2,999 grams = 5 lb 9 oz–6 lb 9 oz  
3,000–3,499 grams = 6 lb 10 oz–7 lb 11 oz  
3,500–3,999 grams = 7 lb 12 oz–8 lb 13 oz  
4,000–4,499 grams = 8 lb 14 oz–9 lb 14 oz  
4,500–4,999 grams = 9 lb 15 oz–11 lb 0 oz  
5,000 grams or more = 11 lb 1 oz or more

ICD-9 and ICD-10 define low birthweight as less than 2,500 grams. Very low birthweight is defined as less than 1,500 grams.

To establish the continuity of class intervals needed to convert pounds and ounces to grams, the end points of these intervals are assumed to be half an ounce less at the lower end and half an ounce more at the upper end. For example, 2 lb 4 oz–3 lb 4 oz is interpreted as 2 lb 3 ½ oz–3 lb 4 ½ oz.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Tables 22, 23, I-21, and I-22** of the 2021 Final Report [1], and **Table B** for the percent of records for which birthweight is not stated.

## Apgar score

*5-minute score:* The Apgar score is a measure of the need for resuscitation and a predictor of the infant's chances of surviving the first year of life. It is a summary measure of the infant's condition based on heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these factors is given a score of 0, 1, or 2; the sum of these 5 values is the Apgar score, which ranges from 0 to 10. A score of 0 to 3 indicates an infant in need of resuscitation; a score of 4 to 6 is considered intermediate; a score of 7 or greater indicates that the neonate is in good to excellent physical condition. The 5-minute score means that these factors were assessed at 5 minutes after delivery.

*10-minute Apgar score:* The 2003 revised certificate asks for a 10-minute Apgar score if the 5-minute score is less than 6. Ten-minute Apgar score was reported for 1.3 percent (47,277) of births in 2021; an additional 5.5 percent (2,589) of births had “Not stated” 10-minute Apgar score for infants whose 5-minute score was less than 6.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31] and **Table B** for the percent of records for which 5-minute and 10-minute Apgar score is not stated.

## Abnormal conditions of the newborn

Six abnormal conditions of the newborn are separately identified in a checkbox format: 1) assisted ventilation required immediately following delivery; 2) assisted ventilation required for more than six hours; 3) NICU admission; 4) newborn given surfactant replacement therapy; 5) antibiotics received by the newborn for suspected neonatal sepsis; and 6) seizure or serious neurological dysfunction. This item allows for the reporting of more than one condition and includes a choice of “None of the above”. If the item is not completed (i.e., none of the boxes are checked), it is classified as “Not stated”. The checkbox item significant birth injury is no longer included in the public use file because of concerns with data quality.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-24** of the 2021 Final Report [1], and **Table B** for the percent of records for which abnormal conditions of the newborn is not stated.

## **Congenital anomalies of the newborn**

Twelve congenital anomalies are separately identified in a checkbox format: 1) anencephaly; 2) meningomyelocele/spina bifida; 3) cyanotic congenital heart disease; 4) congenital diaphragmatic hernia; 5) omphalocele; 6) gastroschisis; 7) limb reduction defect; 8) cleft lip with or without cleft palate; 9) cleft palate alone; 10) Down syndrome; 11) suspected chromosomal disorder; and 12) hypospadias. This item allows for the reporting of more than one anomaly and includes a choice of “None of the above”. If the item is not completed (i.e. none of the boxes are checked), it is classified as “Not stated”.

Data for the congenital anomaly “Hypospadias” are edited to exclude this condition where the infant is a female.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also the NCHS manual for detailed descriptions of editing and computation methods [30,31], **Table I-25** of the 2021 Final Report [1], and **Table B** for the percent of records for which congenital anomalies is not stated. See the Quality of Data section below for discussion of quality concerns with rarely occurring events.

*Down Syndrome and suspected chromosomal disorder:* The item includes a general checkbox question about whether Down Syndrome and suspected chromosomal disorder are present. If “Yes” (box checked), the following question is asked: karyotype pending or karyotype confirmed. These responses are combined for a “Yes” response.

## **Plurality**

Plurality is classified as single, twin, triplet, and quadruplet and higher order births. Each record in the public use natality file represents an individual birth. For example, a record coded as a twin represents one birth in a twin delivery. Pairs or sets of twins or higher order multiple births are not identified in this file. Records for which plurality is unknown are imputed as singletons. This occurred for 0.007% (271) of all records for 2021.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also NCHS manuals for detailed descriptions of editing and computation methods [30,31], **Tables 24, 25, and I-23** in the 2021 Final Report [1].

## **Infant breastfed**

Information on whether the infant was being breastfed during the period from birth to discharge from the hospital is available 49 states and the District of Columbia (excludes California), representing 88.5% of all U.S. births in 2021. The item asks the question: Is the infant being breastfed at discharge? Yes/No. The intent to breastfeed, without having initiated it by the time of hospital discharge, is not considered a “Yes” response.

It is recommended that this information be collected directly from the medical record using the [Facility Worksheet](#) [28]. Detailed instructions and definitions for the characteristics are presented in the [Guide to the Facility Worksheet](#) [29]. See also NCHS manuals for detailed descriptions of editing and computation methods [30,31], **Table I-11** in the 2021 Final Report [1], and **Table B** for the percent of records for which infant breastfed at discharge is not stated.

A reporting flag should be used to generate accurate numbers by residence for infant breastfed. The reporting flag (the file position is specified in the file layout) will exclude births to residents of non-reporting states. More information on the use of reporting flags can be found in the introduction to the User Guide for the 2014 Natality Public Use File [18].

## **Definitions of medical terms**

For definitions and discussion of the maternal and infant health characteristics, see the [Guide to the Facility Worksheet](#) [27].

## **Quality of Data**

Although vital statistics data are useful for a variety of administrative and scientific purposes, they cannot be correctly interpreted unless various qualifying factors and methods of classification are taken into account. The factors to be considered depend on the specific purposes for which the data are to be used. It is not feasible to discuss all the pertinent factors in the use of vital statistics tabulations, but some of the more important ones should be mentioned.

Most of the factors limiting the use of data arise from imperfections (missing or misclassified) in the original records or from the impracticability of tabulating these data in very detailed categories. Underreporting of certain medical and health items should also be noted (see below). These limitations should not be ignored, but their existence does not lessen the value of the data for most general purposes.

*Completeness of registration:* It is estimated that more than 99 percent of all births occurring in the United States in 2021 were registered.

*Completeness of reporting:* Interpretation of birth certificate data must include evaluation of item completeness. The “Not stated” percentage is one measure of the quality of the data. Completeness of reporting varies among items and states. See **Table B** for the percentage of birth records on which specified items were not stated. Items with high percentages of “Not stated” should be interpreted with caution.

*Quality control procedures:* As electronic files are received at NCHS, they are automatically checked for completeness, individual item code validity, and unacceptable inconsistencies between data items. The registration area is notified of any problems. In addition, NCHS staff review the files on an ongoing basis to detect problems in overall quality such as inadequate reporting for certain items, failure to follow NCHS coding rules, and systems and software errors. Traditionally, quality assurance procedures were limited to the review and analysis of differences between NCHS and registration area code assignments for a small sample of records. As electronic birth registration became prevalent, this procedure was augmented by analyses of year-to-year and area-to-area variations in the data. These analyses are based on preliminary tabulations of the data that are cumulated by state on a year-to-date basis. NCHS investigates all differences judged to have consequences for quality and completeness. In the review process, statistical tests are used to call initial attention to differences for possible follow-up. As necessary, registration areas are informed of differences encountered in the tables and asked to verify the counts or to determine the nature of the differences. Missing records (except those permanently voided) and other problems detected by NCHS are resolved, and corrections are transmitted to NCHS.

*Comparison with medical records:* Two reports based on studies in two states and New York City showed that the quality of data items on the 2003 revised birth certificate varied widely. That is, some items are collected in such a manner that exact agreement with the medical records (considered the “gold standard”) for non-check box items and sensitivity for checkbox items was high, whereas some health and medical condition items on the birth certificate are likely underreported [8,9].

*Rarely occurring events:* There were not enough cases of some of the rarer conditions listed on the birth certificate to assess data quality in the study mentioned above. Examples are maternal morbidities, such as ruptured uterus and unplanned hysterectomy. These may be underreported on the birth certificate compared with results from large multi-center studies and nationally representative survey data. For example, the rate of uterine rupture for women with a previous cesarean who delivered singletons at term (37 or more weeks of completed gestation) was 0.32% in 1999-2002 in a National



Institute for Child Health and Development (NICHD) 19-institution cohort study [48] compared with 0.08 percent for comparable birth certificate data in 2014. Although there are other reasons for the differences in the rates, such as the differing time periods under study, these findings suggest that the birth certificate data likely underreport these morbidities.

It is well documented that congenital anomalies, except for the most visible and most severe, have historically been under-reported on birth certificates [49]. This has been attributable, at least in part, to the inclusion of anomalies on the 1989 U.S. Standard Certificate of Live Birth, which may be difficult to detect within the short period between birth and completion of the child's birth certificate. The 2003 revision of the U.S. Standard Certificate attempted to improve reporting of congenital anomalies by including only those diagnosable within 24 hours of birth using conventional, widely available diagnostic techniques [50]. However, it is not clear whether these efforts were successful because the instances of the anomalies were too few to be included in the quality study above and there have yet to be other quality studies assessing these data.

### **State-specific data quality issues for 2021**

These state-specific data quality issues are of particular concern due to documented evidence of underreporting and/or inaccurate reporting for 2021. ***These data should be used with caution.***

Father's information: Changes in delivery room/hospital policy in response to the COVID-19 pandemic, may have influenced a general increase in unknown information for fathers and an increase in a "No" response for paternity acknowledgements.

Alabama:

- *Obstetric procedures* – Successful, Failed External Cephalic Version

Arkansas:

- *Obstetric procedures* – Successful, Failed External cephalic version

Indiana:

- *Attendant at delivery*

Puerto Rico:

- *Characteristics of Labor & Delivery* – Anesthesia, Induction of labor

South Carolina:

- *Number of Live Born*
- *Prenatal Care items* – Date of First Prenatal Care Visit

Virgin Islands:

- *Marital status* (unknowns exceed 25% of records)
- *Prenatal Care items* – Day of the First Prenatal Care Visit (unknowns exceed 25% of records)
- *Previous Live Births Now Dead*
- *Mother Received WIC Food During Pregnancy* (unknowns exceed 25% of records)
- *Date of Last Other Pregnancy Outcome* (unknowns exceed 25% of records)
- *Number of Cigarettes Smoked items* (unknowns exceed 25% of records)
- *Method of Delivery* – Trial of Labor (unknowns exceed 25% of records)
- *Multiple items*: Residence of Mother – Inside City Limits, Paternity Acknowledgement: Unknowns exceeded 50% and have been flagged as “Not Reported.”

Virginia:

- *Prenatal care items* – Number prenatal care visits
- *Obstetric procedures* – Successful, Failed External cephalic version

## Computation of Rates and Other Measures

### Population denominators

*2021 population estimates*: Birth and fertility rates for 2021 shown in the 2021 Final Report [1] are based on populations estimated from the 2020 census as of July 1, 2021. These populations are shown in **Table 1**. The population estimates have been provided by the U.S. Census Bureau [51] and are based on the 2020 census counts by age, race (consistent with the revised 1997 OMB standards), and sex [34].

Birth and fertility rates by state shown in the 2021 Final Report [1] are based on state-level population estimates based on the 2020 census provided by the U.S. Census Bureau [51]. Birth and fertility rates for the territories except Puerto Rico are based on population estimates available from the U.S. Census Bureau’s International Data Base [52]. Rates for Puerto Rico are based on population estimates from the 2020 census as of July 1, 2021, and are available from the U.S. Census Bureau [53].

Rates by state and territory shown in this report may differ from rates computed on the basis of other population estimates; rates for smaller population subgroups such as those for teen mothers may be particularly affected by differences in population estimates. Birth and fertility rates by month are based on monthly population estimates also based on the 2020 census estimates. Rates for unmarried women are based on distributions of the population by marital status averaged over a 2-year period for 2020–2021 as reported by the U.S. Census Bureau in the March Current Population Survey (CPS) for each

year [54,55], which have been adjusted to July 1, 2021 (2020 census) population levels [51] by NCHS' Division of Vital Statistics [41].

As of the preparation of this report, data from the March CPS for 2022 were not available. Accordingly, the distributions of the population by marital status were based on a 2-year average of 2020 and 2021. For earlier years, rates for unmarried women are based on distributions of the population by marital status averaged over a 3-year period.

### **Population estimates for the specific Hispanic groups**

Beginning in 2011, birth and fertility rates for the specific Hispanic population groups (Mexican, Puerto Rican, Cuban, Central and South American, and Other Hispanic populations, and Dominican, starting in 2016) are based on population estimates derived from the 1-year American Community Survey (ACS) [56] and adjusted to the U.S. resident population control totals by the U.S. Census Bureau. For detailed information on the population estimates for the specific Hispanic groups, see the User Guide for the 2016 Natality Public Use File [57].

The 2021 population estimates for the specific Hispanic population groups were not available as of the preparation of the 2021 final report. Accordingly, birth and fertility rates for these groups are not shown in the final report. Once available, birth and fertility rates for the specified Hispanic population groups will be published. These estimates will be derived from the 2021 1-year ACS and adjusted according to the (2020-based) postcensal estimates for July 1, 2021.

### **Revised population estimates**

*Residential population base:* Birth rates for the United States and individual states are based on the total resident populations of the respective areas (**Table 2**). These populations exclude the Armed Forces abroad but include the Armed Forces stationed in each area. The residential population as well as the population including Armed Forces abroad for the United States for 2010–2021 are shown in **Table 3** [58]. A detailed discussion of historical population bases is presented elsewhere [59].

*Small populations as denominators:* An asterisk (\*) is shown in place of any derived rate in the following situations: 1) the rate is based on fewer than 20 births in the numerator, or 2) for the Hispanic subgroups, a relative standard error of 23 percent or more for the ACS-based rates of 2010-2021. Rates based on populations below these minimum levels lack sufficient reliability for analytic purposes.

*Net census undercounts and overcounts:* Studies conducted by the U.S. Census Bureau indicate that some age, race, and sex groups are more completely enumerated than others. Census miscounts can

have consequences for vital statistics measures. For example, an adjustment to increase the population denominator would result in a smaller rate compared to the unadjusted population. A more detailed discussion of census undercounts and overcounts can be found in the “1999 Technical Appendix” [59]. Adjusted rates for 2021 can be computed by multiplying the reported rates by ratios from the 2021 census-level population adjusted for the estimated age-specific census over- and undercounts.

### **Cohort fertility tables**

Various fertility measures for cohorts of women are computed from births adjusted for underregistration and population estimates corrected for under enumeration and misstatement of age. Cohort fertility tables are available through 2009 and have recently been revised and updated to incorporate new rates for black women [60-63]. A detailed description of the methods used in deriving these measures is available in an earlier publication as well as detailed data for earlier years [64].

### **Total fertility rates**

The total fertility rate is the sum of the birth rates by age of mother (in 5-year age groups) multiplied by 5. It is an age-adjusted rate because it is based on the assumption that there is the same number of women in each age group. The rate of 1,664.0 in 2021, for example, means that if a hypothetical group of 1,000 women were to have the same birth rates in each age group that were observed in the actual childbearing population in 2021, they would have a total of 1,664 children by the time they reached the end of the reproductive period (taken here to be age 50 years), assuming that all of the women survived to that age.

### **Seasonal adjustment of rates**

The seasonally adjusted birth and fertility rates are computed from the X-11 variant of Census Method II [65]. This method, used since 1964, differs slightly from the U.S. Bureau of Labor Statistics (BLS) Seasonal Factor Method, which was used for *Vital Statistics of the United States*, 1964. The fundamental technique is the same in that it is an adaptation of the ratio-to-moving-average method. Before 1964, the method of seasonal adjustment was based on the X-9 variant and other variants of Census Method II. A comparison of the Census Method II with the BLS Seasonal Factor Method shows the differences in the seasonal patterns of births to be negligible.

### **Computation of percentages, percentage distributions, and means**

Births for which a particular characteristic is unknown were subtracted from the figures for total births that were used as denominators before percentages, percentage distributions, and means were computed. The percentage of records with missing information for each item is shown by state in **Table B**. The mean age of mother is the arithmetic average of the age of mothers at the time of birth, computed directly from the frequency of births by age of mother.

An asterisk (\*) indicates that the figure does not meet standards of reliability or precision. Two separate criteria are used to determine whether a figure, either a rate or proportion, meets these standards.

For a rate, an asterisk is shown in place of a rate based on fewer than 20 births in the numerator. Rates based on fewer than 20 births have a relative standard error (RSE) of about 23% or more and, therefore, are considered highly variable.

For a proportion (or percentage), new criteria have been adopted by NCHS [66]. For prior published proportion or percentages, an asterisk was shown in place of a proportion or percentage based on fewer than 20 births in the numerator, as rates are still currently based. The new criteria are based on denominator size and on the absolute or relative widths of the confidence interval of the proportion or percentage calculated using the Clopper–Pearson method. For detailed information on the new criteria, see “National Center for Health Statistics Data Presentation Standards for Proportions” [66].

## **Computation of Measures of Variability**

### **Random variation and significance testing for natality data**

For information and discussion on random variation and significance testing for natality data, with the exception of specified Hispanic groups (see below), see the User Guide to the 2010 Natality Public Use File [67].

### **Specified Hispanic population groups**

For information and discussion on random variation and significance testing of birth and fertility rates for the specified Hispanic groups, see the User Guide to the 2016 Natality Public Use File [57].

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## U.S. STANDARD CERTIFICATE OF LIVE BIRTH

LOCAL FILE NO.

BIRTH NUMBER:

<b>C H I L D</b>	1. CHILD'S NAME (First, Middle, Last, Suffix)		2. TIME OF BIRTH (24 hr)	3. SEX	4. DATE OF BIRTH (Mo/Day/Yr)
	5. FACILITY NAME (If not institution, give street and number)		6. CITY, TOWN, OR LOCATION OF BIRTH		7. COUNTY OF BIRTH
<b>M O T H E R</b>	8a. MOTHER'S CURRENT LEGAL NAME (First, Middle, Last, Suffix)			8b. DATE OF BIRTH (Mo/Day/Yr)	
	8c. MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last, Suffix)			8d. BIRTHPLACE (State, Territory, or Foreign Country)	
	9a. RESIDENCE OF MOTHER-STATE	9b. COUNTY		9c. CITY, TOWN, OR LOCATION	
	9d. STREET AND NUMBER		9e. APT. NO.	9f. ZIP CODE	9g. INSIDE CITY LIMITS? <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>F A T H E R</b>	10a. FATHER'S CURRENT LEGAL NAME (First, Middle, Last, Suffix)		10b. DATE OF BIRTH (Mo/Day/Yr)	10c. BIRTHPLACE (State, Territory, or Foreign Country)	
<b>C E R T I F I E R</b>	11. CERTIFIER'S NAME: _____ TITLE: <input type="checkbox"/> MD <input type="checkbox"/> DO <input type="checkbox"/> HOSPITAL ADMIN. <input type="checkbox"/> CNM/CM <input type="checkbox"/> OTHER MIDWIFE <input type="checkbox"/> OTHER (Specify) _____		12. DATE CERTIFIED ____/____/____ MM DD YYYY		13. DATE FILED BY REGISTRAR ____/____/____ MM DD YYYY

## INFORMATION FOR ADMINISTRATIVE USE

<b>M O T H E R</b>	14. MOTHER'S MAILING ADDRESS: 9 Same as residence, or: State: _____ City, Town, or Location: _____ Street & Number: _____ Apartment No.: _____ Zip Code: _____	
	15. MOTHER MARRIED? (At birth, conception, or any time between) <input type="checkbox"/> Yes <input type="checkbox"/> No IF NO, HAS PATERNITY ACKNOWLEDGEMENT BEEN SIGNED IN THE HOSPITAL? <input type="checkbox"/> Yes <input type="checkbox"/> No	16. SOCIAL SECURITY NUMBER REQUESTED FOR CHILD? <input type="checkbox"/> Yes <input type="checkbox"/> No
	17. FACILITY ID. (NPI)	
18. MOTHER'S SOCIAL SECURITY NUMBER: _____		19. FATHER'S SOCIAL SECURITY NUMBER: _____

## INFORMATION FOR MEDICAL AND HEALTH PURPOSES ONLY

<b>M O T H E R</b>	20. MOTHER'S EDUCATION (Check the box that best describes the highest degree or level of school completed at the time of delivery)  <input type="checkbox"/> 8th grade or less <input type="checkbox"/> 9th - 12th grade, no diploma <input type="checkbox"/> High school graduate or GED completed <input type="checkbox"/> Some college credit but no degree <input type="checkbox"/> Associate degree (e.g., AA, AS) <input type="checkbox"/> Bachelor's degree (e.g., BA, AB, BS) <input type="checkbox"/> Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA) <input type="checkbox"/> Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)	21. MOTHER OF HISPANIC ORIGIN? (Check the box that best describes whether the mother is Spanish/Hispanic/Latina. Check the "No" box if mother is not Spanish/Hispanic/Latina)  <input type="checkbox"/> No, not Spanish/Hispanic/Latina <input type="checkbox"/> Yes, Mexican, Mexican American, Chicana <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic/Latina (Specify) _____	22. MOTHER'S RACE (Check one or more races to indicate what the mother considers herself to be) <input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> American Indian or Alaska Native (Name of the enrolled or principal tribe) _____ <input type="checkbox"/> Asian Indian <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other Asian (Specify) _____ <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Guamanian or Chamorro <input type="checkbox"/> Samoan <input type="checkbox"/> Other Pacific Islander (Specify) _____ <input type="checkbox"/> Other (Specify) _____
	<b>F A T H E R</b>	23. FATHER'S EDUCATION (Check the box that best describes the highest degree or level of school completed at the time of delivery)  <input type="checkbox"/> 8th grade or less <input type="checkbox"/> 9th - 12th grade, no diploma <input type="checkbox"/> High school graduate or GED completed <input type="checkbox"/> Some college credit but no degree <input type="checkbox"/> Associate degree (e.g., AA, AS) <input type="checkbox"/> Bachelor's degree (e.g., BA, AB, BS) <input type="checkbox"/> Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA) <input type="checkbox"/> Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD)	24. FATHER OF HISPANIC ORIGIN? (Check the box that best describes whether the father is Spanish/Hispanic/Latino. Check the "No" box if father is not Spanish/Hispanic/Latino)  <input type="checkbox"/> No, not Spanish/Hispanic/Latino <input type="checkbox"/> Yes, Mexican, Mexican American, Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic/Latino (Specify) _____
26. PLACE WHERE BIRTH OCCURRED (Check one) <input type="checkbox"/> Hospital <input type="checkbox"/> Freestanding birthing center <input type="checkbox"/> Home Birth: Planned to deliver at home? 9 Yes 9 No <input type="checkbox"/> Clinic/Doctor's office <input type="checkbox"/> Other (Specify) _____		27. ATTENDANT'S NAME, TITLE, AND NPI NAME: _____ NPI: _____ TITLE: <input type="checkbox"/> MD <input type="checkbox"/> DO <input type="checkbox"/> CNM/CM <input type="checkbox"/> OTHER MIDWIFE <input type="checkbox"/> OTHER (Specify) _____	28. MOTHER TRANSFERRED FOR MATERNAL MEDICAL OR FETAL INDICATIONS FOR DELIVERY? <input type="checkbox"/> Yes <input type="checkbox"/> No IF YES, ENTER NAME OF FACILITY MOTHER TRANSFERRED FROM: _____

Mother's Name

Mother's Medical Record No.

<b>MOTHER</b>	29a. DATE OF FIRST PRENATAL CARE VISIT MM / DD / YYYY <input type="checkbox"/> No Prenatal Care		29b. DATE OF LAST PRENATAL CARE VISIT MM / DD / YYYY		30. TOTAL NUMBER OF PRENATAL VISITS FOR THIS PREGNANCY _____ (If none, enter "0".)	
	31. MOTHER'S HEIGHT _____ (feet/inches)		32. MOTHER'S PREPREGNANCY WEIGHT _____ (pounds)		33. MOTHER'S WEIGHT AT DELIVERY _____ (pounds)	
	34. DID MOTHER GET WIC FOOD FOR HERSELF DURING THIS PREGNANCY? <input type="checkbox"/> Yes <input type="checkbox"/> No		35. NUMBER OF PREVIOUS LIVE BIRTHS (Do not include this child)		36. NUMBER OF OTHER PREGNANCY OUTCOMES (spontaneous or induced losses or ectopic pregnancies)	
	35a. Now Living Number _____ <input type="checkbox"/> None		35b. Now Dead Number _____ <input type="checkbox"/> None		36a. Other Outcomes Number _____ <input type="checkbox"/> None	
	35c. DATE OF LAST LIVE BIRTH MM / YYYY		36b. DATE OF LAST OTHER PREGNANCY OUTCOME MM / YYYY		39. DATE LAST NORMAL MENSES BEGAN MM / DD / YYYY	
37. CIGARETTE SMOKING BEFORE AND DURING PREGNANCY For each time period, enter either the number of cigarettes or the number of packs of cigarettes smoked. IF NONE, ENTER "0".  Average number of cigarettes or packs of cigarettes smoked per day: # of cigarettes    # of packs Three Months Before Pregnancy    _____ OR _____ First Three Months of Pregnancy    _____ OR _____ Second Three Months of Pregnancy    _____ OR _____ Third Trimester of Pregnancy    _____ OR _____		38. PRINCIPAL SOURCE OF PAYMENT FOR THIS DELIVERY  <input type="checkbox"/> Private Insurance <input type="checkbox"/> Medicaid <input type="checkbox"/> Self-pay <input type="checkbox"/> Other (Specify) _____		40. MOTHER'S MEDICAL RECORD NUMBER		
<b>MEDICAL AND HEALTH INFORMATION</b>	41. RISK FACTORS IN THIS PREGNANCY (Check all that apply)  Diabetes <input type="checkbox"/> Prepregnancy (Diagnosis prior to this pregnancy) <input type="checkbox"/> Gestational (Diagnosis in this pregnancy)  Hypertension <input type="checkbox"/> Prepregnancy (Chronic) <input type="checkbox"/> Gestational (PIH, preeclampsia) <input type="checkbox"/> Eclampsia  <input type="checkbox"/> Previous preterm birth  <input type="checkbox"/> Other previous poor pregnancy outcome (Includes perinatal death, small-for-gestational age/intrauterine growth restricted birth)  <input type="checkbox"/> Pregnancy resulted from infertility treatment-If yes, check all that apply: <input type="checkbox"/> Fertility-enhancing drugs, Artificial insemination or Intrauterine insemination <input type="checkbox"/> Assisted reproductive technology (e.g., in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT))  <input type="checkbox"/> Mother had a previous cesarean delivery If yes, how many _____  <input type="checkbox"/> None of the above		43. OBSTETRIC PROCEDURES (Check all that apply)  <input type="checkbox"/> Cervical cerclage <input type="checkbox"/> Tocolysis  External cephalic version: <input type="checkbox"/> Successful <input type="checkbox"/> Failed  <input type="checkbox"/> None of the above		46. METHOD OF DELIVERY  A. Was delivery with forceps attempted but unsuccessful? <input type="checkbox"/> Yes <input type="checkbox"/> No  B. Was delivery with vacuum extraction attempted but unsuccessful? <input type="checkbox"/> Yes <input type="checkbox"/> No  C. Fetal presentation at birth <input type="checkbox"/> Cephalic <input type="checkbox"/> Breech <input type="checkbox"/> Other  D. Final route and method of delivery (Check one) <input type="checkbox"/> Vaginal/Spontaneous <input type="checkbox"/> Vaginal/Forceps <input type="checkbox"/> Vaginal/Vacuum <input type="checkbox"/> Cesarean If cesarean, was a trial of labor attempted? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	42. INFECTIONS PRESENT AND/OR TREATED DURING THIS PREGNANCY (Check all that apply)  <input type="checkbox"/> Gonorrhea <input type="checkbox"/> Syphilis <input type="checkbox"/> Chlamydia <input type="checkbox"/> Hepatitis B <input type="checkbox"/> Hepatitis C <input type="checkbox"/> None of the above		44. ONSET OF LABOR (Check all that apply)  <input type="checkbox"/> Premature Rupture of the Membranes (prolonged, ≥12 hrs.)  <input type="checkbox"/> Precipitous Labor (<3 hrs.)  <input type="checkbox"/> Prolonged Labor (≥ 20 hrs.)  <input type="checkbox"/> None of the above		47. MATERNAL MORBIDITY (Check all that apply) (Complications associated with labor and delivery)  <input type="checkbox"/> Maternal transfusion <input type="checkbox"/> Third or fourth degree perineal laceration <input type="checkbox"/> Ruptured uterus <input type="checkbox"/> Unplanned hysterectomy <input type="checkbox"/> Admission to intensive care unit <input type="checkbox"/> Unplanned operating room procedure following delivery <input type="checkbox"/> None of the above	
			45. CHARACTERISTICS OF LABOR AND DELIVERY (Check all that apply)  <input type="checkbox"/> Induction of labor <input type="checkbox"/> Augmentation of labor <input type="checkbox"/> Non-vertex presentation <input type="checkbox"/> Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery <input type="checkbox"/> Antibiotics received by the mother during labor <input type="checkbox"/> Clinical chorioamnionitis diagnosed during labor or maternal temperature ≥38°C (100.4°F) <input type="checkbox"/> Moderate/heavy meconium staining of the amniotic fluid <input type="checkbox"/> Fetal intolerance of labor such that one or more of the following actions was taken: in-utero resuscitative measures, further fetal assessment, or operative delivery <input type="checkbox"/> Epidural or spinal anesthesia during labor <input type="checkbox"/> None of the above			

<b>NEWBORN</b>	48. NEWBORN MEDICAL RECORD NUMBER		54. ABNORMAL CONDITIONS OF THE NEWBORN (Check all that apply)		55. CONGENITAL ANOMALIES OF THE NEWBORN (Check all that apply)	
	49. BIRTHWEIGHT (grams preferred, specify unit)  _____ 9 grams    9 lb/oz		<input type="checkbox"/> Assisted ventilation required immediately following delivery  <input type="checkbox"/> Assisted ventilation required for more than six hours  <input type="checkbox"/> NICU admission  <input type="checkbox"/> Newborn given surfactant replacement therapy  <input type="checkbox"/> Antibiotics received by the newborn for suspected neonatal sepsis  <input type="checkbox"/> Seizure or serious neurologic dysfunction  <input type="checkbox"/> Significant birth injury (skeletal fracture(s), peripheral nerve injury, and/or soft tissue/solid organ hemorrhage which requires intervention)		<input type="checkbox"/> Anencephaly <input type="checkbox"/> Meningocele/Spina bifida <input type="checkbox"/> Cyanotic congenital heart disease <input type="checkbox"/> Congenital diaphragmatic hernia <input type="checkbox"/> Omphalocele <input type="checkbox"/> Gastroschisis <input type="checkbox"/> Limb reduction defect (excluding congenital amputation and dwarfing syndromes) <input type="checkbox"/> Cleft Lip with or without Cleft Palate <input type="checkbox"/> Cleft Palate alone <input type="checkbox"/> Down Syndrome <input type="checkbox"/> Karyotype confirmed <input type="checkbox"/> Karyotype pending <input type="checkbox"/> Suspected chromosomal disorder <input type="checkbox"/> Karyotype confirmed <input type="checkbox"/> Karyotype pending <input type="checkbox"/> Hypospadias <input type="checkbox"/> None of the anomalies listed above	
	50. OBSTETRIC ESTIMATE OF GESTATION: _____ (completed weeks)		9 None of the above			
	51. APGAR SCORE: Score at 5 minutes: _____ If 5 minute score is less than 6, Score at 10 minutes: _____					
	52. PLURALITY - Single, Twin, Triplet, etc. (Specify) _____					
	53. IF NOT SINGLE BIRTH - Born First, Second, Third, etc. (Specify) _____					
56. WAS INFANT TRANSFERRED WITHIN 24 HOURS OF DELIVERY? <input type="checkbox"/> Yes <input type="checkbox"/> No IF YES, NAME OF FACILITY INFANT TRANSFERRED TO: _____		57. IS INFANT LIVING AT TIME OF REPORT? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Infant transferred, status unknown		58. IS THE INFANT BEING BREASTFED AT DISCHARGE? <input type="checkbox"/> Yes <input type="checkbox"/> No		

Mother's Name

Mother's Medical Record No.

**Table A. Births by place of occurrence and residence for births occurring in the 50 states, the District of Columbia, and U.S. territories, 2021**

Area	Number live births	
	Occurrence <sup>1</sup>	Residence <sup>1,2</sup>
United States	3,669,928	3,664,292
Alabama	56,610	58,054
Alaska	9,281	9,367
Arizona	78,387	77,916
Arkansas	35,120	35,965
California	421,088	420,608
Colorado	63,560	62,949
Connecticut	36,920	35,670
Delaware	10,871	10,482
District of Columbia	12,035	8,660
Florida	216,534	216,260
Georgia	125,059	124,073
Hawaii	15,636	15,620
Idaho	22,156	22,427
Illinois	128,502	132,189
Indiana	80,251	79,946
Iowa	36,845	36,835
Kansas	36,359	34,705
Kentucky	50,201	52,214
Louisiana	57,625	57,437
Maine	11,681	12,006
Maryland	65,098	68,285
Massachusetts	70,076	69,137
Michigan	103,992	104,980
Minnesota	63,497	64,425
Mississippi	34,060	35,156
Missouri	70,183	69,453
Montana	11,245	11,231
Nebraska	24,779	24,609
Nevada	33,283	33,686
New Hampshire	12,670	12,625
New Jersey	98,603	101,497
New Mexico	19,779	21,391

New York	211,541	210,742
North Carolina	122,683	120,466
North Dakota	11,673	10,112
Ohio	130,194	129,791
Oklahoma	46,699	48,410
Oregon	41,623	40,914
Pennsylvania	131,545	132,622
Rhode Island	11,001	10,464
South Carolina	53,202	57,185
South Dakota	12,210	11,369
Tennessee	87,212	81,717
Texas	380,216	373,594
Utah	47,955	46,712
Vermont	5,120	5,384
Virginia	96,062	95,825
Washington	83,493	83,911
West Virginia	18,318	17,198
Wisconsin	61,547	61,781
Wyoming	5,648	6,237

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Births occurring to US territorial residents

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Puerto Rico	---	19,304
Virgin Islands	---	903
Guam	---	2,623
American Samoa	---	---
Northern Marianas	---	570

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--- Data not available.

<sup>1</sup> Excludes data for the territories.

<sup>2</sup> Excludes data for foreign residents.



Table B. Percent of birth records on which specified items were not stated: United States and each state and territory, New York City, and the District of Columbia, 2021  
[By place of residence]

Reporting area	All births	Time of birth	Mother's birthplace	Education of mother	Education of father	Father's age	Father's race	Hispanic Origin	
								Mother	Father
Total of reporting areas <sup>1</sup>	3,664,292	0.0	0.2	1.5	13.6	11.2	18.3	1.0	12.7
Alabama	58,054	-	0.0	0.1	16.3	16.1	20.1	0.0	16.1
Alaska	9,367	0.1	0.1	1.8	16.2	11.4	16.5	2.3	18.4
Arizona	77,916	0.0	0.1	0.4	13.5	13.0	15.6	0.5	13.8
Arkansas	35,965	0.0	0.6	1.1	25.0	22.2	28.3	0.3	22.1
California	420,608	0.0	0.2	7.4	13.4	6.0	16.9	4.3	9.8
Colorado	62,949	0.0	0.2	1.1	7.2	5.9	11.1	0.9	6.4
Connecticut	35,670	-	0.1	0.1	9.0	8.9	14.2	0.1	9.0
Delaware	10,482	-	0.9	2.4	34.6	24.0	33.9	0.4	24.8
District of Columbia	8,660	-	0.3	2.1	20.6	18.1	27.1	0.2	18.9
Florida	216,260	0.0	0.3	1.1	13.0	10.8	22.4	0.1	10.9
Georgia	124,073	0.0	0.0	0.3	17.6	13.7	20.3	0.5	14.2
Hawaii	15,620	-	0.2	1.9	8.7	8.0	8.5	0.5	8.2
Idaho	22,427	0.0	0.4	0.9	11.7	8.1	16.5	0.5	11.4
Illinois	132,189	0.0	0.1	1.1	12.5	10.1	13.6	0.6	10.8
Indiana	79,946	0.0	0.4	0.3	11.8	11.4	14.0	0.2	11.7
Iowa	36,835	-	0.0	0.2	13.6	12.3	16.0	0.0	12.8
Kansas	34,705	-	0.2	0.6	9.5	8.8	11.5	0.3	9.1
Kentucky	52,214	0.0	0.2	0.5	20.5	18.6	22.8	0.2	19.3
Louisiana	57,437	-	0.0	0.5	15.0	14.1	20.5	0.1	14.3
Maine	12,006	0.0	0.1	0.3	10.5	10.2	11.6	0.1	15.9
Maryland	68,285	0.0	0.3	0.6	13.2	10.5	22.0	0.2	12.5
Massachusetts	69,137	0.0	0.0	2.3	8.1	6.5	10.6	1.5	4.0
Michigan	104,980	0.0	0.2	0.9	11.6	10.7	14.0	0.6	11.4
Minnesota	64,425	0.1	0.2	0.5	11.2	7.6	13.9	0.2	7.8
Mississippi	35,156	-	0.1	0.3	15.8	15.4	19.4	0.0	15.6
Missouri	69,453	0.0	1.3	0.4	21.9	21.2	23.7	0.7	23.5
Montana	11,231	-	0.0	0.1	8.1	7.7	9.2	0.1	7.7
Nebraska	24,609	-	0.1	0.1	11.5	10.7	20.6	0.1	11.3
Nevada	33,686	0.0	0.2	2.4	13.0	10.3	13.2	0.3	10.7
New Hampshire	12,625	-	0.1	0.5	6.1	5.2	9.3	0.6	5.3
New Jersey	101,497	0.0	0.0	1.1	7.7	6.2	19.6	1.6	8.6
New Mexico	21,391	0.0	0.0	0.3	16.6	16.5	17.1	0.2	16.8
New York (excluding NYC)	117,122	-	0.0	0.9	9.8	8.1	16.0	0.5	8.8
New York City	93,620	-	0.1	0.5	9.9	9.0	21.4	1.6	10.9
North Carolina	120,466	0.0	0.5	0.3	15.6	14.9	24.5	0.1	15.0
North Dakota	10,112	-	3.1	1.5	12.7	10.6	11.5	2.0	12.8
Ohio	129,791	0.0	0.1	0.3	17.4	16.7	19.8	0.2	17.2
Oklahoma	48,410	-	0.1	0.2	16.6	14.3	22.3	0.3	16.5
Oregon	40,914	0.0	0.1	0.8	9.3	8.2	14.4	1.0	9.3
Pennsylvania	132,622	0.0	0.6	0.7	12.4	10.3	18.4	1.1	12.3
Rhode Island	10,464	0.0	0.0	0.3	11.4	11.0	25.7	0.2	11.4
South Carolina	57,185	0.0	0.2	0.4	18.1	16.3	21.9	0.2	15.8
South Dakota	11,369	0.0	0.1	0.4	13.5	11.0	13.2	0.1	11.1
Tennessee	81,717	0.0	0.1	0.4	13.6	12.5	20.0	0.2	13.0
Texas	373,594	0.0	0.1	0.4	12.1	11.4	17.0	0.2	13.4
Utah	46,712	0.0	0.2	2.5	8.4	5.6	11.8	1.4	7.1
Vermont	5,384	-	0.0	0.5	9.6	5.2	9.6	0.6	9.3
Virginia	95,825	0.0	0.3	1.1	10.6	9.3	16.7	0.3	9.7
Washington	83,911	0.0	0.7	3.5	14.8	9.6	21.8	3.7	15.0
West Virginia	17,198	0.0	0.3	0.5	14.6	1.1	15.0	0.4	14.4
Wisconsin	61,781	0.0	0.1	0.7	36.7	33.6	37.3	0.4	36.6
Wyoming	6,237	-	0.0	1.3	14.6	12.0	17.3	2.6	15.2
Puerto Rico	19,304	0.0	0.0	0.1	5.6	5.0	7.3	0.1	5.4
Virgin Islands	903	0.6	1.9	8.9	46.1	16.4	37.3	11.7	49.7
Guam	2,623	0.1	3.0	5.9	35.0	33.7	37.3	1.5	33.5
American Samoa <sup>2</sup>	---	---	---	---	---	---	---	---	---
Northern Marianas	570	-	-	0.5	6.7	6.7	7.5	-	7.0

See footnotes at end of table.

Table B. Percent of birth records on which specified items were not stated: United States and each state and territory, New York City, and the District of Columbia, 2021--Con.  
[By place of residence]

Reporting area	Place of birth	Attendant at birth	Month prenatal care began	Number of prenatal care visits	Mother's height	Mother's pre-pregnancy weight	Weight gain	Did mother get WIC food for herself during this pregnancy	Live-birth order
Total of reporting areas <sup>1</sup>	0.0	0.1	2.1	2.0	0.5	1.7	2.7	1.1	0.3
Alabama	-	-	0.3	0.3	0.1	0.6	1.1	0.1	0.0
Alaska	-	0.0	1.9	2.6	0.5	2.5	5.8	1.9	1.9
Arizona	0.0	0.0	1.7	1.0	0.2	1.0	1.2	0.6	0.0
Arkansas	0.0	0.0	1.0	0.9	0.3	2.5	3.9	0.9	0.3
California	0.0	0.1	1.5	1.9	0.4	2.4	2.9	0.7	0.1
Colorado	0.0	0.0	1.9	1.8	0.8	3.4	4.0	1.4	0.1
Connecticut	-	0.0	0.7	0.6	0.1	0.4	0.9	0.2	0.1
Delaware	-	-	1.4	1.0	0.7	1.0	2.2	5.7	0.3
District of Columbia	0.0	0.0	3.2	3.3	1.6	2.6	3.6	1.7	0.1
Florida	0.0	0.0	3.6	3.0	0.9	4.7	5.5	1.5	1.3
Georgia	0.0	0.0	0.8	0.7	0.1	0.3	0.6	0.7	0.2
Hawaii	0.0	0.4	7.5	8.3	0.3	4.5	5.0	9.5	-
Idaho	0.0	0.3	0.8	1.0	0.2	1.3	2.4	0.8	0.4
Illinois	0.0	0.0	2.3	2.3	0.2	2.5	3.0	0.6	0.4
Indiana	0.0	0.2	0.2	0.2	0.2	0.8	1.1	1.0	0.2
Iowa	-	-	0.3	0.3	0.1	0.2	1.2	0.3	0.1
Kansas	-	-	1.0	0.7	0.2	0.7	1.2	0.2	0.0
Kentucky	0.0	-	2.4	2.2	0.1	0.5	1.0	0.9	0.0
Louisiana	-	0.1	3.8	2.0	0.2	1.5	2.5	1.5	0.1
Maine	-	0.0	0.8	0.5	0.3	2.6	3.3	0.3	0.1
Maryland	0.0	0.1	3.6	3.6	0.7	1.3	3.3	1.2	0.0
Massachusetts	0.0	0.0	1.5	1.4	0.7	2.0	3.0	1.7	0.7
Michigan	-	0.0	1.3	0.7	0.2	1.0	2.0	1.2	0.4
Minnesota	-	0.1	0.6	0.8	0.3	1.0	1.7	0.3	0.1
Mississippi	-	0.0	1.0	0.5	0.0	0.3	0.9	0.2	0.0
Missouri	0.0	0.0	2.9	4.2	0.9	1.9	3.9	2.3	0.4
Montana	-	-	0.2	0.2	0.1	0.3	0.6	0.1	0.0
Nebraska	0.0	-	1.4	1.4	0.3	1.0	1.9	0.5	0.1
Nevada	0.1	0.0	1.7	1.9	1.1	2.3	2.6	1.4	0.1
New Hampshire	-	0.0	1.9	0.4	0.6	2.4	3.3	1.5	0.3
New Jersey	-	0.0	1.6	0.8	0.3	1.7	2.3	2.7	0.0
New Mexico	-	-	2.4	3.1	0.2	0.9	1.6	0.4	0.1
New York (excluding NYC)	-	0.1	3.1	4.0	1.7	3.9	4.7	2.0	0.8
New York City	-	0.0	2.8	2.6	0.1	0.7	1.2	0.8	0.2
North Carolina	0.0	0.3	0.9	1.0	0.2	1.5	3.1	0.3	0.0
North Dakota	0.0	0.4	2.9	3.5	0.1	1.4	1.8	2.1	0.1
Ohio	-	0.0	0.8	0.9	0.2	0.8	2.1	0.5	0.2
Oklahoma	-	0.1	1.3	1.4	0.1	0.6	1.8	0.8	0.2
Oregon	-	0.0	0.6	0.7	0.2	1.0	1.6	0.9	0.4
Pennsylvania	0.0	0.0	3.7	3.8	0.8	2.2	4.8	3.0	0.4
Rhode Island	0.0	0.1	0.3	1.3	0.0	0.9	1.5	0.2	0.5
South Carolina	0.0	0.0	0.2	0.2	0.5	0.6	1.8	1.1	0.0
South Dakota	-	0.0	1.0	0.9	0.2	0.5	1.1	1.0	0.4
Tennessee	-	0.0	1.9	2.0	0.1	0.4	1.3	0.7	0.0
Texas	0.0	0.0	2.7	2.0	0.4	0.5	0.9	0.0	0.0
Utah	-	0.0	1.0	1.3	0.3	1.0	1.6	1.7	0.1
Vermont	-	-	1.2	0.5	0.1	1.7	2.7	1.5	0.1
Virginia	0.0	0.0	1.4	0.7	0.5	1.5	2.1	0.9	0.2
Washington	0.0	0.2	11.0	10.8	3.0	6.9	13.8	5.2	3.7
West Virginia	-	0.3	1.2	1.8	0.1	0.6	4.1	1.2	0.5
Wisconsin	-	0.0	1.6	1.9	0.3	1.2	3.8	1.6	0.0
Wyoming	0.0	0.0	1.7	1.5	0.6	0.7	1.3	0.1	0.0
Puerto Rico	-	0.0	0.5	0.5	0.1	0.1	0.5	0.2	0.5
Virgin Islands	-	5.2	17.1	18.2	11.2	17.1	24.3	28.8	12.3
Guam	0.4	0.5	22.2	21.4	9.1	17.9	20.2	8.4	-
American Samoa <sup>2</sup>	---	---	---	---	---	---	---	---	---
Northern Marianas	-	-	0.4	0.2	-	0.2	1.1	-	-

See footnotes at end of table.

Table B. Percent of birth records on which specified items were not stated: United States and each state and territory, New York City, and the District of Columbia, 2021--Con.  
[By place of residence]

Reporting areas	Birth interval	Cigarette smoking before and during pregnancy	Source of payment <sup>3</sup>	Risk Factors in this Pregnancy	Infections present	Obstetric Procedures	Characteristics of labor and delivery	Method of delivery		
								Fetal presentation	Final route and method of delivery	
Total of reporting areas <sup>1</sup>	3.1	0.4	0.8	0.1	0.4	0.2	0.1	0.1	0.3	0.1
Alabama	1.4	0.1	0.0	-	0.0	0.0	-	-	0.0	0.0
Alaska	3.9	2.5	1.5	0.6	0.7	0.5	0.3	0.4	0.4	0.1
Arizona	0.4	0.1	0.1	-	0.0	-	0.0	0.1	0.1	0.0
Arkansas	2.4	0.4	1.1	0.0	0.0	-	0.0	0.1	0.1	0.0
California	0.7	0.3	0.2	0.1	0.4	0.4	0.2	0.2	0.2	0.0
Colorado	3.4	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Connecticut	2.3	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0
Delaware	2.9	0.5	0.5	0.2	0.8	0.2	0.1	0.1	0.1	0.1
District of Columbia	4.8	1.2	0.3	0.1	1.2	0.4	0.1	0.2	0.2	0.0
Florida	2.5	0.3	0.6	0.3	0.6	0.4	0.0	0.7	0.7	0.2
Georgia	2.5	0.2	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1
Hawaii	2.8	1.9	0.2	-	-	-	-	0.9	0.9	0.0
Idaho	1.6	0.3	0.3	0.1	0.3	0.1	0.1	0.2	0.2	0.0
Illinois	2.1	0.2	0.2	0.1	0.1	0.1	0.0	0.3	0.3	0.0
Indiana	2.8	0.2	0.3	0.6	3.0	0.1	0.0	0.2	0.2	0.0
Iowa	2.3	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Kansas	1.3	0.5	1.4	0.0	0.0	0.0	-	0.0	0.0	0.0
Kentucky	2.2	0.4	0.6	0.5	0.6	0.4	0.1	0.3	0.3	0.1
Louisiana	2.7	1.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0
Maine	2.3	0.1	0.6	-	0.4	0.0	0.1	0.1	0.1	0.0
Maryland	4.6	0.3	0.4	0.1	0.0	0.0	-	0.3	0.3	0.0
Massachusetts	3.5	0.0	1.0	0.3	1.0	1.0	1.0	1.0	1.0	1.0
Michigan	3.5	0.8	0.8	0.1	1.2	0.2	0.2	0.5	0.5	0.1
Minnesota	2.1	0.1	0.2	0.1	0.3	0.1	0.0	0.4	0.4	0.1
Mississippi	0.8	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Missouri	5.5	1.8	2.4	0.0	0.0	-	0.0	1.1	1.1	0.2
Montana	1.0	0.1	0.1	-	0.0	0.0	0.0	0.0	0.0	0.1
Nebraska	2.1	0.1	0.4	0.2	0.3	0.2	0.1	0.0	0.0	0.0
Nevada	1.7	0.9	0.2	-	0.0	0.0	0.0	0.0	0.0	0.0
New Hampshire	1.7	0.9	0.3	0.3	0.3	0.3	0.1	0.0	0.0	0.0
New Jersey	3.7	0.6	0.2	0.0	0.4	0.8	0.0	0.1	0.1	0.0
New Mexico	4.3	0.3	0.5	0.0	0.5	0.0	-	0.1	0.1	-
New York (excluding NYC)	6.5	0.2	0.4	0.3	0.9	0.6	0.0	0.4	0.4	0.3
New York City	5.9	0.1	0.2	0.1	0.4	0.1	0.0	0.1	0.1	0.0
North Carolina	1.8	0.1	0.2	0.0	0.6	0.0	0.0	0.0	0.0	0.1
North Dakota	3.7	0.9	1.5	-	-	-	-	-	-	-
Ohio <sup>9</sup>	2.7	0.2	0.4	0.0	0.1	0.0	0.0	0.2	0.2	0.1
Oklahoma	3.3	0.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	2.0	0.6	0.3	-	-	-	0.1	0.4	0.4	-
Pennsylvania	7.0	1.3	3.4	0.2	0.3	0.1	0.1	0.2	0.2	0.0
Rhode Island	1.8	0.2	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1
South Carolina	2.5	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0
South Dakota	2.4	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	-
Tennessee	3.8	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	-
Texas	4.9	0.2	2.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1
Utah	0.8	0.3	2.5	-	-	-	-	0.0	0.0	0.0
Vermont	2.5	1.3	0.1	-	0.0	-	-	0.1	0.1	-
Virginia	1.1	0.1	0.3	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Washington	7.9	2.9	2.9	1.2	1.2	1.7	1.1	3.1	3.1	0.3
West Virginia	3.4	0.0	0.7	0.6	1.6	0.6	0.1	0.6	0.6	-
Wisconsin	2.3	0.6	0.5	0.2	0.8	0.1	0.1	0.4	0.4	0.1
Wyoming	1.8	4.6	0.4	0.0	0.0	0.0	-	-	-	-
Puerto Rico	1.1	0.1	0.7	0.3	0.4	1.0	1.3	0.6	0.6	0.0
Virgin Islands	39.5	47.0	21.5	5.5	5.8	4.0	3.3	12.7	12.7	4.8
Guam	7.2	20.9	13.1	6.6	2.1	1.0	1.6	2.2	2.2	2.0
American Samoa <sup>2</sup>	---	---	---	---	---	---	---	---	---	---
Northern Marianas	1.4	1.2	-	-	0.2	-	-	-	-	-

See footnotes at end of table.

Table B. Percent of birth records on which specified items were not stated: United States and each state and territory, New York City, and the District of Columbia, 2021--Con.  
[By place of residence]

Reporting area	Maternal morbidity	Birthweight	Obstetric estimate of gestation	Apgar score		Abnormal conditions	Congenital anomalies of the newborn	Infant breastfed <sup>4</sup>
				5-minute	10-minute			
Total of reporting areas <sup>1</sup>	0.2	0.1	0.1	0.5	0.5	0.2	0.2	0.7
Alabama	0.0	0.0	0.0	0.3	0.3	–	0.0	0.1
Alaska	0.4	0.1	0.1	0.7	0.8	0.4	0.0	0.5
Arizona	–	0.1	0.1	0.2	0.2	–	–	0.4
Arkansas	0.0	0.1	0.1	0.3	0.3	0.0	0.0	0.6
California	0.2	0.0	0.0	1.0	1.3	0.4	0.4	---
Colorado	0.0	0.4	0.1	0.5	0.6	0.3	0.6	0.0
Connecticut	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.7
Delaware	0.4	0.0	0.0	0.2	0.2	0.2	0.1	1.0
District of Columbia	0.0	0.0	0.1	0.4	0.4	0.0	0.0	2.7
Florida	0.4	0.0	0.1	0.6	0.6	0.5	0.9	0.5
Georgia	0.1	0.1	0.0	0.3	0.4	0.1	0.1	0.2
Hawaii	–	0.1	0.1	0.3	0.3	–	0.0	0.2
Idaho	0.1	0.1	0.0	0.6	0.7	0.1	0.0	0.6
Illinois	0.1	0.0	0.0	0.2	0.2	0.0	0.1	0.4
Indiana	0.1	0.0	0.0	0.2	0.2	0.0	0.4	0.8
Iowa	0.0	0.0	0.1	0.4	0.5	0.0	0.0	0.2
Kansas	0.0	0.0	0.1	0.4	0.4	0.0	0.0	0.3
Kentucky	0.4	0.0	0.0	0.4	0.4	0.4	0.5	0.5
Louisiana	–	0.0	0.1	0.2	0.2	0.0	0.0	1.8
Maine	0.1	0.1	0.1	0.4	0.4	0.0	0.0	0.4
Maryland	0.1	0.0	0.1	0.3	0.3	0.0	0.0	0.1
Massachusetts	1.0	1.0	0.8	1.2	1.2	1.0	1.0	1.2
Michigan	0.2	0.1	0.1	0.2	0.3	0.1	0.3	---
Minnesota	0.1	0.1	0.1	0.3	0.4	0.0	0.0	0.4
Mississippi	0.0	0.1	0.0	0.8	0.8	0.0	0.0	0.1
Missouri	–	0.1	0.1	0.5	0.6	–	–	2.9
Montana	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.1
Nebraska	0.0	0.0	0.0	0.6	0.6	0.0	0.1	0.4
Nevada	0.0	0.0	0.0	0.1	0.1	–	–	1.2
New Hampshire	0.3	0.2	0.2	0.4	0.5	0.3	0.5	0.9
New Jersey	0.3	0.0	0.0	0.3	0.3	0.0	0.2	0.7
New Mexico	–	0.0	0.1	0.3	0.3	–	–	0.2
New York (excluding NYC)	0.4	0.3	0.3	0.7	0.7	0.4	0.4	0.8
New York City	0.1	0.0	0.0	0.3	0.4	0.1	0.2	0.2
North Carolina	0.0	0.1	0.0	0.4	0.4	0.0	0.0	0.0
North Dakota	–	0.0	0.1	0.3	0.4	–	–	1.1
Ohio	0.0	0.1	0.1	0.3	0.4	0.0	0.0	0.5
Oklahoma	0.0	0.1	0.1	0.2	0.3	0.1	0.1	1.4
Oregon	0.6	0.0	0.0	0.3	0.3	0.0	–	0.7
Pennsylvania	0.6	0.1	0.2	0.5	0.5	0.4	0.0	2.7
Rhode Island	0.1	0.1	0.0	0.4	0.4	0.6	0.3	0.6
South Carolina	0.6	0.0	0.0	0.3	0.3	0.1	0.1	0.2
South Dakota	0.1	0.1	0.0	0.5	0.6	0.0	0.0	0.3
Tennessee	0.0	0.0	0.1	0.3	0.4	0.0	0.0	0.6
Texas	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
Utah	–	0.0	0.0	0.5	0.5	–	–	0.1
Vermont	0.0	0.1	0.1	0.6	0.6	–	0.0	0.7
Virginia	0.0	0.1	0.0	0.3	0.5	0.0	0.0	0.5
Washington	1.2	0.1	0.2	0.9	0.9	0.0	0.0	3.1
West Virginia	0.6	0.1	0.0	0.4	0.5	0.4	0.0	5.2
Wisconsin	0.1	0.1	0.1	0.5	0.5	0.1	0.4	1.8
Wyoming	–	0.0	0.0	0.5	0.6	0.0	0.1	0.5
Puerto Rico	1.2	0.0	0.0	0.2	0.2	0.3	0.5	0.3
Virgin Islands	5.0	2.7	2.4	2.7	2.9	3.2	3.5	6.6
Guam	2.7	0.7	0.9	1.1	2.9	1.0	0.9	11.1
American Samoa <sup>2</sup>	---	---	---	---	---	---	---	---
Northern Marianas	–	–	0.4	–	0.2	–	–	–

0.0 Quantity more than zero but less than 0.05.

---Data not available.

– Quantity zero.

<sup>1</sup> Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas.

<sup>2</sup> American Samoa has not yet adopted the 2003 U.S. Standard Certificate of Live Birth.

<sup>3</sup> Expanded source of payment categories reported by 35 states and the District of Columbia; see Detailed technical notes.

<sup>4</sup> California and Michigan do not report infant breastfed. See Detailed technical notes.

Table 1. Estimated total population, by race and Hispanic origin and specified Hispanic origin group and estimated female population, by age and race and Hispanic origin and specified Hispanic origin group of woman, and standard errors by age and specified Hispanic origin group: United States, 2021

[Populations estimated as of July 1]

Race and Hispanic origin		Total population	Female population										
			15-44 years	10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
					Total	15-17 years	18-19 years						
All races and origins\1		331,893,745	65,080,433	10,459,561	10,541,690	6,351,879	4,189,811	10,550,759	11,013,419	11,428,324	11,035,485	10,510,756	9,905,753
Non-Hispanic, single-race\2													
	White	196,833,431	35,160,048	5,161,695	5,408,191	3,235,996	2,172,195	5,559,432	5,854,957	6,263,828	6,176,169	5,897,471	5,634,132
	Black	41,858,536	9,118,503	1,455,940	1,442,396	866,631	575,765	1,496,428	1,627,392	1,659,711	1,476,602	1,415,974	1,315,950
	American Indian or Alaska	2,451,916	521,656	88,309	88,710	53,892	34,818	89,209	93,375	92,329	82,133	75,900	70,278
	Asian	19,685,901	4,449,096	540,701	563,597	334,714	228,883	605,414	732,977	868,859	873,370	804,879	767,651
	Native Hawaiian or Pacific	626,246	138,254	21,418	21,194	12,869	8,325	20,601	23,211	25,983	25,200	22,065	18,734
Hispanic\3	Total	62,647,044	13,980,437	2,721,973	2,613,433	1,596,168	1,017,265	2,428,365	2,372,231	2,260,901	2,192,272	2,113,235	1,950,628
	Mexican	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Puerto Rican	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Cuban	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Dominican	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Other Hispanic\4	---	---	---	---	---	---	---	---	---	---	---	---
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--- Data not available.

- 1 Includes population estimates of race and origin groups not shown separately, such as Hispanic single-race white, Hispanic single-race black, and non-Hispanic multiple-race people.
- 2 Persons of non-Hispanic origin may be of any race. Race categories are consistent with the 1997 Office of Management and Budget (OMB) standards. Single-race is defined as only one race reported.
- 3 Includes all persons of Hispanic origin of any race.
- 4 Includes Central and South American and other and unknown Hispanic.

NOTES: Population count estimates are based on the 2020 census; see "Technical Notes." Population estimates for Mexican, Puerto Rican, Cuban, Central and Other Hispanic, which includes includes Central and South American and other and unknown Hispanic, are based on the American Community Survey adjusted to resident population control totals (the 2010-based population estimates for the United States for July 1, 2021). Population estimates for Hispanic total are based on the 2020 census, as of Juy 1, 2021. Population estimates by specified Hispanic origin in this table may not add to population estimates for total Hispanic. Standard errors are shown in parentheses below each population estimate.

SOURCE: U.S. Census Bureau. See references 51 and 56.

Table 2. Estimated total population, female population aged 15-44 years, and age-specific female population: United States, each state, and territory: July 1, 2021												
Geographic Area	Total population	Female population										
		15-44 years	10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
				Total	15-17 years	18-19 years						
United States	331,893,745	65,080,433	10,459,561	10,541,690	6,351,879	4,189,811	10,550,759	11,013,419	11,428,324	11,035,485	10,510,756	9,905,753
Alabama	5,039,877	976,400	159,751	159,313	96,146	63,167	164,940	162,974	169,551	160,798	158,824	154,957
Alaska	732,673	144,275	24,599	21,611	14,050	7,561	21,417	25,451	27,778	26,027	21,991	19,063
Arizona	7,276,316	1,404,610	233,292	235,502	141,404	94,098	238,874	242,715	240,794	227,728	218,997	208,532
Arkansas	3,025,891	583,039	99,971	98,289	60,360	37,929	98,509	96,866	99,656	95,953	93,766	88,970
California	39,237,836	7,973,291	1,251,643	1,257,351	758,597	498,754	1,237,296	1,381,494	1,458,475	1,365,547	1,273,128	1,208,284
Colorado	5,812,069	1,199,633	178,004	180,785	109,194	71,591	181,229	212,532	221,979	210,932	192,176	171,395
Connecticut	3,605,597	684,946	106,403	118,429	68,315	50,114	116,821	109,747	112,662	115,719	111,568	108,416
Delaware	1,003,384	185,597	29,810	31,410	18,376	13,034	28,509	30,503	33,895	31,322	29,958	27,893
District of Columbia	670,050	177,738	15,686	18,829	7,906	10,923	25,320	38,446	39,132	32,130	23,881	18,145
Florida	21,781,128	3,935,590	608,982	601,366	370,642	230,724	617,222	656,066	708,224	685,929	666,783	658,049
Georgia	10,799,566	2,220,822	365,914	370,346	224,283	146,063	360,140	371,767	384,187	369,969	364,413	353,165
Hawaii	1,441,553	263,888	41,260	37,673	23,358	14,315	39,565	44,646	48,646	48,339	45,019	41,121
Idaho	1,900,923	369,349	68,419	65,600	41,158	24,442	59,359	59,594	62,199	62,317	60,280	52,569
Illinois	12,671,469	2,491,982	401,670	407,131	248,613	158,518	401,847	422,376	427,415	423,889	409,324	385,048
Indiana	6,805,985	1,328,151	224,840	226,218	136,646	89,572	232,581	221,470	220,895	215,505	211,482	199,057
Iowa	3,193,079	606,327	104,395	107,213	63,185	44,028	109,852	97,289	95,859	99,602	96,512	85,481
Kansas	2,934,582	568,631	100,786	99,154	59,900	39,254	101,276	92,089	91,258	95,667	89,187	79,410
Kentucky	4,509,394	858,580	142,509	143,068	86,909	56,159	145,178	143,523	146,119	139,501	141,191	134,995
Louisiana	4,624,047	916,561	152,705	145,628	90,372	55,256	148,386	151,231	163,309	159,916	148,091	131,361
Maine	1,372,247	240,818	36,054	38,250	22,814	15,436	36,666	39,886	43,089	42,377	40,550	39,862
Maryland	6,165,129	1,211,511	192,966	193,085	116,398	76,687	184,420	197,330	216,114	216,420	204,142	190,507
Massachusetts	6,984,723	1,411,968	192,286	227,907	122,107	105,800	242,286	241,710	248,350	235,535	216,180	208,862
Michigan	10,050,811	1,895,491	304,296	316,304	189,907	126,397	330,197	323,594	323,784	303,016	298,596	289,909
Minnesota	5,707,390	1,100,012	186,428	183,825	113,289	70,536	175,234	180,099	185,979	195,187	179,688	156,134
Mississippi	2,949,965	578,878	100,597	99,415	60,806	38,609	97,974	95,560	96,871	94,497	94,561	89,677
Missouri	6,168,187	1,188,835	195,140	194,146	118,709	75,437	198,053	200,131	205,175	200,980	190,350	175,185
Montana	1,104,271	205,095	33,534	32,607	20,035	12,572	34,633	34,574	34,991	35,108	33,182	28,823
Nebraska	1,963,692	382,026	67,454	67,606	40,462	27,144	66,848	62,238	60,877	64,397	60,060	53,001
Nevada	3,143,991	614,950	100,654	91,940	59,384	32,556	89,610	108,068	114,839	108,915	101,578	96,186
New Hampshire	1,388,992	253,077	36,923	41,952	23,884	18,068	42,490	41,945	43,902	42,719	40,069	40,067
New Jersey	9,267,130	1,749,003	287,912	283,501	177,163	106,338	272,358	287,683	299,596	304,732	301,133	292,254
New Mexico	2,115,877	404,689	69,886	69,570	42,341	27,229	67,805	67,178	68,807	68,299	63,030	58,160
New York	19,835,913	3,898,025	566,222	592,626	346,938	245,688	622,516	693,194	711,947	660,282	617,460	591,903
North Carolina	10,551,162	2,073,428	330,320	342,077	200,916	141,161	340,552	349,349	362,120	341,519	337,811	332,212
North Dakota	774,948	151,710	25,198	24,554	14,386	10,168	29,108	26,106	25,701	24,785	21,456	18,433
Ohio	11,780,017	2,240,106	366,315	373,485	225,590	147,895	368,867	380,079	390,547	370,309	356,819	339,270
Oklahoma	3,986,639	786,897	136,815	132,133	80,832	51,301	133,665	130,100	134,393	132,940	123,666	112,457
Oregon	4,246,155	835,879	124,767	122,164	74,332	47,832	128,085	141,420	152,525	149,548	142,137	126,378
Pennsylvania	12,964,056	2,425,434	378,713	401,993	233,114	168,879	390,861	403,922	432,604	410,021	386,033	367,291
Rhode Island	1,095,610	216,511	29,165	36,617	18,607	18,010	37,606	36,203	38,803	34,898	32,384	31,185
South Carolina	5,190,705	993,775	163,112	161,737	96,742	64,995	161,326	165,632	177,090	166,370	161,620	155,875
South Dakota	895,376	165,766	30,657	29,505	17,940	11,565	28,557	26,862	27,450	27,568	25,824	22,177
Tennessee	6,975,218	1,367,581	217,759	214,193	132,141	82,052	223,447	241,092	243,265	225,343	220,241	213,213
Texas	29,527,941	6,156,590	1,066,749	1,035,425	636,758	398,667	992,594	1,032,106	1,063,065	1,046,921	986,479	919,708
Utah	3,337,975	734,008	135,799	132,487	81,849	50,638	135,230	123,262	115,362	113,983	113,684	92,506
Vermont	645,570	119,980	16,664	20,644	10,495	10,149	22,246	18,838	19,308	19,821	19,123	17,916
Virginia	8,642,274	1,709,257	265,171	273,055	160,683	112,372	275,701	284,985	297,465	296,015	282,036	264,210
Washington	7,738,692	1,548,735	237,420	224,472	138,470	86,002	228,298	270,127	293,619	279,494	252,725	224,565
West Virginia	1,782,959	314,167	51,338	51,690	31,252	20,438	53,670	51,032	52,298	50,659	54,818	53,767
Wisconsin	5,895,908	1,108,341	183,101	189,414	112,596	76,818	193,825	181,232	178,029	186,860	178,981	162,841
Wyoming	578,803	108,480	19,507	18,395	11,525	6,870	17,710	17,103	18,326	19,177	17,769	15,308
Puerto Rico	3,263,584	626,240	88,092	95,991	56,977	39,014	108,109	111,589	105,832	96,758	107,961	107,672
Virgin Islands	105,870	18,672	3,642	2,913	1,813	1,100	2,622	3,090	3,313	3,817	2,917	3,398
Guam	168,801	32,751	7,088	6,296	3,837	2,459	6,165	5,916	5,376	4,626	4,372	4,656
American Samoa	46,366	10,256	2,036	2,237	1,409	828	1,865	2,045	1,563	1,308	1,238	1,306
Northern Marianas	51,659	9,075	2,321	2,147	1,358	789	1,825	1,613	972	932	1,586	1,753

SOURCE: U.S. Census Bureau. See references 51-53.

**Table 3. Population of the United States, 2010-2021**

[Population enumerated as of April 1 for 2010 and 2020 and estimated as of July 1 for all other years]

Year	United States	
	Population including Armed Forces abroad	Population residing in area
2021	332,140,523	331,893,745
2020	331,693,822	331,449,281
2019	328,475,998	328,239,523
2018	327,403,909	327,167,434
2017	325,939,372	325,719,178
2016	323,348,770	323,127,513
2015	321,654,360	321,418,820
2014	319,133,003	318,857,056
2013	316,432,767	316,128,839
2012	314,250,437	313,914,040
2011	312,008,762	311,591,917
2010	309,178,489	308,745,538

SOURCE: Published data from the U.S. Census Bureau; see references 58.

**Documentation Table 1. Number and percentage of live births by race and Hispanic origin of mother: United States, 2021**

Race	Number		Percentage	
	Total	Non-Hispanic	Total\1	Non-Hispanic
All races\2	3,664,292	2,741,995	100.0	100.0
One race	3,560,161	2,655,013	97.2	96.8
White	2,707,978	1,887,656	73.9	68.8
Black	577,041	517,889	15.7	18.9
American Indian and Alaska Native (AIAN)	34,856	26,124	1.0	1.0
Asian	227,086	213,813	6.2	7.8
Native Hawaiian and Other Pacific Islander (NHOPI)	13,200	9,531	0.4	0.3
More than one race	104,131	86,982	2.8	3.2
Two races	94,715	79,985	2.6	2.9
Black and White	44,220	37,534	1.2	1.4
Black and AIAN	3,052	2,591	0.1	0.1
Black and Asian	2,658	2,410	0.1	0.1
Black and NHOPI	663	572	0.0	0.0
AIAN and White	16,551	13,030	0.5	0.5
AIAN and Asian	420	319	0.0	0.0
AIAN and NHOPI	138	98	0.0	0.0
Asian and White	21,905	19,168	0.6	0.7
Asian and NHOPI	2,254	2,058	0.1	0.1
NHOPI and White	2,854	2,205	0.1	0.1
Three races	8,929	6,688	0.2	0.2
Black, AIAN and White	2,924	2,244	0.1	0.1
Black AIAN and Asian	117	87	0.0	0.0
Black, AIAN and NHOPI	55	39	0.0	0.0
Black, Asian and White	1,152	932	0.0	0.0
Black, Asian and NHOPI	143	124	0.0	0.0
Black, NHOPI, and White	222	163	0.0	0.0
AIAN, Asian and White	504	357	0.0	0.0
AIAN, NHOPI and White	133	89	0.0	0.0
AIAN, Asian and NHOPI	42	25	0.0	0.0
Asian, NHOPI and White	3,637	2,628	0.1	0.1
Four races	458	293	0.0	0.0
Black, AIAN, Asian and White	134	99	0.0	0.0
Black, AIAN, Asian, and NHOPI	8	5	*	*
Black, AIAN, NHOPI and White	29	19	0.0	*
Black, Asian, NHOPI and White	97	68	0.0	0.0
AIAN, Asian, NHOPI and White	190	102	0.0	0.0
Five races				
Black, AIAN, Asian, NHOPI and White	29	16	0.0	*

0.0 Quantity more than zero but less than 0.5.

\* Estimate does not meet NCHS standards of reliability.

\1 Includes births to race and origin groups not shown separately, such as Hispanic, single-race white, Hispanic, single-race black, non-Hispanic, multiple-race women, and births with origin not stated.

\2 Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table, non-Hispanic women are classified by race. Race categories are consistent with the 1997 Office of Management and Budget standards.

NOTE: Race categories are consistent with the 1997 Office of Management and Budget standards.