User Guide to the 2019 Natality Public Use File

Acknowledgments

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Control Count of Records

2019 Natality

File / Data Characteristics

<u>All Files</u>:

Record format: Fixed Format

Code scheme: Numeric/Alphabetic/Blank

Record length: 1330

<u>All Births</u>:

	United States	Territories
Record count	3,757,582	24,373
By occurrence	3,757,582	24,373
By residence	3,747,540	24,083
To foreign residents	10,042	290

2019 Natality Public Use File
Documentation

Position	Length	Field	Description	Values	Definition
1-8	6	FILLER	**Filler**	Blank	
9-12	4	DOB_YY	**Birth Year**	2019	Year of birth
13-14	2	DOB_MM	**Birth Month**	01	January
				02	February
				03	March
				04	April
				05	May
				06	June
				07	July
				08	August
				09	September
				10	October
				11	November
				12	December
15-18	4	FILLER	**Filler**	Blank	
19-22	4	DOB_TT	**Time of Birth**	0000-2359	Time of Birth
				9999	Not Stated
23	1	DOB_WK	**Birth Day of Week**	1	Sunday
				2	Monday
				3	Tuesday
				4	Wednesday
				5	Thursday
				6	Friday
				7	Saturday
24-31	8	FILLER	**Filler**	Blank	
32	1	BFACIL	**Birth Place**	1	Hospital
				2	Freestanding Birth Center
				3	Home (intended)
				4	Home (not intended)
				5	Home (unknown if intended)
				6	Clinic / Doctor's Office
				7	Other
				9	Unknown
33	1	F_FACILITY	**Reporting Flag for Birth Place**	0	Non-Reporting
				1	Reporting
34-49	16	FILLER	**Filler**	Blank	

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Position	Length	Field	Description	Values	Definition
50	1	BFACIL3	**Facility Recode**	1	In Hospital
				2	Not in Hospital
				3	Unknown or Not Stated
51-72	22	FILLER_B	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
73	1	MAGE_IMPFLG	**Mother's Age Imputed** Due to missing data, age imputed.	Blank 1	Age not imputed Age imputed
74	1	MAGE_REPFLG	**Reported Age of Mother Used Flag** Due to missing date of birth, reported age used.	Blank 1	Reported age not used Reported age used
75-76	2	MAGER	**Mother's Single Years of Age**	12	10 – 12 years
				13	13 years
				14	14 years
				15	15 years
				16	16 years
				17	17 years
				18	18 years
				19	19 years
				20	20 years
				21	21 years
				22	22 years
				23	23 years
				24	24 years
				25	25 years
				26	26 years
				27	27 years
				28	28 years
				29	29 years
				30	30 years
				31	31 years
				32	32 years
				33	33 years
				34	34 years
				35	35 years
				36	36 years
				37	37 years
				38	38 years
				39	39 years
				40	40 years
				41	41 years
				42	42 years
				43	43 years

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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	**Mother's Age Recode 14**	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	**Mother's Age Recode 9**	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	**Filler**	Blank	
84	1	MBSTATE_REC	**Mother's Nativity**	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	**Filler**	Blank	
104	1	RESTATUS	**Residence Status** <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.

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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.S. Territories For detailed geography codes see addendum.	1	RESIDENT: State and county of occurrence and residence 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	**Mother's Race Recode 31**		
			United States and all Outlying Areas of the United States except Puerto Rico	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

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Position	Length	Field	Description	Values	Definition
				31	Black, AIAN, Asian, NHOPI, and White
107	2	MRACE6	**Mother's Race Recode 6**		
			United States and all Outlying Areas of the United States except Puerto Rico	1	White (only)
				2	Black (only)
				3	AIAN (only)
				4	Asian (only)
				5	NHOPI (only)
				6	More than one race
108-109	2	MRACE15	**Mother's Race Recode 15**		
			United States and all Outlying Areas of the United States except Puerto Rico	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)
				15	More than one race
110	1	MBRACE	**Bridged Race Mother** Includes individuals reporting only one race and individuals reporting more than one race bridged to a single race.		
			United States and all Outlying Areas of the United States except Puerto Rico	1	White
				2	Black
				3	American Indian or Alaskan Native
				4	Asian or Pacific Islander
			Puerto Rico	1	White
				2	Black
				0	Other (not classified as White or Black)
111	1	MRACEIMP	**Mother's Race Imputed Flag**	Blank	Mother's race not imputed
				1	Unknown race imputed
				2	All other races, formerly coded 09, imputed.

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Position	Length	Field	Description	Values	Definition
112	1	MHISPX	**Mother's Hispanic Origin**	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
113-114	2	FILLER	**Filler**	Blank	
115	1	MHISP_R	**Mother's Hispanic Origin Recode**	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
116	1	F_MHISP	**Reporting Flag for Mother's Origin**	0	Non-Reporting
				1	Reporting
117	1	MRACEHISP	**Mother's Race/Hispanic Origin** Based on single/multiple-race (fields 105-106, 107, and 108-109); for coding to create bridged-race categories (field 110) see "Coding for bridge-race and Hispanic origin categories" in the Detailed Technical Notes.	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	**Filler**	Blank	
119	1	MAR_P	**Paternity Acknowledged**	Y	Yes
				N	No
				U	Unknown
				X	Not Applicable
120	1	DMAR	**Marital Status**		
			United States and all Outlying Areas of the United States except Puerto Rico	1	Married
				2	Unmarried
			Puerto Rico	1	Yes
				2	Unmarried parents living together
				3	Unmarried parents not living together
				9	Unknown or not stated

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Position	Length	Field	Description	Values	Definition
121	1	MAR_IMP	**Mother's Marital Status Imputed**	Blank 1	Marital Status not imputed Marital Status imputed
122	1	FILLER	**Filler**	Blank	
123	1	F_MAR_P	**Reporting Flag for Paternity Acknowledged**	0 1	Non-Reporting Reporting
124	1	MEDUC	**Mother's Education**	1 2 3 4 5 6 7 8 9	8th grade or less 9th through 12th grade with no diploma High school graduate or GED completed Some college credit, but not a degree. Associate degree (AA,AS) Bachelor's degree (BA, AB, BS) Master's degree (MA, MS, MEng, MEd, MSW, MBA) Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD) Unknown
125	1	FILLER	**Filler**	Blank	
126	1	F_MEDUC	**Reporting Flag for Education of Mother**	0 1	Non-Reporting Reporting
127-141	15	FILLER_M	**Filler M**	Blank	

Position	Length	Field	Description	Values	Definition
142	1	FAGERPT_FLG	**Father's Reported Age Used**	Blank 1	Father's reported age not used Father's reported age used
143-146	4	FILLER	**Filler**	Blank	
147-148	2	FAGECOMB	**Father's Combined Age**	09-98 99	Father's combined age in years Unknown or not stated
149-150	2	FAGEREC11	**Father's Age Recode 11**	01 02 03 04 05 06 07 08 09	Under 15 years 15-19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years 50-54 years

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Position	Length	Field	Description	Values	Definition
				10	55-98 years
				11	Not stated
151-152	2	FRACE31	**Father's Race Recode 31**	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
				31	Black, AIAN, Asian, NHOPI, and White
				99	Unknown or Not Stated
153	1	FRACE6	**Father's Race Recode 6**	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	**Father's Race Recode 15**	01	White (only)
				02	Black (only)

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Position	Length	Field	Description	Values	Definition
				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)
				15	More than one race
				99	Unknown or Not Stated
156-158	3	FILLER	**Filler**		
159	1	FHISPX	**Father's Hispanic Origin**	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	**Father's Hispanic Origin Recode**	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	**Reporting Flag for Father's Origin**	0	Non-Reporting
				1	Reporting
162	1	FRACEHISP	**Father's Race/Hispanic Origin** 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)

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Position	Length	Field	Description	Values	Definition
163	1	FEDUC	**Father's Education** Use reporting flag in field 165	1 2 3 4 5 6 7 8 9	8th grade or less 9th through 12th grade with no diploma High school graduate or GED completed Some college credit, but not a degree. Associate degree (AA,AS) Bachelor's degree (BA, AB, BS) Master's degree (MA, MS, MEng, MEd, MSW, MBA) Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD) Unknown
164	1	FILLER	**Filler**	Blank	
165	1	f_FEDUC	**Reporting Flag for Education of Father**	0 1	Non-Reporting Reporting
166-170	5	FILLER_F	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
171-172	2	PRIORLIVE	**Prior Births Now Living**	00-30 99	Number of children still living from previous live births. Unknown or not stated
173-174	2	PRIORDEAD	**Prior Births Now Dead**	00-30 99	Number of children dead from previous live births. Unknown or not stated
175-176	2	PRIORTERM	**Prior Other Terminations**	00-30 99	Number other terminations Unknown or not stated
177-178	2	FILLER	**Filler**	Blank	
179	1	LBO_REC	**Live Birth Order Recode**	1-7 8 9	Number of live birth order. 8 or more live births Unknown or not stated
180-181	2	FILLER	**Filler**	Blank	
182	1	TBO_REC	**Total Birth Order Recode**	1-7 8 9	Number of total birth order. 8 or more total births Unknown or not stated
183-197	15	FILLER	**Filler**	Blank	
198-200	3	ILLB_R	**Interval Since Last Live Birth Recode** Use reporting flag in field 126	000-003 004-300	Plural delivery Months since last live birth

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Position	Length	Field	Description	Values	Definition
				888	Not applicable / 1st live birth
				999	Unknown or not stated
201-202	2	ILLB_R11	**Interval Since Last Live Birth Recode 11** 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 (1st live birth)
				99	Unknown or not stated
203-205	3	FILLER	**Filler**	Blank	
206-208	3	ILOP_R	**Interval Since Last Other Pregnancy Recode** Use reporting flag in field 126	000-003	Plural delivery
				004-300	Months since last live birth
				888	Not applicable / 1st natality event
				999	Unknown or not stated
209-210	2	ILOP_R11	**Interval Since Last Other Pregnancy Recode 11** 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 (1st natality event)
				99	Unknown or not stated
211-213	3	FILLER	**Filler**	Blank	
214-216	3	ILP_R	**Interval Since Last Pregnancy Recode** 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	**Interval Since Last Pregnancy Recode 11** 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

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Position	Length	Field	Description	Values	Definition
				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	

Position	Length	Field	Description	Values	Definition
224-225	2	PRECARE	**Month Prenatal Care Began**	00	No prenatal care
				01-10	Month prenatal care began
				99	Unknown or not stated
226	1	F_MPCB	**Reporting Flag for Month Prenatal Care Began**	0	Non-Reporting
				1	Reporting
227	1	PRECARE5	**Month Prenatal Care Began Recode**	1	1st to 3rd month
				2	4th to 6th month
				3	7th to final month
				4	No prenatal care
				5	Unknown or not stated
228-237	10	FILLER	**Filler**	Blank	
238-239	2	PREVIS	**Number of Prenatal Visits**	00-98	Number of prenatal visits
				99	Unknown or not stated
240-241	2	FILLER	**Filler**	Blank	
242-243	2	PREVIS_REC	**Number of Prenatal Visits Recode**	01	No visits
				02	1 to 2 visits
				03	3 to 4 visits
				04	5 to 6 visits
				05	7 to 8 visits
				06	9 to 10 visits
				07	11 to 12 visits
				08	13 to 14 visits
				09	15 to 16 visits
				10	17 to 18 visits
				11	19 or more visits
				12	Unknown or not stated
244	1	F_TPCV	**Reporting Flag for Total Prenatal Care Visits**	0	Non-Reporting
				1	Reporting

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Position	Length	Field	Description	Values	Definition
245-250	6	FILLER	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
251	1	WIC	**WIC**	Y	Yes
				N	No
				U	Unknown or not stated
252	1	F_WIC	**Reporting Flag for WIC**	0	Non-Reporting
				1	Reporting
253-254	2	CIG_0	**Cigarettes Before Pregnancy**	00-97	Number of cigarettes daily
				98	98 or more cigarettes daily
				99	Unknown or not stated
255-256	2	CIG_1	**Cigarettes 1st Trimester**	00-97	Number of cigarettes daily
				98	98 or more cigarettes daily
				99	Unknown or not stated
257-258	2	CIG_2	**Cigarettes 2nd Trimester**	00-97	Number of cigarettes daily
				98	98 or more cigarettes daily
				99	Unknown or not stated
259-260	2	CIG_3	**Cigarettes 3rd Trimester**	00-97	Number of cigarettes daily
				98	98 or more cigarettes daily
				99	Unknown or not stated
261	1	CIG0_R	**Cigarettes Before Pregnancy Recode**	0	Nonsmoker
				1	1-5
				2	6-10
				3	11-20
				4	21-40
				5	41 or more
				6	Unknown or not stated
262	1	CIG1_R	**Cigarettes 1st Trimester Recode**	0	Nonsmoker
				1	1-5
				2	6-10
				3	11-20
				4	21-40
				5	41 or more
				6	Unknown or not stated
263	1	CIG2_R	**Cigarettes 2nd Trimester Recode**	0	Nonsmoker
				1	1-5

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Position	Length	Field	Description	Values	Definition
				2	6-10
				3	11-20
				4	21-40
				5	41 or more
				6	Unknown or not stated
264	1	CIG3_R	**Cigarettes 3rd Trimester Recode**	0	Nonsmoker
				1	1-5
				2	6-10
				3	11-20
				4	21-40
				5	41 or more
				6	Unknown or not stated
265	1	F_CIGS_0	**Reporting Flag for Cigarettes before Pregnancy**	0	Non-Reporting
				1	Reporting
266	1	F_CIGS_1	**Reporting Flag for Cigarettes 1st Trimester**	0	Non-Reporting
				1	Reporting
267	1	F_CIGS_2	**Reporting Flag for Cigarettes 2nd Trimester**	0	Non-Reporting
				1	Reporting
268	1	F_CIGS_3	**Reporting Flag for Cigarettes 3rd Trimester**	0	Non-Reporting
				1	Reporting
269	1	CIG_REC	**Cigarette Recode**	Y	Yes
				N	No
				U	Unknown or not stated
270	1	F_TOBACO	**Reporting Flag for Tobacco use**	0	Non-Reporting
				1	Reporting
271-279	9	FILLER_R	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
280-281	2	M_Ht_In	**Mother's Height in Total Inches**	30-78	Height in inches
				99	Unknown or not stated
282	1	F_M_HT	**Reporting Flag for Mother's Height**	0	Non-Reporting
				1	Reporting
283-286	4	BMI	**Body Mass Index** Use reporting flag in field 282	13.0-69.9	Body Mass Index
				99.9	Unknown or not stated

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Position	Length	Field	Description	Values	Definition
287	1	BMI_R	**Body Mass Index Recode** 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	**Filler**	Blank	
292-294	3	PWgt_R	**Pre-pregnancy Weight Recode**	075-375 999	Weight in pounds Unknown or not stated
295	1	F_PWGT	**Reporting Flag for Pre-pregnancy Weight**	0 1	Non-Reporting Reporting
296-298	3	FILLER	**Filler**	Blank	
299-301	3	DWgt_R	**Delivery Weight Recode**	100-400 999	Weight in pounds Unknown or not stated
302	1	FILLER	**Filler**	Blank	
303	1	F_DWGT	**Reporting Flag for Delivery Weight**	0 1	Non-Reporting Reporting
304-305	2	WTGAIN	**Weight Gain**	00-97 98 99	Weight gain in pounds 98 pounds and over Unknown or not stated
306	1	WTGAIN_REC	**Weight Gain Recode**	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	**Reporting Flag for Weight Gain**	0 1	Non-Reporting Reporting
308-312	5	FILLER_W	**Filler**	Blank	

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Position	Length	Field	Description	Values	Definition
313-342	30	**Risk Factors**			
313	1	RF_PDIAB	**Pre-pregnancy Diabetes**	Y	Yes
				N	No
				U	Unknown or not stated
314	1	RF_GDIAB	**Gestational Diabetes**	Y	Yes
				N	No
				U	Unknown or not stated
315	1	RF_PHYPE	**Pre-pregnancy Hypertension**	Y	Yes
				N	No
				U	Unknown or not stated
316	1	RF_GHYPE	**Gestational Hypertension**	Y	Yes
				N	No
				U	Unknown or not stated
317	1	RF_EHYPE	**Hypertension Eclampsia**	Y	Yes
				N	No
				U	Unknown or not stated
318	1	RF_PPTERM	**Previous Preterm Birth**	Y	Yes
				N	No
				U	Unknown or not stated
319	1	F_RF_PDIAB	**Reporting Flag for Pre-pregnancy Diabetes**	0	Non-Reporting
				1	Reporting
320	1	F_RF_GDIAB	**Reporting Flag for Gestational Diabetes**	0	Non-Reporting
				1	Reporting
321	1	F_RF_PHYPER	**Reporting Flag for Pre-pregnancy Hypertension**	0	Non-Reporting
				1	Reporting
322	1	F_RF_GHYPER	**Reporting Flag for Gestational Hypertension**	0	Non-Reporting
				1	Reporting
323	1	F_RF_ECLAMP	**Reporting Flag for Hypertension Eclampsia**	0	Non-Reporting
				1	Reporting
324	1	F_RF_PPB	**Reporting Flag for Previous Preterm Birth**	0	Non-Reporting
				1	Reporting
325	1	RF_INFTR	**Infertility Treatment Used**	Y	Yes
				N	No

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Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
326	1	RF_FEDRG	**Fertility Enhancing Drugs**	Y	Yes
				N	No
				X	Not applicable
				U	Unknown or not stated
327	1	RF_ARTEC	**Asst. Reproductive Technology**	Y	Yes
				N	No
				X	Not applicable
				U	Unknown or not stated
328	1	f_RF_INFT	**Reporting Flag for Infertility Treatment**	0	Non-Reporting
				1	Reporting
329	1	F_RF_INF_DRG	**Reporting Flag for Fertility Enhance Drugs**	0	Non-Reporting
				1	Reporting
330	1	F_RF_INF_ART	**Reporting Flag for Reproductive Technology**	0	Non-Reporting
				1	Reporting
331	1	RF_CESAR	**Previous Cesarean**	Y	Yes
				N	No
				U	Unknown or not stated
332-333	2	RF_CESARN	**Number of Previous Cesareans**	00	None
				01-30	Number of previous cesareans
				99	Unknown or not stated
334	1	FILLER	**Filler**	Blank	
335	1	F_RF_CESAR	**Reporting Flag for Previous Cesarean**	0	Non-Reporting
				1	Reporting
336	1	F_RF_NCESAR	**Reporting Flag for Number of Previous Cesareans**	0	Non-Reporting
				1	Reporting
337	1	NO_RISKS	**No Risk Factors Reported**	1	True
				0	False
				9	Not Reported
338-342	5	FILLER_RF	**Filler**	Blank	

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Position	Length	Field	Description	Values	Definition
343-358	15	**Infections Present**			
343	1	IP_GON	**Gonorrhea**	Y	Yes
				N	No
				U	Unknown or not stated
344	1	IP_SYPH	**Syphilis**	Y	Yes
				N	No
				U	Unknown or not stated
345	1	IP_CHLAM	**Chlamydia**	Y	Yes
				N	No
				U	Unknown or not stated
346	1	IP_HEPB	**Hepatitis B**	Y	Yes
				N	No
				U	Unknown or not stated
347	1	IP_HEPC	**Hepatitis C**	Y	Yes
				N	No
				U	Unknown or not stated
348	1	F_IP_GONOR	**Reporting Flag for Gonorrhea**	0	Non-Reporting
				1	Reporting
349	1	F_IP_SYPH	**Reporting Flag for Syphilis**	0	Non-Reporting
				1	Reporting
350	1	F_IP_CHLAM	**Reporting Flag for Chlamydia**	0	Non-Reporting
				1	Reporting
351	1	F_IP_HEPATB	**Reporting Flag for Hepatitis B**	0	Non-Reporting
				1	Reporting
352	1	F_IP_HEPATC	**Reporting Flag for Hepatitis C**	0	Non-Reporting
				1	Reporting
353	1	NO_INFEC	**No Infections Reported**	1	True
				0	False
				9	Not Reported
354-358	5	FILLER_IP	**Filler_IP**	Blank	

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Position	Length	Field	Description	Values	Definition
359-370	12		**Obstetric Procedures**		
359	1	FILLER	**Filler**	Blank	
360	1	OB_ECVS	**Successful External Cephalic Version**	Y	Yes
				N	No
				U	Unknown or not stated
361	1	OB_ECVF	**Failed External Cephalic Version**	Y	Yes
				N	No
				U	Unknown or not stated
362	1	FILLER	**Filler**	Blank	
363	1	F_OB_SUCC	**Reporting Flag for Successful External Cephalic Version**	0	Non-Reporting
				1	Reporting
364	1	F_OB_FAIL	**Reporting Flag for Failed External Cephalic Version**	0	Non-Reporting
				1	Reporting
365-382	17	FILLER_OB	**Filler_OB**	**B**lank	

Position	Length	Field	Description	Values	Definition
383-400	18		**Characteristics of Labor and Delivery**		
383	1	LD_INDL	**Induction of Labor**	Y	Yes
				N	No
				U	Unknown or not stated
384	1	LD_AUGM	**Augmentation of Labor**	Y	Yes
				N	No
				U	Unknown or not stated
385	1	LD_STER	**Steroids**	Y	Yes
				N	No
				U	Unknown or not stated
386	1	LD_ANTB	**Antibiotics**	Y	Yes
				N	No
				U	Unknown or not stated
387	1	LD_CHOR	**Chorioamnionitis**	Y	Yes
				N	No
				U	Unknown or not stated

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Position	Length	Field	Description	Values	Definition
388	1	LD_ANES	**Anesthesia**	Y N U	Yes No Unknown or not stated
389	1	F_LD_INDL	**Reporting Flag for Induction of Labor**	0 1	Non-Reporting Reporting
390	1	F_LD_AUGM	**Reporting Flag for Augmentation of Labor**	0 1	Non-Reporting Reporting
391	1	F_LD_STER	**Reporting Flag for Steroids**	0 1	Non-Reporting Reporting
392	1	F_LD_ANTB	**Reporting Flag for Antibiotics**	0 1	Non-Reporting Reporting
393	1	F_LD_CHOR	**Reporting Flag for Chorioamnionitis**	0 1	Non-Reporting Reporting
394	1	F_LD_ANES	**Reporting Flag for Anesthesia**	0 1	Non-Reporting Reporting
395	1	NO_LBRDLV	**No Characteristics of Labor Reported**	1 0 9	True False Not Reported
396-400	5	FILLER_LD	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
401-414	14		**<u>Method of Delivery</u>**		
401	1	ME_PRES	**Fetal Presentation at Delivery**	1 2 3 9	Cephalic Breech Other Unknown or not stated
402	1	ME_ROUT	**Final Route & Method of Delivery**	1 2 3 4 9	Spontaneous Forceps Vacuum Cesarean Unknown or not stated
403	1	ME_TRIAL	**Trial of Labor Attempted (if cesarean)**	Y N X	Yes No Not applicable

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Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
404	1	F_ME_PRES	**Reporting Flag for Fetal Presentation**	0	Non-Reporting
				1	Reporting
405	1	F_ME_ROUT	**Reporting Flag for Final Route and Method of Deliver**	0	Non-Reporting
				1	Reporting
406	1	F_ME_TRIAL	**Reporting Flag for Trial of Labor Attempted**	0	Non-Reporting
				1	Reporting
407	1	RDMETH_REC	**Delivery Method Recode**	1	Vaginal (excludes vaginal after previous C-section)
				2	Vaginal after previous c-section
				3	Primary C-section
				4	Repeat C-section
				5	Vaginal (unknown if previous c-section)
				6	C-section (unknown if previous c-section)
				9	Not stated
408	1	DMETH_REC	**Delivery Method Recode**	1	Vaginal
				2	C-Section
				9	Unknown
409	1	F_DMETH_REC	**Reporting Flag for Method of Delivery Recode**	0	Non-Reporting
				1	Reporting
410-414	5	FILLER_ME	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
415-432	18		**Maternal Morbidity**		
415	1	MM_MTR	**Maternal Transfusion**	Y	Yes
				N	No
				U	Unknown or not stated
416	1	MM_PLAC	**Perineal Laceration**	Y	Yes
				N	No
				U	Unknown or not stated
417	1	MM_RUPT	**Ruptured Uterus**	Y	Yes
				N	No
				U	Unknown or not stated
418	1	MM_UHYST	**Unplanned Hysterectomy**	Y	Yes
				N	No

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Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
419	1	MM_AICU	**Admit to Intensive Care**	Y	Yes
				N	No
				U	Unknown or not stated
420	1	FILLER	**Filler**	Blank	
421	1	F_MM_MTR	**Reporting Flag for Maternal Transfusion**	0	Non-Reporting
				1	Reporting
422	1	F_MM_ PLAC	**Reporting Flag for Perineal Laceration**	0	Non-Reporting
				1	Reporting
423	1	F_MM_RUPT	**Reporting Flag for Ruptured Uterus**	0	Non-Reporting
				1	Reporting
424	1	F_MM_UHYST	**Reporting Flag for Unplanned Hysterectomy**	0	Non-Reporting
				1	Reporting
425	1	F_MM_AICU	**Reporting Flag for Admission to Intensive Care**	0	Non-Reporting
				1	Reporting
426	1	FILLER	**Filler**	Blank	
427	1	NO_MMORB	**No Maternal Morbidity Reported**	1	True
				0	False
				9	Not Reported
428-432	5	FILLER_MM	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
433	1	ATTEND	**Attendant at Birth**	1	Doctor of Medicine (MD)
				2	Doctor of Osteopathy (DO)
				3	Certified Nurse Midwife (CNM)
				4	Other Midwife
				5	Other
				9	Unknown or not stated
434	1	MTRAN	**Mother Transferred** Use reporting flag in field 126	Y	Yes
				N	No
				U	Unknown
435	1	PAY	**Payment Source for Delivery**	1	Medicaid
				2	Private Insurance

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	Self-Pay
				4	Indian Health Service
				5	CHAMPUS/TRICARE
				6	Other Government (Federal, State, Local)
				8	Other
				9	Unknown
436	1	PAY_REC	**Payment Recode**	1	Medicaid
				2	Private Insurance
				3	Self Pay
				4	Other
				9	Unknown
437	1	F_PAY	**Reporting Flag for Source of Payment**	0	Non-Reporting
				1	Reporting
438	1	F_PAY_REC	**Reporting Flag for Payment Recode**	0	Non-Reporting
				1	Reporting
439-443	5	FILLER_A	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
444-445	2	APGAR5	**Five Minute APGAR Score**	00-10	A score of 0-10
				99	Unknown or not stated
446	1	APGAR5R	**Five Minute APGAR Recode**	1	A score of 0-3
				2	A score of 4-6
				3	A score of 7-8
				4	A score of 9-10
				5	Unknown or not stated
447	1	F_APGAR5	**Reporting Flag for Five minute APGAR**	0	Non-Reporting
				1	Reporting
448-449	2	APGAR10	**Ten Minute APGAR Score** Use reporting flag in field 126	00-10	A score of 0-10
				88	Not applicable
				99	Unknown or not stated
450	1	APGAR10R	**Ten Minute APGAR Recode** Use reporting flag in field 126	1	A score of 0-3
				2	A score of 4-6
				3	A score of 7-8
				4	A score of 9-10
				5	Not stated/not applicable
451-453	3	FILLER	**Filler**	Blank	

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Position	Length	Field	Description	Values	Definition
454	1	DPLURAL	**Plurality Recode**	1	Single
				2	Twin
				3	Triplet
				4	Quadruplet
				5	Quintuplet or higher
455	1	FILLER	**Filler**	Blank	
456	1	IMP_PLUR	**Plurality Imputed**	Blank	Plurality is not imputed
				1	Plurality is imputed
457-458	2	FILLER	**Filler**	Blank	
459	1	SETORDER_R	**Set Order Recode** Use reporting flag in field 126	1	1st
				2	2nd
				3	3rd
				4	4th
				5	5th to 16th
				9	Unknown or not stated
460-474	15	FILLER	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
475	1	SEX	**Sex of Infant**	M	Male
				F	Female
476	1	IMP_SEX	**Imputed Sex**	Blank	Infant Sex not Imputed
				1	Infant Sex is Imputed
477-478	2	DLMP_MM	**Last Normal Menses Month**	01	January
				02	February
				03	March
				04	April
				05	May
				06	June
				07	July
				08	August
				09	September
				10	October
				11	November
				12	December
				99	Unknown or not stated
479-480	2	FILLER	**Filler**	Blank	

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Position	Length	Field	Description	Values	Definition
481-484	4	DLMP_YY	**Last Normal Menses Year**	nnnn 9999	Year of last normal menses Unknown or not stated
485-487	3	FILLER	**Filler**	Blank	
488	1	COMPGST_IMP	**Combined Gestation Imputation Flag**	Blank 1	Combined Gestation is not imputed Combined Gestation is imputed
489	1	OBGEST_FLG	**Obstetric Estimate of Gestation Used Flag**	Blank 1	Obstetric Estimate is not used Obstetric Estimate is used
490-491	2	COMBGEST	**Combined Gestation – Detail in Weeks**	17-47 99	17th through 47th week of Gestation Unknown
492-493	2	GESTREC10	**Combined Gestation Recode 10**	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	**Combined Gestation Recode 3**	1 2 3	Under 37 weeks 37 weeks and over Not stated
495-497	3	FILLER	**Filler**	Blank	
498	1	LMPUSED	**Combined Gestation Used Flag**	Blank 1	Combined gestation not used Combined gestation used
499-500	2	OEGest_Comb	**Obstetric Estimate Edited** (NCHS standard item)	17-47 99	Weeks of gestation Not stated
501-502	2	OEGest_R10	**Obstetric Estimate Recode10** (NCHS standard item)	01 02 03 04 05 06 07	Under 20 weeks 20-27 weeks 28-31 weeks 32-33 weeks 34-36 weeks 37-38 weeks 39 weeks

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Position	Length	Field	Description	Values	Definition
				08	40 weeks
				09	41 weeks
				10	42 weeks and over
				99	Unknown
503	1	OEGest_R3	**Obstetric Estimate Recode 3** (NCHS Standard Item)	1 2 3	Under 37 weeks 37 weeks and over Not stated

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Position	Length	Field	Description	Values	Definition
504-507	4	DBWT	**Birth Weight – Detail in Grams (Edited)**	0227-8165 9999	Number of grams Not stated birth weight
508	1	FILLER	**Filler**	Blank	
509-510	2	BWTR12	**Birth Weight Recode 12**	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	**Birth Weight Recode 4**	1 2 3 4	0227 - 1499 grams 1500 – 2499 grams 2500 - 8165 grams Unknown or not stated
512-516	5	FILLER_G	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
517-536	20		**Abnormal Conditions of the Newborn**		
517	1	AB_AVEN1	**Assisted Ventilation (immediately)**	Y N U	Yes No Unknown or not stated
518	1	AB_AVEN6	**Assisted Ventilation > 6 hrs**	Y N	Yes No

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Position	Length	Field	Description	Values	Definition
				U	Unknown or not stated
519	1	AB_NICU	**Admission to NICU**	Y N U	Yes No Unknown or not stated
520	1	AB_SURF	**Surfactant**	Y N U	Yes No Unknown or not stated
521	1	AB_ANTI	**Antibiotics for Newborn**	Y N U	Yes No 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	

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Position	Length	Field	Description	Values	Definition
537-566	30		**Congenital Anomalies of the Newborn**		
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
539	1	CA_CCHD	**Cyanotic Congenital Heart Disease**	Y N U	Yes No Unknown or not stated
540	1	CA_CDH	**Congenital Diaphragmatic Hernia**	Y N U	Yes No Unknown or not stated
541	1	CA_OMPH	**Omphalocele**	Y N U	Yes No Unknown or not stated
542	1	CA_GAST	**Gastroschisis**	Y N U	Yes No Unknown or not stated
543	1	F_CA_ANEN	**Reporting Flag for Anencephaly**	0 1	Non-Reporting Reporting
544	1	F_CA_MENIN	**Reporting Flag for Meningomyelocele/Spina Bifida**	0 1	Non-Reporting Reporting
545	1	F_CA_HEART	**Reporting Flag for Cyanotic Congenital Heart Disease**	0 1	Non-Reporting Reporting
546	1	F_CA_HERNIA	**Reporting Flag for Congenital Diaphragmatic Hernia**	0 1	Non-Reporting Reporting
547	1	F_CA_OMPHA	**Reporting Flag for Omphalocele**	0 1	Non-Reporting Reporting
548	1	F_CA_GASTRO	**Reporting Flag for Gastroschisis**	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
549	1	CA_LIMB	**Limb Reduction Defect**	Y	Yes
				N	No
				U	Unknown or not stated
550	1	CA_CLEFT	**Cleft Lip w/ or w/o Cleft Palate**	Y	Yes
				N	No
				U	Unknown or not stated
551	1	CA_CLPAL	**Cleft Palate alone**	Y	Yes
				N	No
				U	Unknown or not stated
552	1	CA_DOWN	**Down Syndrome**	C	Confirmed
				P	Pending
				N	No
				U	Unknown
553	1	CA_DISOR	**Suspected Chromosomal Disorder**	C	Confirmed
				P	Pending
				N	No
				U	Unknown
554	1	CA_HYPO	**Hypospadias**	Y	Yes, anomaly reported
				N	No, anomaly not reported
				U	Unknown
555	1	F_CA_LIMB	**Reporting Flag for Limb Reduction Defect**	0	Non-Reporting
				1	Reporting
556	1	F_CA_CLEFTLP	**Reporting Flag for Cleft Lip with or without Cleft Palate**	0	Non-Reporting
				1	Reporting
557	1	F_CA_CLEFT	**Reporting Flag for Cleft Palate Alone**	0	Non-Reporting
				1	Reporting
558	1	F_CA_DOWNS	**Reporting Flag for Down Syndrome**	0	Non-Reporting
				1	Reporting
559	1	F_CA_CHROM	**Reporting Flag for Suspected Chromosomal Disorder**	0	Non-Reporting
				1	Reporting
560	1	F_CA_HYPOS	**Reporting Flag for Hypospadias**	0	Non-Reporting
				1	Reporting
561	1	NO_CONGEN	**No Congenital Anomalies Checked**	1	True
				0	False

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Position	Length	Field	Description	Values	Definition
				9	Not Reported
562-566	5	FILLER_CA	**Filler**	Blank	

Position	Length	Field	Description	Values	Definition
567	1	ITRAN	**Infant Transferred** Use reporting flag in field 126	Y N U	Yes No Unknown or not stated
568	1	ILIVE	**Infant Living at Time of Report** Use reporting flag in field 126	Y N U	Yes No Unknown or not stated
569	1	BFED	**Infant Breastfed at Discharge**	Y N U	Yes No Unknown or not stated
570	1	F_BFED	**Reporting Flag for Breastfed at Discharge**	0 1	Non-Reporting Reporting
571-1330	760	FILLER_X	**Filler**	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

ADDENDUM

Detailed geographic information for the territories.

24-25	2	OCTERR	**Mother's Occurrence Territory/Possession**			Outlying Areas of the United States
					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	**Occurrence FIPS County**			Puerto Rico
					021	Bayamo'n
					025	Caguas
					031	Carolina
					097	Mayaguez
					113	Ponce
					127	San Juan
					999	County of less than 100,000
						Other Outlying Areas of the United States
					000	No county level geography
					999	County of less than 100,000

31	1	OCNTYPOP	**Occurrence County Pop**		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	**Mother's Birth Country**		AA-ZZ	See Geographic Documentation

85-86	2	MRCNTRY	**Mother's Residence Country**		AA-ZZ	See Geographic Documentation

89-90	2	MRTERR	**Mother's Residence Territory**			Outlying Areas of the United States
					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	**Residence FIPS county**		Puerto Rico
				021	Bayamo'n
				025	Caguas
				031	Carolina
				097	Mayaguez
				113	Ponce
				127	San Juan
				999	County of less than 100,000
					Other Outlying Areas of the United States
				000	No county level geography
				999	County of less than 100,000
99	1	RCNTY_POP	**Population of Residence County**	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	**Population of Residence City**	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	**Record Type**	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

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

2019

NATALITY

U.S. DEPARTMENT OF

HEALTH AND HUMAN SERVICES

CENTERS FOR DISEASE CONTROL AND PREVENTION

NATIONAL CENTER FOR HEALTH STATISTICS

Hyattsville, Maryland: 2020

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 2019" [1], and are for use with the 2019 Natality public use data. The 2019 natality micro-data file may be downloaded at 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 1995-2016. Beginning with the 2016 data, all items available in the public use file will be 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.

Key natality items are presented in "Births in the United States, 2019," which will accompany the release of the 2019 public use file [2]. Information on other items can be found in the upcoming 2019 final report and accompanying internet tables [1]. Additional discussion of selected items (e.g., sexually transmitted infections during pregnancy, vaginal births after previous cesarean, and twin childbearing) 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 Virgin Islands and American Samoa did not report for 2019.

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 and Northern Marianas for 2019 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 2019.

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., 2019 births to women aged 20-24 years and the 2019 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 2019 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 2019file 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. 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.

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".

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 launched 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 45 minutes in length. It is available at 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 1968-2019 may be downloaded at 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 [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 2018 is presented by reporting area in **Table B**.

Note the change in 2019 California occurrence births for women of "Central and South American" and "Other and unknown Hispanic" origin. The number of California births by occurrence to "Central and South American" women increased from 17,535 in 2018 to 27,735 in 2019 (a difference of 58.2%), whereas the number births to "Other and unknown Hispanic" women decreased from 34,993 in 2018 to 19,419 in 2019 (45.0%). This change is likely related, at least in part, to the implementation of a new state reporting system and corresponding increases in literal responses providing greater specificity of Hispanic origin.

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 2.7% of mothers in the U.S. reporting more than one race in 2019 (**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 2019, race of mother was imputed for 6.8% 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 2019 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 (555 records; 0.01% for 2019) 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 2019 Final Report [1].

Inferential procedures: Historical information on inferential procedures can be found in the 2014 User Guide [18]. In 2019, 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 2019 on 0.1% 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 2019 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 2019 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 13.8 percent (**Table B**) in 2019, this information was missing for more than one-third of records for one state (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 2019 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 2019 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 2019 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 1st trimester. For example, in 2014, the percentage of births with prenatal care beginning in the 1st trimester was 73.3% when based on LMP (data not available) compared with 76.6% when based on OE. By state, 1st trimester prenatal care based on OE was, on average, 5% higher than 1st 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 2019 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 2019 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 2019 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°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 2019 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, 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 2019 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 49 states and the District of Columbia (excludes California), representing 88.1 percent of 2019 births. 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.

A reporting flag should be used to generate accurate numbers by residence for planned home births. The reporting flag (the file position is specified in the file layout) will exclude births to residents of non-reporting states (California). 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].

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 2019 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 2019 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 2019 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 2019 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 2019 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 2019 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 2019 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, 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 2019 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 34 states and the District of Columbia, representing 56.9 percent of all U.S. births in 2019. 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, Michigan, 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:

[mother's pre-pregnancy weight (lb) / [mother's height (in)]2] x 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 2019 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 2019 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 2019 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 48 states and the District of Columbia (excludes South Carolina and Tennessee), representing 96.3 percent of 2019 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 48 states and the District of Columbia (excludes South Carolina, and Tennessee), representing 96.3 percent of 2019 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 2019 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 2019 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 2019 OE-based preterm birth rate is 10.23% compared with the LMP-based rate of 12.16%. 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 2019 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 l4 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 l 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 2019 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 (46,789) of births in 2019; an additional 6.3 percent (2,933) 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 2019 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) gastrochisis; 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 2019 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 discuss 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, quadruplet, and quintuplet 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 0.004% (166) of all records for 2019.

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 2019 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 48 states and the District of Columbia (excludes California and Michigan), representing 85.2 percent of all U.S. births in 2019. 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 2019 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. 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 2019 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: A 2013 report based on studies in two states 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 [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 2019

These state-specific data quality issues are of particular concern due to documented evidence of underreporting and/or inaccurate reporting for 2019. ***These data should be used with caution.***

Georgia:
- ***Characteristics of Labor & Delivery*** – Augmentation of labor
- ***Prenatal care items*** – Number of prenatal care visits

Michigan:
- ***Breastfeeding*** – Item wording is not consistent with the national standard item wording and data for this state are not considered comparable with those of other states. Use the reporting flag for this item to exclude Michigan data from the reporting area totals.

North Carolina:
- ***Maternal Morbidity*** – Maternal transfusion

Puerto Rico:

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

Rhode Island:

- ***Prenatal care items* –** Number of prenatal care visits (unknowns exceed 25% of records)

Texas:

- ***Risk Factors in this Pregnancy*** – Fertility enhancing drugs

Virginia:

- ***Prenatal care items*** – Number prenatal care visits

Computation of Rates and Other Measures

Population denominators

2019 population estimates: Birth and fertility rates for 2019 shown in the 2019 Final Report [1] are based on populations estimated from the 2010 census as of July 1, 2019. 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 2010 census counts by age, race (consistent with the revised 1997 OMB standards), and sex [34].

Birth and fertility rates by state shown in the 2019 Final Report [1] are based on state-level population estimates based on the 2010 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 2010 census as of July 1, 2019, 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 2010 census estimates. Rates for unmarried women are based on distributions of the population by marital status averaged over a 2-year period for 2018–2019 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, 2019 (2010 census) population levels [51] by NCHS' Division of Vital Statistics [41].

As of the preparation of this report, data from the March CPS for 2020 were not available. Accordingly, the distributions of the population by marital status were based on a 2-year average of

2018 and 2019. 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 2019 population estimates for the specific Hispanic population groups were not available as of the preparation of the 2019 final report. Accordingly, birth and fertility rates for these groups are not shown in this report. Birth and fertility rates for the specified Hispanic population groups will be available in forthcoming expanded report tables of the 2019 Final Report [1]. These estimates will be derived from the 2019 1-year ACS and adjusted according to the (2010-based) postcensal estimates for July 1, 2019.

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 2010–2019 are shown in **Table 3**. A detailed discussion of historical population bases is presented elsewhere [58].

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 2010-2019. 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" [58].

Adjusted rates for 2019 can be computed by multiplying the reported rates by ratios from the 2019 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 [59-62]. 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 [63].

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 1,706.0 in 2019, 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 2019, they would have a total of 1,706.0 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 [64]. 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 [65]. 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" [65].

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 [66].

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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Figure 1. U.S. Standard Certificate of Live Birth, 2003 Revision

U.S. STANDARD CERTIFICATE OF LIVE BIRTH

LOCAL FILE NO.   BIRTH NUMBER:

C H I L D

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

M O T H E R

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? □ Yes □ No

F A T H E R

10a. FATHER'S CURRENT LEGAL NAME (First, Middle, Last, Suffix)   10b. DATE OF BIRTH (Mo/Day/Yr)   10c. BIRTHPLACE (State, Territory, or Foreign Country)

C E R T I F I E R

11. CERTIFIER'S NAME: _____

TITLE: □ MD □ DO □ HOSPITAL ADMIN. □ CNM/CM □ OTHER MIDWIFE

□ OTHER (Specify)_____

12. DATE CERTIFIED _____/_____/_____ MM DD YYYY

13. DATE FILED BY REGISTRAR _____/_____/_____ MM DD YYYY

INFORMATION FOR ADMINISTRATIVE USE

M O T H E R

14. MOTHER'S MAILING ADDRESS: □ 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) □ Yes □ No
IF NO, HAS PATERNITY ACKNOWLEDGEMENT BEEN SIGNED IN THE HOSPITAL? □ Yes □ No

16. SOCIAL SECURITY NUMBER REQUESTED FOR CHILD? □ Yes □ No

17. FACILITY ID. (NPI)

18. MOTHER'S SOCIAL SECURITY NUMBER: 19. FATHER'S SOCIAL SECURITY NUMBER:

INFORMATION FOR MEDICAL AND HEALTH PURPOSES ONLY

M O T H E R

20. MOTHER'S EDUCATION (Check the box that best describes the highest degree or level of school completed at the time of delivery)
- □ 8th grade or less
- □ 9th - 12th grade, no diploma
- □ High school graduate or GED completed
- □ Some college credit but no degree
- □ Associate degree (e.g., AA, AS)
- □ Bachelor's degree (e.g., BA, AB, BS)
- □ Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)
- □ 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)
- □ No, not Spanish/Hispanic/Latina
- □ Yes, Mexican, Mexican American, Chicana
- □ Yes, Puerto Rican
- □ Yes, Cuban
- □ Yes, other Spanish/Hispanic/Latina

(Specify)_____

22. MOTHER'S RACE (Check one or more races to indicate what the mother considers herself to be)
- □ White
- □ Black or African American
- □ American Indian or Alaska Native (Name of the enrolled or principal tribe)_____
- □ Asian Indian
- □ Chinese
- □ Filipino
- □ Japanese
- □ Korean
- □ Vietnamese
- □ Other Asian (Specify)_____
- □ Native Hawaiian
- □ Guamanian or Chamorro
- □ Samoan
- □ Other Pacific Islander (Specify)_____
- □ Other (Specify)_____

F A T H E R

(Mother's Name | Mother's Medical Record No.)

23. FATHER'S EDUCATION (Check the box that best describes the highest degree or level of school completed at the time of delivery)
- □ 8th grade or less
- □ 9th - 12th grade, no diploma
- □ High school graduate or GED completed
- □ Some college credit but no degree
- □ Associate degree (e.g., AA, AS)
- □ Bachelor's degree (e.g., BA, AB, BS)
- □ Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)
- □ 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)
- □ No, not Spanish/Hispanic/Latino
- □ Yes, Mexican, Mexican American, Chicano
- □ Yes, Puerto Rican
- □ Yes, Cuban
- □ Yes, other Spanish/Hispanic/Latino

(Specify)_____

25. FATHER'S RACE (Check one or more races to indicate what the father considers himself to be)
- □ White
- □ Black or African American
- □ American Indian or Alaska Native (Name of the enrolled or principal tribe)_____
- □ Asian Indian
- □ Chinese
- □ Filipino
- □ Japanese
- □ Korean
- □ Vietnamese
- □ Other Asian (Specify)_____
- □ Native Hawaiian
- □ Guamanian or Chamorro
- □ Samoan
- □ Other Pacific Islander (Specify)_____
- □ Other (Specify)_____

26. PLACE WHERE BIRTH OCCURRED (Check one)
- □ Hospital
- □ Freestanding birthing center
- □ Home Birth: Planned to deliver at home? □ Yes □ No
- □ Clinic/Doctor's office
- □ Other (Specify)_____

27. ATTENDANT'S NAME, TITLE, AND NPI

NAME: _____ NPI:_____

TITLE: □ MD □ DO □ CNM/CM □ OTHER MIDWIFE
□ OTHER (Specify)_____

28. MOTHER TRANSFERRED FOR MATERNAL MEDICAL OR FETAL INDICATIONS FOR DELIVERY? □ Yes □ No
IF YES, ENTER NAME OF FACILITY MOTHER TRANSFERRED FROM:

_____

REV. 11/2003

MOTHER

29a. DATE OF FIRST PRENATAL CARE VISIT
_____/_____/_____ ☐ No Prenatal Care
M M   D D   YYYY

29b. DATE OF LAST PRENATAL CARE VISIT
_____/_____/_____
M M   D D   YYYY

30. TOTAL NUMBER OF PRENATAL VISITS FOR THIS PREGNANCY
_____ (If none, enter A0".)

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? ☐ Yes ☐ No

35. NUMBER OF PREVIOUS LIVE BIRTHS (Do not include this child)

35a. Now Living
Number _____
☐ None

35b. Now Dead
Number _____
☐ None

36. NUMBER OF OTHER PREGNANCY OUTCOMES (spontaneous or induced losses or ectopic pregnancies)

36a. Other Outcomes
Number _____
☐ None

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 A0".

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
☐ Private Insurance
☐ Medicaid
☐ Self-pay
☐ Other
(Specify) _____

35c. DATE OF LAST LIVE BIRTH
_____/_____
MM   Y Y Y Y

36b. DATE OF LAST OTHER PREGNANCY OUTCOME
_____/_____
MM   Y Y Y Y

39. DATE LAST NORMAL MENSES BEGAN
_____/_____/_____
M M   D D   YYYY

40. MOTHER'S MEDICAL RECORD NUMBER

MEDICAL AND HEALTH INFORMATION

41. RISK FACTORS IN THIS PREGNANCY (Check all that apply)

Diabetes
☐ Prepregnancy (Diagnosis prior to this pregnancy)
☐ Gestational (Diagnosis in this pregnancy)

Hypertension
☐ Prepregnancy (Chronic)
☐ Gestational (PIH, preeclampsia)
☐ Eclampsia

☐ Previous preterm birth

☐ Other previous poor pregnancy outcome (Includes perinatal death, small-for-gestational age/intrauterine growth restricted birth)

☐ Pregnancy resulted from infertility treatment-If yes, check all that apply:
☐ Fertility-enhancing drugs, Artificial insemination or Intrauterine insemination
☐ Assisted reproductive technology (e.g., in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT))

☐ Mother had a previous cesarean delivery
If yes, how many _____

☐ None of the above

42. INFECTIONS PRESENT AND/OR TREATED DURING THIS PREGNANCY (Check all that apply)

☐ Gonorrhea
☐ Syphilis
☐ Chlamydia
☐ Hepatitis B
☐ Hepatitis C
☐ None of the above

43. OBSTETRIC PROCEDURES (Check all that apply)

☐ Cervical cerclage
☐ Tocolysis

External cephalic version:
☐ Successful
☐ Failed

☐ None of the above

44. ONSET OF LABOR (Check all that apply)

☐ Premature Rupture of the Membranes (prolonged, ∃12 hrs.)

☐ Precipitous Labor (<3 hrs.)

☐ Prolonged Labor (∃ 20 hrs.)

☐ None of the above

45. CHARACTERISTICS OF LABOR AND DELIVERY (Check all that apply)

☐ Induction of labor
☐ Augmentation of labor
☐ Non-vertex presentation
☐ Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery
☐ Antibiotics received by the mother during labor
☐ Clinical chorioamnionitis diagnosed during labor or maternal temperature ≥38°C (100.4°F)
☐ Moderate/heavy meconium staining of the amniotic fluid
☐ 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
☐ Epidural or spinal anesthesia during labor
☐ None of the above

46. METHOD OF DELIVERY

A. Was delivery with forceps attempted but unsuccessful?
☐ Yes ☐ No

B. Was delivery with vacuum extraction attempted but unsuccessful?
☐ Yes ☐ No

C. Fetal presentation at birth
☐ Cephalic
☐ Breech
☐ Other

D. Final route and method of delivery (Check one)
☐ Vaginal/Spontaneous
☐ Vaginal/Forceps
☐ Vaginal/Vacuum
☐ Cesarean
If cesarean, was a trial of labor attempted?
☐ Yes
☐ No

47. MATERNAL MORBIDITY (Check all that apply) (Complications associated with labor and delivery)
☐ Maternal transfusion
☐ Third or fourth degree perineal laceration
☐ Ruptured uterus
☐ Unplanned hysterectomy
☐ Admission to intensive care unit
☐ Unplanned operating room procedure following delivery
☐ None of the above

NEWBORN INFORMATION

NEWBORN

48. NEWBORN MEDICAL RECORD NUMBER

49. BIRTHWEIGHT (grams preferred, specify unit)
_____
9 grams   9 lb/oz

50. OBSTETRIC ESTIMATE OF GESTATION:
_____ (completed weeks)

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) _____

54. ABNORMAL CONDITIONS OF THE NEWBORN (Check all that apply)

☐ Assisted ventilation required immediately following delivery

☐ Assisted ventilation required for more than six hours

☐ NICU admission

☐ Newborn given surfactant replacement therapy

☐ Antibiotics received by the newborn for suspected neonatal sepsis

☐ Seizure or serious neurologic dysfunction

☐ Significant birth injury (skeletal fracture(s), peripheral nerve injury, and/or soft tissue/solid organ hemorrhage which requires intervention)

9 None of the above

55. CONGENITAL ANOMALIES OF THE NEWBORN (Check all that apply)

☐ Anencephaly
☐ Meningomyelocele/Spina bifida
☐ Cyanotic congenital heart disease
☐ Congenital diaphragmatic hernia
☐ Omphalocele
☐ Gastroschisis
☐ Limb reduction defect (excluding congenital amputation and dwarfing syndromes)
☐ Cleft Lip with or without Cleft Palate
☐ Cleft Palate alone
☐ Down Syndrome
☐ Karyotype confirmed
☐ Karyotype pending
☐ Suspected chromosomal disorder
☐ Karyotype confirmed
☐ Karyotype pending
☐ Hypospadias
☐ None of the anomalies listed above

Mother's Name

Mother's Medical Record No. _____

56. WAS INFANT TRANSFERRED WITHIN 24 HOURS OF DELIVERY? 9 Yes 9 No
IF YES, NAME OF FACILITY INFANT TRANSFERRED
TO:_____

57. IS INFANT LIVING AT TIME OF REPORT?
☐ Yes ☐ No ☐ Infant transferred, status unknown

58. IS THE INFANT BEING BREASTFED AT DISCHARGE?
☐ Yes ☐ 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, 2019

Area	Number live births	
	Occurrence[1]	Residence[1,2]
United States	3,757,582	3,747,540
Alabama	57,224	58,615
Alaska	9,735	9,822
Arizona	80,371	79,375
Arkansas	35,314	36,564
California	447,653	446,479
Colorado	63,520	62,869
Connecticut	35,557	34,258
Delaware	10,935	10,562
District of Columbia	13,384	9,079
Florida	220,230	220,002
Georgia	127,255	126,371
Hawaii	16,827	16,797
Idaho	21,762	22,063
Illinois	136,602	140,128
Indiana	81,354	80,859
Iowa	37,558	37,649
Kansas	36,986	35,395
Kentucky	50,874	53,069
Louisiana	59,111	58,941
Maine	11,509	11,779
Maryland	66,793	70,178
Massachusetts	69,916	69,117
Michigan	106,918	107,886
Minnesota	65,082	66,027
Mississippi	35,663	36,636
Missouri	72,912	72,127
Montana	11,122	11,079
Nebraska	25,146	24,755
Nevada	34,731	35,072
New Hampshire	11,825	11,839
New Jersey	96,906	99,585
New Mexico	21,574	22,960

New York	222,347	221,539
North Carolina	120,577	118,725
North Dakota	12,022	10,454
Ohio	134,854	134,461
Oklahoma	47,667	49,143
Oregon	42,288	41,858
Pennsylvania	133,589	134,230
Rhode Island	10,708	10,175
South Carolina	53,448	57,038
South Dakota	12,223	11,449
Tennessee	86,066	80,450
Texas	386,178	377,599
Utah	48,023	46,826
Vermont	5,193	5,361
Virginia	97,400	97,429
Washington	84,764	84,895
West Virginia	19,004	18,136
Wisconsin	62,961	63,270
Wyoming	5,921	6,565

Births occurring to US territorial residents		
Puerto Rico	---	20,353
Virgin Islands	---	---
Guam	---	3,041
American Samoa	---	---
Northern Marianas	---	686

--- Data not available.

[1] Excludes data for the territories.

[2] 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, 2019
[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 [1]	3,747,540	0.0	0.2	1.4	13.8	11.5	18.5	1.0	12.9
Alabama	58,615	–	0.0	0.2	17.9	17.7	20.6	0.0	17.7
Alaska	9,822	0.0	0.1	1.7	15.0	10.9	15.0	1.7	15.7
Arizona	79,375	0.0	0.1	0.4	12.2	11.7	13.9	0.6	12.5
Arkansas	36,564	0.0	0.6	0.8	24.0	22.1	28.0	0.8	22.1
California	446,479	0.0	0.2	6.3	12.6	6.4	15.7	3.9	9.7
Colorado	62,869	0.0	0.2	1.3	8.7	6.6	13.4	1.6	8.1
Connecticut	34,258	0.0	0.1	0.2	9.0	8.9	13.8	0.1	8.9
Delaware	10,562	–	0.5	0.8	34.8	28.4	35.3	0.2	20.1
District of Columbia	9,079	0.0	0.2	1.1	20.4	18.3	28.9	0.0	21.2
Florida	220,002	0.0	0.3	0.9	13.8	11.5	22.4	0.0	11.7
Georgia	126,371	0.0	0.0	0.6	16.4	13.6	18.6	0.7	14.4
Hawaii	16,797	–	0.1	0.9	8.8	8.5	8.9	0.3	8.6
Idaho	22,063	0.0	0.4	0.6	10.1	7.7	15.4	0.4	9.9
Illinois	140,128	0.0	0.1	1.3	13.1	10.8	13.7	0.7	11.6
Indiana	80,859	0.0	0.3	0.1	12.6	11.3	15.1	0.0	12.5
Iowa	37,649	–	0.0	0.2	14.4	13.5	16.2	0.0	13.7
Kansas	35,395	–	0.2	0.4	9.8	9.2	14.0	0.2	9.2
Kentucky	53,069	0.0	0.2	0.5	19.1	17.4	21.3	0.3	18.0
Louisiana	58,941	–	0.0	0.6	15.8	14.7	20.8	0.1	15.1
Maine	11,779	–	0.1	0.3	8.4	8.0	8.9	0.1	10.5
Maryland	70,178	0.0	0.5	0.6	14.4	10.8	22.2	0.3	13.6
Massachusetts	69,117	0.0	0.0	2.6	10.3	7.1	11.9	1.6	4.9
Michigan	107,886	0.0	0.2	1.0	13.6	12.2	15.7	0.2	12.8
Minnesota	66,027	0.0	0.1	0.5	12.2	7.6	14.5	0.3	7.8
Mississippi	36,636	0.0	0.1	0.3	17.3	16.8	20.5	0.0	17.0
Missouri	72,127	0.0	0.7	0.3	15.8	15.2	18.2	0.4	15.6
Montana	11,079	–	–	0.2	9.6	8.8	10.7	0.2	8.7
Nebraska	24,755	–	0.1	0.1	10.6	9.7	21.2	0.1	10.4
Nevada	35,072	0.0	0.2	3.2	14.5	11.2	15.9	0.4	11.7
New Hampshire	11,839	–	0.2	0.7	7.1	5.0	10.5	0.6	5.3
New Jersey	99,585	0.0	0.1	0.7	7.7	6.6	19.6	1.1	8.4
New Mexico	22,960	–	0.1	0.2	16.3	16.1	16.8	0.2	16.5
New York (excluding NYC)	116,138	–	0.0	0.9	10.4	8.8	17.1	0.4	9.4
New York City	105,401	0.0	0.1	0.5	10.2	8.9	20.0	1.4	11.1
North Carolina	118,725	0.0	0.4	0.4	15.7	14.6	24.6	0.1	14.7
North Dakota	10,454	–	0.7	1.3	12.2	10.4	11.7	2.1	12.6
Ohio	134,461	0.0	0.3	0.3	16.4	15.7	18.7	0.2	16.1
Oklahoma	49,143	0.0	0.1	0.3	12.6	11.1	19.4	0.2	12.4
Oregon	41,858	0.0	0.1	0.6	9.5	8.5	13.7	0.7	9.5
Pennsylvania	134,230	0.0	0.4	1.3	13.1	11.6	18.9	1.3	12.7
Rhode Island	10,175	0.1	0.0	4.0	10.9	10.3	27.5	0.4	10.6
South Carolina	57,038	–	0.2	0.5	20.3	19.9	24.9	0.3	20.1
South Dakota	11,449	0.0	0.1	0.3	12.3	9.8	11.8	0.2	9.8
Tennessee	80,450	0.0	0.2	0.6	15.6	14.9	22.0	0.5	15.1
Texas	377,599	0.0	0.1	0.3	12.9	12.4	19.0	0.1	14.3
Utah	46,826	0.0	0.2	3.3	9.7	6.3	13.2	3.8	9.7
Vermont	5,361	–	0.1	0.6	10.6	5.9	10.6	0.7	10.6
Virginia	97,429	–	0.2	1.5	12.3	9.5	16.7	0.1	10.4
Washington	84,895	0.0	0.7	2.2	14.7	9.5	22.0	3.3	15.7
West Virginia	18,136	0.0	0.2	0.2	15.4	1.0	15.8	0.3	15.1
Wisconsin	63,270	0.0	0.1	0.7	37.5	33.7	37.9	0.3	37.2
Wyoming	6,565	–	0.0	0.9	15.2	13.4	17.5	1.8	16.0
Puerto Rico	20,353	–	0.0	0.1	6.0	5.7	7.2	0.1	6.0
Virgin Islands	---	---	---	---	---	---	---	---	---
Guam	3,041	0.2	3.6	3.4	27.3	24.7	30.5	0.6	26.7
American Samoa [2]	---	---	---	---	---	---	---	---	---
Northern Marianas	686	0.9	–	0.6	6.6	6.7	8.3	0.4	6.9

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, 2019--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 [1]	0.0	0.1	2.3	2.5	0.5	2.0	3.0	1.2	0.2
Alabama	0.0	0.0	0.6	0.6	0.3	1.7	3.5	0.2	0.1
Alaska	-	0.0	3.2	4.1	0.6	2.4	5.5	2.1	1.1
Arizona	0.0	0.0	2.5	1.9	0.1	0.5	0.7	0.8	0.1
Arkansas	-	0.0	1.0	1.1	0.5	1.8	3.4	1.1	0.0
California	0.0	0.1	1.2	1.4	0.5	1.8	2.3	0.9	0.1
Colorado	0.0	0.0	2.4	1.8	1.3	4.6	5.6	3.0	0.1
Connecticut	-	-	0.7	0.9	0.0	0.4	0.8	0.4	0.1
Delaware	0.0	0.1	1.5	0.8	0.3	1.1	2.2	2.5	0.2
District of Columbia	-	0.1	3.6	5.0	0.7	0.9	2.3	2.3	0.1
Florida	0.0	0.0	5.6	7.6	0.7	4.2	5.4	1.4	0.5
Georgia	0.0	0.0	2.1	1.9	0.4	0.8	1.3	1.2	0.5
Hawaii	-	0.3	5.9	10.4	0.7	4.4	5.4	8.5	-
Idaho	-	0.4	0.7	1.0	0.2	1.2	2.0	0.7	0.3
Illinois	0.0	0.0	2.9	2.7	0.2	2.7	3.3	1.3	0.2
Indiana	0.0	0.0	0.2	0.2	0.1	0.5	0.8	0.2	0.0
Iowa	-	0.0	0.5	0.5	0.1	0.3	1.0	0.4	0.0
Kansas	-	-	0.7	0.4	0.2	0.6	1.1	0.4	0.0
Kentucky	0.0	0.0	3.7	3.4	0.4	1.2	2.4	0.8	0.0
Louisiana	-	0.1	2.4	1.6	0.3	2.4	3.4	1.5	0.3
Maine	-	0.1	0.3	0.3	0.1	2.0	2.8	0.2	0.1
Maryland	0.0	0.1	4.4	4.4	1.3	2.3	4.2	1.4	0.3
Massachusetts	-	0.0	1.7	1.4	0.3	2.2	2.6	2.2	0.2
Michigan	-	0.0	2.4	1.8	0.4	3.7	4.8	1.5	0.1
Minnesota	-	0.2	0.6	0.6	0.3	0.8	1.4	0.3	0.2
Mississippi	-	0.0	1.4	1.3	0.0	0.5	1.0	0.2	0.0
Missouri	0.0	0.0	3.3	4.6	0.6	1.3	3.1	2.1	0.3
Montana	-	-	0.1	0.1	0.2	0.4	0.6	0.2	0.1
Nebraska	-	0.0	2.7	2.7	0.1	0.9	2.1	0.6	0.2
Nevada	0.0	0.0	6.2	6.3	0.1	3.6	4.1	4.1	0.1
New Hampshire	-	-	0.4	0.3	0.2	2.1	2.8	1.0	0.4
New Jersey	-	0.0	1.3	0.5	0.4	1.1	1.5	0.4	0.2
New Mexico	-	0.0	0.5	0.4	0.3	0.9	1.5	0.4	0.2
New York (excluding NYC)	0.0	0.1	2.6	4.1	1.4	4.1	4.8	1.8	0.6
New York City	0.0	0.0	2.2	2.1	0.1	0.5	0.9	0.7	0.1
North Carolina	0.0	0.5	0.8	0.8	0.2	2.1	3.6	0.3	0.0
North Dakota	0.1	0.2	4.2	4.2	0.2	0.9	1.5	1.4	0.1
Ohio	-	0.0	0.7	0.8	0.1	0.6	1.6	0.3	0.3
Oklahoma	-	0.0	1.1	1.0	0.1	0.6	1.4	0.9	0.1
Oregon	-	0.0	0.4	0.4	0.2	0.9	1.4	0.8	0.1
Pennsylvania	0.0	0.0	3.1	3.4	1.1	7.7	11.0	2.7	0.7
Rhode Island	0.0	0.1	2.7	29.2	1.9	3.7	6.1	2.4	1.8
South Carolina	-	0.1	0.3	0.3	0.6	0.9	1.8	1.9	0.1
South Dakota	-	-	0.9	0.9	0.2	0.8	1.3	0.8	0.0
Tennessee	0.0	0.1	2.9	2.7	0.3	0.7	1.8	0.5	0.2
Texas	0.0	0.0	1.9	1.6	0.5	0.5	1.0	0.0	0.0
Utah	-	0.0	1.1	1.3	0.5	1.6	2.6	3.2	0.0
Vermont	0.1	0.0	0.3	0.5	0.2	1.0	1.7	1.9	0.1
Virginia	0.0	0.0	3.1	0.9	1.2	2.1	2.7	1.8	0.1
Washington	0.0	0.1	8.4	10.8	1.6	5.2	9.0	3.8	1.8
West Virginia	0.0	0.3	0.7	0.7	0.1	0.8	3.9	1.3	0.2
Wisconsin	0.0	0.0	3.1	4.0	0.2	1.6	3.3	1.4	0.3
Wyoming	-	0.0	2.1	1.5	0.9	0.8	1.3	0.4	0.0
Puerto Rico	-	-	0.1	0.1	0.0	0.0	0.3	0.1	0.0
Virgin Islands	---	---	---	---	---	---	---	---	---
Guam	0.2	0.1	19.8	18.1	5.4	14.8	15.7	9.5	-
American Samoa [2]	---	---	---	---	---	---	---	---	---
Northern Marianas	-	0.4	1.3	1.0	1.5	1.7	5.0	2.6	2.3

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, 2019--Con.
[By place of residence]

Reporting areas	Birth interval	Cigarette smoking before and during pregnancy	Source of payment [3]	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 [1]	3.4	0.5	0.7	0.1	0.3	0.1	0.0	0.3	0.1
Alabama	1.8	0.2	0.1	0.0	0.0	0.0	–	0.0	0.0
Alaska	4.2	2.7	1.2	0.8	1.1	1.1	0.6	0.0	0.0
Arizona	0.6	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0
Arkansas	3.1	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
California	0.6	0.5	0.2	0.1	0.2	0.2	0.2	0.5	0.0
Colorado	5.2	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Connecticut	3.2	0.1	0.0	0.4	0.2	0.3	0.1	0.0	0.0
Delaware	3.6	0.4	0.2	0.1	0.4	0.2	0.0	0.1	0.1
District of Columbia	3.5	1.4	0.2	0.0	0.1	0.0	0.0	0.1	0.0
Florida	2.7	0.4	0.5	0.1	0.5	0.2	0.0	0.7	0.1
Georgia	3.2	1.3	0.1	0.2	0.2	0.1	0.1	0.2	0.1
Hawaii	2.2	2.4	0.1	---	---	---	---	4.6	---
Idaho	1.3	0.3	0.2	0.1	0.2	0.0	0.1	0.2	0.0
Illinois	2.8	0.2	0.2	0.1	0.1	0.1	0.0	0.3	0.0
Indiana	2.5	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0
Iowa	2.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	1.2	0.3	0.5	–	–	–	–	0.0	0.0
Kentucky	2.1	0.8	0.4	0.3	0.4	0.3	0.2	0.2	0.1
Louisiana	2.7	1.1	0.0	0.0	0.0	–	0.0	0.0	0.0
Maine	2.5	0.0	0.3	0.0	0.6	0.0	0.1	0.2	0.0
Maryland	6.6	0.6	0.4	0.1	0.0	0.0	–	0.2	0.0
Massachusetts	3.2	0.0	0.3	0.2	0.2	0.2	0.2	0.3	0.2
Michigan	1.6	0.8	0.3	0.2	1.4	0.1	0.1	0.3	0.0
Minnesota	2.2	0.1	0.2	0.1	0.3	0.1	0.1	0.2	0.1
Mississippi	0.7	0.2	0.1	0.0	0.1	0.0	0.0	0.1	0.0
Missouri	5.8	0.8	1.2	0.0	0.0	0.0	0.0	0.8	0.2
Montana	1.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Nebraska	3.4	0.1	1.4	0.1	0.2	0.1	0.0	–	–
Nevada	2.8	1.1	0.3	0.0	0.0	0.0	0.0	0.0	–
New Hampshire	1.4	0.4	0.5	0.4	0.2	0.2	0.1	0.0	0.0
New Jersey	5.4	0.7	0.1	0.0	0.0	0.1	0.0	0.4	0.4
New Mexico	6.7	0.4	0.2	0.0	0.5	0.0	–	0.1	0.0
New York (excluding NYC)	7.0	0.3	0.4	0.3	0.9	0.7	0.0	0.4	0.3
New York City	7.0	0.0	0.9	0.1	0.2	0.0	0.0	0.0	0.0
North Carolina	2.0	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.0
North Dakota	4.6	0.9	1.5	–	–	–	–	0.0	–
Ohio [9]	2.9	0.1	0.4	0.0	0.0	0.0	0.0	0.1	0.0
Oklahoma	3.8	0.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	2.3	0.3	0.2	0.0	0.0	0.0	0.1	0.1	0.0
Pennsylvania	9.5	1.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0
Rhode Island	6.3	1.2	0.1	0.1	0.0	0.1	0.0	0.0	0.1
South Carolina	3.3	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
South Dakota	2.6	0.3	0.1	0.0	0.0	0.0	–	0.0	–
Tennessee	4.3	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Texas	4.7	0.1	1.9	0.1	0.2	0.0	0.0	0.0	0.1
Utah	1.0	0.5	4.0	–	0.0	–	–	–	–
Vermont	4.2	1.4	0.1	0.0	0.0	0.0	0.0	0.2	0.0
Virginia	1.2	0.1	0.2	0.0	0.0	0.0	0.0	0.4	0.0
Washington	8.6	2.0	1.4	0.0	0.0	0.6	0.3	0.9	0.2
West Virginia	3.1	0.2	0.2	0.5	3.2	1.1	0.2	0.7	0.0
Wisconsin	2.4	0.8	1.5	0.3	1.3	0.6	0.1	0.6	0.1
Wyoming	4.4	4.6	0.3	–	–	–	–	–	–
Puerto Rico	0.6	0.1	0.4	0.1	0.2	0.6	0.5	0.1	0.0
Virgin Islands	---	---	---	---	---	---	---	---	---
Guam	6.4	14.5	8.6	1.1	1.3	0.6	0.9	1.9	1.1
American Samoa [2]	---	---	---	---	---	---	---	---	---
Northern Marianas	2.6	1.7	3.1	0.3	1.5	0.7	1.0	0.9	0.9

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, 2019--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 [4]
				5-minute	10-minute			
Total of reporting areas [1]	0.1	0.0	0.1	0.4	0.5	0.1	0.1	0.7
Alabama	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.6
Alaska	0.9	0.1	0.1	0.6	0.7	1.0	–	0.4
Arizona	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.4
Arkansas	0.0	0.1	0.0	0.3	0.3	0.0	0.0	1.3
California	0.2	0.0	0.0	0.8	1.1	0.2	0.2	---
Colorado	0.0	0.3	0.0	0.4	0.4	0.2	0.6	0.0
Connecticut	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.8
Delaware	0.1	0.1	0.0	0.3	0.4	–	0.0	0.4
District of Columbia	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.8
Florida	0.1	0.0	0.0	0.4	0.5	0.1	0.3	0.7
Georgia	0.2	0.1	0.0	0.2	0.3	0.1	0.1	0.8
Hawaii	---	0.1	0.1	0.4	0.4	---	---	0.2
Idaho	0.1	0.0	0.0	0.6	0.6	0.1	0.2	0.5
Illinois	0.1	0.0	0.0	0.1	0.2	0.0	0.1	0.4
Indiana	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.1
Iowa	0.0	0.0	0.0	0.4	0.4	–	0.0	0.3
Kansas	–	0.0	0.0	0.4	0.4	–	–	0.4
Kentucky	0.4	0.0	0.0	0.3	0.3	0.3	0.4	0.6
Louisiana	–	0.1	0.1	0.2	0.2	–	–	2.2
Maine	0.0	0.1	0.1	0.4	0.5	0.1	0.1	1.3
Maryland	0.0	0.0	0.1	0.3	0.3	0.0	0.0	0.1
Massachusetts	0.2	0.4	0.2	0.4	0.4	0.2	0.2	0.4
Michigan	0.1	0.1	0.0	0.3	0.4	0.1	0.6	---
Minnesota	0.1	0.1	0.1	0.3	0.4	0.0	0.0	0.5
Mississippi	0.0	0.1	0.0	0.7	0.7	0.0	0.0	0.1
Missouri	0.0	0.1	0.1	0.6	0.6	–	–	2.2
Montana	0.0	0.0	0.0	0.3	0.3	0.1	0.0	0.2
Nebraska	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1
Nevada	0.0	0.0	0.0	0.1	0.2	0.0	0.0	3.6
New Hampshire	0.3	0.1	0.1	0.4	0.4	0.6	0.8	0.5
New Jersey	0.0	0.4	0.1	0.6	0.6	0.0	0.0	0.5
New Mexico	–	0.1	0.0	0.2	0.2	–	–	0.2
New York (excluding NYC)	0.4	0.3	0.3	0.7	0.7	0.4	0.6	0.8
New York City	0.2	0.0	0.0	0.2	0.3	0.1	0.2	0.1
North Carolina	0.0	0.1	0.0	0.4	0.4	0.0	0.0	0.0
North Dakota	–	0.0	0.0	0.4	0.4	–	–	1.5
Ohio	0.0	0.1	0.1	0.2	0.3	0.0	0.0	0.5
Oklahoma	0.0	0.1	0.0	0.2	0.2	0.0	0.0	1.2
Oregon	0.4	0.0	0.0	0.2	0.2	0.0	0.0	0.7
Pennsylvania	0.0	0.5	0.2	0.6	0.6	0.0	0.0	2.8
Rhode Island	0.0	0.2	0.0	0.2	0.3	0.7	0.4	0.3
South Carolina	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.5
South Dakota	0.1	0.0	0.0	0.4	0.4	0.0	0.0	0.4
Tennessee	0.0	0.2	0.1	0.4	0.5	0.0	0.0	0.5
Texas	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
Utah	0.0	0.0	0.0	0.4	0.5	–	0.0	0.0
Vermont	0.1	0.1	0.1	0.6	0.6	0.0	0.1	0.5
Virginia	0.0	0.1	0.0	0.3	0.5	–	–	0.7
Washington	0.6	0.1	0.2	0.9	0.9	0.0	0.0	1.1
West Virginia	0.8	0.0	0.0	0.3	0.4	0.8	0.0	3.7
Wisconsin	0.4	0.1	0.1	0.4	0.4	0.5	1.3	2.0
Wyoming	–	0.0	0.0	0.3	0.3	0.1	0.3	0.4
Puerto Rico	0.5	0.0	–	0.0	0.1	0.1	0.2	0.2
Virgin Islands	---	---	---	---	---	---	---	---
Guam	0.8	0.6	0.6	0.4	1.9	0.6	1.2	11.9
American Samoa [2]	---	---	---	---	---	---	---	---
Northern Marianas	0.6	1.0	0.6	1.0	1.2	1.0	1.5	1.7

0.0 Quantity more than zero but less than 0.05.
---Data not available.
– Quantity zero.

[1] Excludes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas.

[2] American Samoa has not yet adopted the 2003 U.S. Standard Certificate of Live Birth.

[3] Expanded source of payment categories reported by 35 states and the District of Columbia; see Detailed technical notes.

[4] 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, 2019

[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		328,239,523	64,325,356	10,180,007	10,308,963	6,109,866	4,199,097	10,568,188	11,504,446	11,076,695	10,852,580	10,014,484	10,312,396
Non-Hispanic, single-race\2													
White		197,309,822	35,063,576	5,099,703	5,374,563	3,172,237	2,202,326	5,633,574	6,188,431	6,162,490	6,085,206	5,619,312	6,063,475
Black		41,147,488	9,005,247	1,410,180	1,429,443	834,783	594,660	1,510,571	1,731,951	1,541,900	1,452,176	1,339,206	1,364,444
American Indian or Alaska		2,434,908	513,664	87,343	87,058	51,385	35,673	89,556	98,281	86,658	80,235	71,876	72,903
Asian		18,905,879	4,442,907	520,536	553,165	324,970	228,195	622,844	792,421	857,685	844,068	772,724	752,726
Native Hawaiian or Pacific		595,908	135,256	20,785	20,244	12,098	8,146	20,913	24,749	25,258	24,058	20,034	18,447
Hispanic\3	Total	60,572,237	13,573,396	2,607,641	2,471,758	1,486,528	985,230	2,359,028	2,374,415	2,172,650	2,167,700	2,027,845	1,894,490
	Mexican	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Puerto Rican	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Cuban	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Dominican	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---
	Other Hispanic\4	---	---	---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---	---	---	---	---	---	---

--- 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 2010 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, 2019). Population estimates for Hispanic total are based on the 2010 census, as of Juy 1, 2019. 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, 2019

| Geographic Area | Total population | 15-44 years | 10-14 years | Female population 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	328,239,523	64,325,356	10,180,007	10,308,963	6,109,866	4,199,097	10,568,188	11,504,446	11,076,695	10,852,580	10,014,484	10,312,396
Alabama	4,903,185	949,318	152,364	154,529	91,138	63,391	160,699	169,504	157,860	156,924	149,802	159,489
Alaska	731,545	144,302	23,663	21,516	13,817	7,699	21,903	27,969	27,114	25,103	20,697	20,213
Arizona	7,278,717	1,398,758	234,050	233,494	137,050	96,444	238,938	252,373	231,907	228,707	213,339	217,720
Arkansas	3,017,804	578,319	98,048	96,172	57,778	38,394	98,538	101,740	95,820	96,239	89,810	92,754
California	39,512,223	8,065,265	1,236,285	1,241,516	736,976	504,540	1,287,528	1,494,297	1,432,403	1,363,988	1,245,533	1,263,078
Colorado	5,758,736	1,179,141	177,467	177,225	105,968	71,257	179,754	219,281	215,607	205,593	181,681	177,945
Connecticut	3,565,287	670,572	105,414	117,276	66,803	50,473	116,828	108,598	110,584	111,260	106,026	116,299
Delaware	973,764	180,047	28,614	29,792	17,045	12,747	28,178	32,289	32,048	30,058	27,682	29,439
District of Columbia	705,749	190,372	14,607	19,171	7,690	11,481	28,430	44,478	42,746	32,752	22,795	19,174
Florida	21477737	3889274	591098	587772	352171	235601	615988	695672	679927	670316	639599	681523
Georgia	10,617,423	2,180,019	357,078	360,287	214,454	145,833	352,957	384,940	366,690	366,142	349,003	368,310
Hawaii	1,415,872	262,868	39,487	37,302	22,907	14,395	39,983	48,114	47,757	47,721	41,991	41,750
Idaho	1,787,065	344,821	64,130	61,406	37,692	23,714	55,390	58,782	56,991	58,516	53,736	50,677
Illinois	12,671,821	2,497,251	395,533	402,205	242,434	159,771	408,950	442,312	425,479	424,190	394,115	404,188
Indiana	6,732,219	1,310,454	218,710	222,966	132,118	90,848	230,809	228,815	212,436	214,045	201,383	207,420
Iowa	3,155,070	594,283	101,761	103,383	59,753	43,630	108,676	99,272	93,934	99,254	89,764	88,203
Kansas	2,913,314	561,891	97,552	96,680	57,678	39,002	101,498	93,853	91,408	94,736	83,716	81,794
Kentucky	4,467,673	848,023	139,185	139,306	82,901	56,405	143,968	150,646	137,484	141,124	135,495	141,140
Louisiana	4,648,794	922,449	150,511	144,005	87,364	56,641	149,485	166,954	162,369	160,147	139,489	137,743
Maine	1,344,212	232,728	35,560	37,436	21,838	15,598	36,457	39,875	40,871	40,004	38,085	42,380
Maryland	6,045,680	1,185,432	184,889	186,613	110,637	75,976	182,472	204,624	211,014	210,226	190,483	199,943
Massachusetts	6,892,503	1,393,607	187,477	224,448	119,917	104,531	244,058	248,655	245,738	224,617	206,091	221,214
Michigan	9,986,857	1,878,472	298,196	315,633	186,345	129,288	333,914	339,874	302,872	300,007	286,172	310,638
Minnesota	5,639,632	1,081,656	181,522	176,831	106,990	69,841	176,376	183,591	187,715	191,764	165,379	162,723
Mississippi	2,976,149	584,299	101,009	98,568	58,488	40,080	99,310	102,962	95,205	96,756	91,498	94,380
Missouri	6,137,428	1,177,035	191,486	189,903	113,695	76,208	198,418	209,922	200,070	199,478	179,244	183,965
Montana	1,068,778	195,191	31,720	30,795	18,645	12,150	33,961	34,443	32,686	33,384	29,922	28,701
Nebraska	1,934,408	373,791	65,345	64,915	38,521	26,394	65,923	62,704	60,988	63,636	55,625	53,524
Nevada	3,080,156	601,516	97,571	88,483	56,194	32,289	88,970	112,322	108,890	106,216	96,635	99,410
New Hampshire	1,359,711	245,728	36,437	41,445	23,677	17,768	42,812	41,787	41,545	40,330	37,809	43,521
New Jersey	8,882,190	1,674,091	270,597	269,310	166,481	102,829	266,233	283,706	282,221	290,920	281,701	297,753
New Mexico	2,096,829	398,472	68,678	67,901	40,686	27,215	67,132	69,896	67,175	66,736	59,632	59,423
New York	19,453,561	3,874,787	537,637	577,660	334,120	243,540	635,630	731,653	699,055	641,014	589,775	613,672
North Carolina	10,488,084	2,055,756	326,268	338,155	194,973	143,182	338,141	363,173	347,155	339,183	329,949	353,220
North Dakota	762,062	148,153	23,672	22,784	13,128	9,656	29,403	27,729	24,814	23,770	19,653	18,578
Ohio	11,689,100	2,212,147	358,661	369,297	218,884	150,413	369,692	395,329	374,176	364,521	339,132	360,631
Oklahoma	3,956,971	774,815	132,392	128,687	77,490	51,197	131,368	136,769	130,306	131,579	116,106	115,381
Oregon	4,217,737	827,845	121,661	119,931	71,693	48,238	129,753	148,954	147,583	147,830	133,794	129,643
Pennsylvania	12,801,989	2,382,893	365,908	394,792	224,705	170,087	393,213	420,562	417,238	394,437	362,651	389,967
Rhode Island	1,059,361	208,546	28,256	35,762	18,205	17,557	37,494	36,767	35,743	32,856	29,924	32,892
South Carolina	5,148,714	984,181	159,497	158,802	92,679	66,123	160,292	177,577	168,416	164,484	154,610	164,348
South Dakota	884,659	162,089	29,595	27,955	16,707	11,248	28,355	27,371	27,354	27,301	23,753	22,825
Tennessee	6,829,174	1,333,861	211,554	207,809	126,250	81,559	219,838	247,960	228,129	220,743	209,382	223,094
Texas	28,995,881	6,037,295	1,029,711	1,004,804	610,844	393,960	972,342	1,061,442	1,035,196	1,024,702	938,809	934,150
Utah	3,205,958	702,260	130,045	124,535	76,075	48,460	128,846	122,197	108,654	113,907	104,121	86,950
Vermont	623,989	114,532	16,070	20,014	10,079	9,935	22,106	18,281	18,079	18,672	17,380	18,774
Virginia	8,535,519	1,686,773	256,766	266,936	155,243	111,693	274,705	294,497	291,993	290,813	267,829	277,162
Washington	7,614,893	1,517,257	227,824	219,326	133,192	86,134	228,994	283,289	280,561	268,981	236,106	231,852
West Virginia	1,792,147	315,074	50,037	51,164	30,714	20,450	53,747	54,214	49,648	52,788	53,513	56,776
Wisconsin	5,822,434	1,089,703	179,235	184,817	108,416	76,401	191,799	184,099	176,616	184,899	167,473	170,402
Wyoming	578,759	107,944	19,174	17,449	10,618	6,831	17,934	18,333	18,425	19,211	16,592	15,465
Puerto Rico	3,193,694	615,774	89,847	98,596	56,233	42,363	106,565	110,150	95,503	100,245	104,715	107,356
Virgin Islands	106,631	19,014	3,615	2,912	1,810	1,102	2,866	3,205	3,476	3,498	3,057	3,710
Guam	168,147	32,820	6,998	6,635	3,873	2,762	6,081	5,895	5,187	4,573	4,449	5,094
American Samoa	50,135	10,962	2,429	2,423	1,466	957	2,109	2,191	1,507	1,388	1,344	1,448
Northern Marianas	51,718	8,951	2,467	2,079	1,262	817	1,753	1,401	947	1,092	1,679	2,309

SOURCE: U.S. Census Bureau. See references 51, 52, and 53.

Table 3. Population of the United States, 2010-2019

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

Year	United States	
	Population including Armed Forces abroad	Population residing in area
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 reference 67.

Documentation Table 1. Number and percentage of live births by race and Hispanic origin of mother: United States, 2019

Race	Number		Percentage	
	Total	Non-Hispanic	Total\1	Non-Hispanic
All races\2	3,747,540	2,825,286	100.0	100.0
One race	3,646,267	2,740,976	97.3	97.0
White	2,744,570	1,915,912	73.2	67.8
Black	600,281	548,075	16.0	19.4
American Indian and Alaska Native (AIAN)	36,381	28,450	1.0	1.0
Asian	252,099	238,769	6.7	8.5
Native Hawaiian and Other Pacific Islander (NHOPI)	12,936	9,770	0.3	0.3
More than one race	101,273	84,310	2.7	3.0
Two races	91,844	77,067	2.5	2.7
Black and White	42,299	35,570	1.1	1.3
Black and AIAN	3,138	2,637	0.1	0.1
Black and Asian	2,576	2,340	0.1	0.1
Black and NHOPI	623	545	0.0	0.0
AIAN and White	17,138	13,507	0.5	0.5
AIAN and Asian	437	335	0.0	0.0
AIAN and NHOPI	126	103	0.0	0.0
Asian and White	20,470	17,834	0.5	0.6
Asian and NHOPI	2,168	2,029	0.1	0.1
NHOPI and White	2,869	2,167	0.1	0.1
Three races	8,954	6,945	0.2	0.2
Black, AIAN and White	3,153	2,538	0.1	0.1
Black AIAN and Asian	121	107	0.0	0.0
Black, AIAN and NHOPI	43	36	0.0	0.0
Black, Asian and White	1,018	832	0.0	0.0
Black, Asian and NHOPI	140	123	0.0	0.0
Black, NHOPI, and White	208	165	0.0	0.0
AIAN, Asian and White	556	394	0.0	0.0
AIAN, NHOPI and White	131	82	0.0	0.0
AIAN, Asian and NHOPI	43	28	0.0	0.0
Asian, NHOPI and White	3,541	2,640	0.1	0.1
Four races	445	279	0.0	0.0
Black, AIAN, Asian and White	143	108	0.0	0.0
Black, AIAN, Asian, and NHOPI	12	8	*	*
Black, AIAN, NHOPI and White	28	15	0.0	*
Black, Asian, NHOPI and White	75	54	0.0	0.0
AIAN, Asian, NHOPI and White	187	94	0.0	0.0
Five races				
Black, AIAN, Asian, NHOPI and White	30	19	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.