

**DOCUMENTATION OF THE
DETAIL NATALITY TAPE FILE FOR
1998 DATA**

**SPECIAL NOTICE
EFFECTIVE WITH 1998 DATA THE
COMMONWEALTH OF THE NORTHERN
MARIANA ISLANDS RECORDS ARE INCLUDED
IN THE TERRITORIES PUBLIC-USE FILE.**

**EFFECTIVE WITH 1997 DATA
AMERICAN SAMOA RECORDS ARE INCLUDED
IN THE TERRITORIES PUBLIC-USE FILE.**

Public Use Data Tape Documentation - Natality Detail 1998 Data

This tape documentation was prepared in the Division of Vital Statistics. Manju Sharma of the Systems, Programming, and Statistical Resources Branch was responsible for developing the natality documentation and for providing all of the computer programming services necessary to keep it up-to-date.

Melissa Park of the Reproductive Statistics Branch prepared the Technical Appendix. The Registration Methods Section and the Data Acquisition and Evaluation Branch provided consultation to State Vital Statistics offices regarding collection of birth certificate data.

Questions on the documentation or general questions concerning the natality file should be directed to the of the Systems, Programming, and Statistical Resources Branch, Division of Vital Statistics, NCHS, 6525 Belcrest Road, Room 840, Hyattsville, MD 20782 (301-458-4777).

Questions concerning the Technical Appendix or substantive questions concerning the natality data should be directed to the Reproductive Statistics Branch, Division of Vital Statistics, NCHS, 6525 Belcrest Road, Room 820, Hyattsville, MD 20782 (301-458-4111).

Documentation of the Detail Natality Data File for 1998 Data

Since 1985 natality statistics for all States and the District of Columbia have been based on information from the total file of records. The information is received on computer data tapes coded by the States and provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program. NCHS receives the data for this file from the registration offices of all States, the District of Columbia, and New York City. Natality data for Puerto Rico, Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands (referred to as Northern Marianas) are included as separate data-set in the public-use file.

Natality data for the United States are limited to births occurring within the United States to U.S. residents and nonresidents. Births to nonresidents of the United States are excluded from all tabulations by place of residence. Births occurring to U.S. citizens outside the United States are not included in this file. Natality data for Puerto Rico, Virgin Islands, Guam, American Samoa and Northern Marianas are limited to births occurring within the respective territories.

Effective January 1, 1989, a revised U.S. Standard Certificate of Live Birth replaced the 1978 revision. The 1989 revision provides a wide variety of new information on maternal and infant health characteristics, representing a significant departure from previous versions in both content and format. For a more detailed discussion of the revised and new items refer to the technical appendix part of this document.

The Office of Management and Budget revised its designation of metropolitan statistical areas based on figures from the 1990 Census. Effective with the 1990 data file, NCHS has been using these new definitions and codes as indicated in the listing of 320 Metropolitan Statistical Areas (MSA's), Primary Metropolitan Statistical Areas (PMSA's), and New England County Metropolitan Areas (NECMA'S) included in this documentation. There are also 20 Consolidated Metropolitan Statistical Areas (CMSA's), which are made up of PMSA's. Because other geographic changes based on 1990 Census became effective with 1994 data file, the metropolitan statistical area destination were updated as well. Effective with the 1994 data-file there are 311 MSA's, PMSA's, and NECMA'S and 18 CMSA's as indicated in the listing included in this documentation.

NCHS has adopted a new policy on release of vital statistics unit record data files. This new policy was implemented for the 1989 vital event files to prevent the inadvertent disclosure of individuals and institutions. As a result, the files for 1989 and later years do not contain the actual day of the birth or the dates of birth of the mother or father. The geographic detail is also restricted; only counties and cities of 100,000 or more population based on the 1990 Census, as well as metropolitan areas of 100,000 or more population based on the 1990 Census, are identified.

Included in this document are:

1. List of data elements and tape locations.
2. Machine/File/Data Characteristics.
3. Detail Record Layout.
4. Geographic Code Outline.
5. Metropolitan Statistical Areas as adapted for use by NCHS/DVS.
6. Technical Appendix.
7. Table 1. Counts of Births by occurrence and residence for each State
8. Report of Final Natality Statistics, 1998

SYMBOLS USED IN TABLES

Symbol	Explanation
---	Data not available
...	Category not applicable
-	Quantity zero
0.0	Quantity more than 0 but less than 0.05
*	Figure does not meet standards of reliability or precision

List of Data Elements and Tape Locations

<u>Data Items</u>	<u>Locations</u>
1. General	
a. Data year	1-4
b. Record type	5
c. Resident status	6
2. Occurrence	
a. NCHS State	16-17
b. Expanded NCHS State	14-15
c. NCHS County	18-20
d. Population size - county	26
e. Division	12
f. Region	11
g. FIPS State	21-22
h. FIPS County	23-25
3. Residence	
a. NCHS State	32-33
b. Expanded NCHS State	30-31
c. NCHS County	34-36
d. NCHS City	37-39
e. Population size - city	40
f. Population size - county	58
g. NCHS PSMA/MSA	347-349
h. Met/Nonmet county	41
i. Division	28
j. Region	27
k. FIPS State	42-43
l. FIPS County	44-46
m. FIPS Place	47-51
n. CMSA	52-53
o. FIPS PSMA/MSA	54-57
4. Prenatal Care	
a. Month began	106-109
b. Number of visits	110-113
c. Adequacy of care recode	93
5. Child	
a. Sex	188-189
b. Number at delivery	201
c. Birthweight	193-199
d. Apgar score	205-207
e. Gestation	181-187,208-209
f. Month/year of birth	172-173,176-179
g. Day of week of birth	180

List of Data Elements and Tape Locations

	<u>Data Items</u>	<u>Locations</u>
6.	Mother	
	a. Age	68-76,91-92
	b. Race	79-82
	c. Marital status	86-87
	d. Education	83-85
	e. Place of birth	88-90
	f. Hispanic origin	77-78
7.	Pregnancy History	
	a. Born alive, now living	94-95
	b. Born alive, now dead	96-97
	c. Other terminations	98-99
	d. Total birth order	103-105
	e. Live birth order	100-102
8.	Father	
	a. Age	154-157,166-167
	b. Race	160-162
	c. Hispanic origin	158-159
9.	Other Items	
	a. Residence reporting flags	307-326
	b. Attendant at birth	10
	c. Place of delivery	8-9
	d. Interval since last live birth	128-132
10.	Medical and Health Data	
	a. Method of delivery	217-222,224
	b. Medical risk factors	225-241
	c. Other risk factors	
	Tobacco	242-245
	Alcohol	246-249
	Weight gain during pregnancy	250-252
	d. Obstetric procedures	253-259
	e. Complications of labor and/or delivery	260-275
	f. Abnormal conditions of the newborn	276-284
	g. Congenital anomalies	285-306

Machine/File/Data Characteristics:

ALL DATA SETS:

1.	Machine used:	IBM/3081/K
2.	Language used:	PL/I
3.	File organization:	One file, multiple reels
4.	Record format:	Blocked, fixed format
5.	Record mode:	IBM/EBCDIC 8-bit code
6.	Code scheme:	Numeric/Alphabetic/Blanks
7.	Last block:	May be a short block
8.	Record length:	350
9.	Blocksize:	32550

U.S. DATA SET:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 3,945,192
	b.	By residence: 3,941,553
	c.	To foreign residents: 3,639

PUERTO RICO, VIRGIN ISLANDS, AND GUAM DATA SET:

1.	Record count:	69,911
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PUERTO RICO:

2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 60,518
	b.	By residence:
		60,412

VIRGIN ISLANDS:

1.	Record count:	
.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 1,915
	b.	By residence: 1,800

GUAM:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 4,328
	b.	By residence: 4,318

AMERICAN SAMOA:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 1,688
	b.	By residence: 1,688

NORTHERN MARIANAS:

1.	Record count:	
2.	Data counts:	ALL BIRTHS:
	a.	By occurrence: 1,462
	b.	By residence: 1,462

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
1-4	4	<u>DATAYEAR</u> <u>Year Birth of Child (Data Year)</u> 1998 ... 1998
5	1	<u>RECTYPE</u> <u>Record Type</u> 1 ... Resident: State and county of occurrence and residence are the same. 2 ... Nonresident: State and/or county of occurrence and residence are different.
6	1	<u>RESTATUS</u> <u>Resident Status</u> <u>United States occurrence</u> 1 ... RESIDENTS: State and county of occurrence and residence are the same. 2 ... INTRASTATE NONRESIDENTS: State of occurrence and residence are the same, but county is different. 3 ... INTERSTATE NONRESIDENTS: State of occurrence and residence are different, but both are in the U.S. 4 ... FOREIGN RESIDENTS: State of occurrence is one of the 50 States or the District of Columbia, but place of residence of mother is outside of the U.S. <u>Puerto Rico occurrence</u> 1 ... RESIDENTS: Territory and county equivalent of occurrence and residence are the same. 2 ... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different. 4 ... FOREIGN RESIDENTS: Occurred in Puerto Rico to a resident of any other place.

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
6	1	<p><u>RESTATUS</u> <u>Resident Status (Cont'd)</u></p> <p><u>Virgin Islands occurrence</u></p> <p>1 ... RESIDENTS: Territory and county equivalent of occurrence and residence are the same.</p> <p>2 ... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.</p> <p>4 ... FOREIGN RESIDENTS: Occurred in the Virgin Islands to a resident of any other place.</p> <p><u>Guam occurrence</u></p> <p>1 ... RESIDENTS: Occurred in Guam to a resident of Guam or to a resident of the U.S.</p> <p>4 ... FOREIGN RESIDENTS: Occurred in Guam to a resident of any place other than Guam or of the U.S.</p> <p><u>American Samoa occurrence</u></p> <p>1 ... RESIDENTS: Territory and county equivalent of occurrence and residence are the same.</p> <p>2 ... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.</p> <p>4 ... FOREIGN RESIDENTS: Occurred in the American Samoa to a resident of any other place.</p> <p><u>Northern Marianas occurrence</u></p> <p>1 ... RESIDENTS: Territory and county equivalent of occurrence and residence are the same.</p> <p>2 ... INTRATERRITORY NONRESIDENTS: Territory of occurrence and residence are the same, but county equivalent is different.</p> <p>4 ... FOREIGN RESIDENTS: Occurred in the Northern Marianas to a resident of any other place.</p>
7	1	<p><u>RECWT</u> <u>Record Weight</u></p>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		1 ... Constant - as of the 1985 data year, this file contains data on a 100-percent basis from all reporting areas.
8	1	<u>PLDEL</u> <u>Place or Facility of Birth</u>
		1 ... Hospital
		2 ... Freestanding Birthing Center
		3 ... Clinic or Doctor's Office
		4 ... A Residence
		5 ... Other
		9 ... Unknown or Not Stated
9	1	<u>PLDEL3</u> <u>Place or Facility of Birth Recode</u>
		1 ... In Hospital
		2 ... Not in a Hospital
		3 ... Unknown or Not Stated
10	1	<u>BIRATTND</u> <u>Attendant at Birth</u>
		1 ... Doctor of Medicine (M.D.)
		2 ... Doctor of Osteopathy (D.O.)
		3 ... Certified Nurse Midwife (C.N.M.)
		4 ... Other Midwife
		5 ... Other
		9 ... Unknown or Not Stated
11-26	16	<u>NOCCUR</u> <u>Place of Occurrence</u>
11-13	3	<u>RDSSCOCC</u> <u>Region, Division, and State Subcode of Occurrence</u>
11	1	<u>REGNOCC</u> <u>Region of Occurrence</u>
12	1	<u>DIVOCC</u> <u>Division of Occurrence</u>
13	1	<u>STSUBOCC</u> <u>State Subcode of Occurrence</u>

States are coded within division and the structure is designed to sequence the States as they appear in NCHS publications.

1998
Detail Natality Record

<u>Tape</u>	<u>Field</u>	<u>Item and Code Outline</u>
<u>Location</u>	<u>Size</u>	
		000 ... Not applicable: P.R., V.I., A.S., Guam or M.P. occurrence
1		... <u>NORTHEAST</u>
	1	... New England
	1	... Maine
	2	... New Hampshire
	3	... Vermont
	4	... Massachusetts
	5	... Rhode Island
	6	... Connecticut
	2	... <u>Middle Atlantic</u>
	1	... New York
	2	... New Jersey
	3	... Pennsylvania
	2	... <u>MIDWEST</u>
	3	... <u>East North Central</u>
	1	... Ohio
	2	... Indiana
	3	... Illinois
	4	... Michigan
	5	... Wisconsin
	4	... <u>West North Central</u>
	1	... Minnesota
	2	... Iowa
	3	... Missouri
	4	... North Dakota
	5	... South Dakota
	6	... Nebraska
	7	... Kansas
	3	... <u>SOUTH</u>
	5	... <u>South Atlantic</u>
	1	... Delaware
	2	... Maryland
	3	... District of Columbia
	4	... Virginia
		<u>STSUBOCC</u>
13	1	<u>State Subcode of Occurrence (Cont'd)</u>
		5 ... West Virginia
		6 ... North Carolina
		7 ... South Carolina
		8 ... Georgia
		9 ... Florida
	6	... <u>East South Central</u>
	1	... Kentucky
	2	... Tennessee
	3	... Alabama
	4	... Mississippi
	7	... <u>West South Central</u>
	1	... Arkansas
	2	... Louisiana
	3	... Oklahoma

1998
Detail Natality Record

**Tape
Location**

**Field
Size**

Item and Code Outline

	4	...	Texas
4		...	<u>WEST</u>
	8	...	<u>Mountain</u>
	1	...	Montana
	2	...	Idaho
	3	...	Wyoming
	4	...	Colorado
	5	...	New Mexico
	6	...	Arizona
	7	...	Utah
	8	...	Nevada
	9	...	<u>Pacific</u>
	1	...	Washington
	2	...	Oregon
	3	...	California
	4	...	Alaska
	5	...	Hawaii

14-15

2

STNATEXP

Expanded State of Occurrence

This item is designed to separately identify New York city records from other New York State records.

United States

01	...	Alabama
02	...	Alaska
03	...	Arizona
04	...	Arkansas
05	...	California

14-15

2

STNATEXP

Expanded State of Occurrence (Cont'd)

06	...	Colorado
07	...	Connecticut
08	...	Delaware
09	...	District of Columbia
10	...	Florida
11	...	Georgia
12	...	Hawaii
13	...	Idaho
14	...	Illinois
15	...	Indiana
16	...	Iowa
17	...	Kansas
18	...	Kentucky
19	...	Louisiana
20	...	Maine
21	...	Maryland
22	...	Massachusetts
23	...	Michigan
24	...	Minnesota
25	...	Mississippi

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		26 ... Missouri
		27 ... Montana
		28 ... Nebraska
		29 ... Nevada
		30 ... New Hampshire
		31 ... New Jersey
		32 ... New Mexico
		33 ... New York
		34 ... New York city
		35 ... North Carolina
		36 ... North Dakota
		37 ... Ohio
		38 ... Oklahoma
		39 ... Oregon
		40 ... Pennsylvania
		41 ... Rhode Island
		42 ... South Carolina
		43 ... South Dakota
		44 ... Tennessee
		45 ... Texas
		46 ... Utah
		47 ... Vermont
		48 ... Virginia
		49 ... Washington
14-15	2	<u>STNATEXP</u> <u>Expanded State of Occurrence (Cont'd)</u>
		50 ... West Virginia
		51 ... Wisconsin
		52 ... Wyoming
		<u>Puerto Rico</u>
		53 ... Puerto Rico
		<u>Virgin Islands</u>
		54 ... Virgin Islands
		<u>Guam</u>
		55 ... Guam
		<u>American Samoa</u>
		62 ... American Samoa
		<u>Northern Marianas</u>
		63 ... Northern Marianas
16-17	2	<u>STATENAT</u> <u>State of Occurrence</u>
		<u>United States</u>
		01 ... Alabama
		02 ... Alaska

1998
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		03 ... Arizona
		04 ... Arkansas
		05 ... California
		06 ... Colorado
		07 ... Connecticut
		08 ... Delaware
		09 ... District of Columbia
		10 ... Florida
		11 ... Georgia
		12 ... Hawaii
		13 ... Idaho
		14 ... Illinois
		15 ... Indiana
		16 ... Iowa
		17 ... Kansas
		18 ... Kentucky
		19 ... Louisiana
		20 ... Maine
		21 ... Maryland

16-17

2

STATENAT
State of Occurrence (Cont'd)

22	...	Massachusetts
23	...	Michigan
24	...	Minnesota
25	...	Mississippi
26	...	Missouri
27	...	Montana
28	...	Nebraska
29	...	Nevada
30	...	New Hampshire
31	...	New Jersey
32	...	New Mexico
33	...	New York
34	...	North Carolina
35	...	North Dakota
36	...	Ohio
37	...	Oklahoma
38	...	Oregon
39	...	Pennsylvania
40	...	Rhode Island
41	...	South Carolina
42	...	South Dakota
43	...	Tennessee
44	...	Texas
45	...	Utah
46	...	Vermont
47	...	Virginia
48	...	Washington
49	...	West Virginia
50	...	Wisconsin
51	...	Wyoming

1998
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		06 ... California
		08 ... Colorado
		09 ... Connecticut
		10 ... Delaware
		11 ... District of Columbia
		12 ... Florida
		13 ... Georgia
21-22	2	<u>STOCCFIP</u>
		<u>State of Occurrence (FIPS) (Cont'd)</u>
		15 ... Hawaii
		16 ... Idaho
		17 ... Illinois
		18 ... Indiana
		19 ... Iowa
		20 ... Kansas
		21 ... Kentucky
		22 ... Louisiana
		23 ... Maine
		24 ... Maryland
		25 ... Massachusetts
		26 ... Michigan
		27 ... Minnesota
		28 ... Mississippi
		29 ... Missouri
		30 ... Montana
		31 ... Nebraska
		32 ... Nevada
		33 ... New Hampshire
		34 ... New Jersey
		35 ... New Mexico
		36 ... New York
		37 ... North Carolina
		38 ... North Dakota
		39 ... Ohio
		40 ... Oklahoma
		41 ... Oregon
		42 ... Pennsylvania
		44 ... Rhode Island
		45 ... South Carolina
		46 ... South Dakota
		47 ... Tennessee
		48 ... Texas
		49 ... Utah
		50 ... Vermont
		51 ... Virginia
		53 ... Washington
		54 ... West Virginia
		55 ... Wisconsin
		56 ... Wyoming
		<u>Puerto Rico</u>
		72 ... Puerto Rico

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
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28	1	<u>DIVRES</u> <u>Division of Residence</u>
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29	1	<u>STSUBRES</u> <u>State Subcode of Residence</u>
----	---	--

States are coded within Division and the code structure is designed to sequence the States as they appear in NCHS publications.

APPLICABLE TO U.S. ONLY

000	...	<u>Foreign Residents</u>
1	...	<u>NORTHEAST</u>
1	...	<u>New England</u>
1	...	Maine
2	...	New Hampshire
3	...	Vermont
4	...	Massachusetts
5	...	Rhode Island
6	...	Connecticut
2	...	<u>Middle Atlantic</u>
1	...	New York
2	...	New Jersey
3	...	Pennsylvania
2	...	<u>MIDWEST</u>
3	...	<u>East North Central</u>
1	...	Ohio
2	...	Indiana
3	...	Illinois
4	...	Michigan
5	...	Wisconsin
4	...	<u>West North Central</u>
1	...	Minnesota
2	...	Iowa
3	...	Missouri
4	...	North Dakota
5	...	South Dakota
6	...	Nebraska
7	...	Kansas
3	...	<u>SOUTH</u>

29	1	<u>STSUBRES</u> <u>State Subcode of Residence (Cont'd)</u>
----	---	---

5	...	<u>South Atlantic</u>
1	...	Delaware
2	...	Maryland
3	...	District of Columbia
4	...	Virginia
5	...	West Virginia
6	...	North Carolina

1998
Detail Natality Record

**Tape
Location**

**Field
Size**

Item and Code Outline

7	...	South Carolina
8	...	Georgia
9	...	Florida
6	...	<u>East South Central</u>
1	...	Kentucky
2	...	Tennessee
3	...	Alabama
4	...	Mississippi
7	...	<u>West South Central</u>
1	...	Arkansas
2	...	Louisiana
3	...	Oklahoma
4	...	Texas
4	...	<u>WEST</u>
8	...	<u>Mountain</u>
1	...	Montana
2	...	Idaho
3	...	Wyoming
4	...	Colorado
5	...	New Mexico
6	...	Arizona
7	...	Utah
8	...	Nevada
9	...	<u>Pacific</u>
1	...	Washington
2	...	Oregon
3	...	California
4	...	Alaska
5	...	Hawaii

30-31 2

STRESEXP
Expanded State of Residence

This item is designed to separately identify New York City records from other New York State records.

United States occurrence

30-31 2

STRESEXP
Expanded State of Residence (Cont'd)

01	...	Alabama
02	...	Alaska
03	...	Arizona
04	...	Arkansas
05	...	California
06	...	Colorado
07	...	Connecticut
08	...	Delaware
09	...	District of Columbia
10	...	Florida
11	...	Georgia
12	...	Hawaii
13	...	Idaho

1998
Detail Natality Record

**Tape
Location**

**Field
Size**

Item and Code Outline

14	...	Illinois
15	...	Indiana
16	...	Iowa
17	...	Kansas
18	...	Kentucky
19	...	Louisiana
20	...	Maine
21	...	Maryland
22	...	Massachusetts
23	...	Michigan
24	...	Minnesota
25	...	Mississippi
26	...	Missouri
27	...	Montana
28	...	Nebraska
29	...	Nevada
30	...	New Hampshire
31	...	New Jersey
32	...	New Mexico
33	...	New York
34	...	New York City
35	...	North Carolina
36	...	North Dakota
37	...	Ohio
38	...	Oklahoma
39	...	Oregon
40	...	Pennsylvania
41	...	Rhode Island
42	...	South Carolina
43	...	South Dakota
44	...	Tennessee

30-31

2

STRESEXP

Expanded State of Residence (Cont'd)

45	...	Texas
46	...	Utah
47	...	Vermont
48	...	Virginia
49	...	Washington
50	...	West Virginia
51	...	Wisconsin
52	...	Wyoming
53-58,60, 62,63	...	Foreign Residents
53	...	Puerto Rico
54	...	Virgin Islands
55	...	Guam
62	...	American Samoa
63	...	Northern Marianas
56	...	Canada
57	...	Cuba
58	...	Mexico
60	...	Remainder of the world

1998
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		<u>Puerto Rico occurrence</u>
		53 ... Puerto Rico
		01-52,54-58,60,62,63... Foreign residents: Refer to U.S. for specific code structure.
		<u>Virgin Islands occurrence</u>
		54 ... Virgin Islands
		01-53,55-58,60,62,63...Foreign residents: Refer to U.S. for specific code structure.
		<u>Guam occurrence</u>
		55 ... Guam
		01-52 ... U.S. resident is also considered a resident of Guam.
		53-54,56-58,60,62,63...Foreign residents: Refer to U.S. for specific code structure.
		<u>American Samoa occurrence</u>
		62 ... American Samoa
		01-52 ... U.S. resident is also considered a resident of American Samoa
30-31	2	<u>STREEXP</u> <u>Expanded Sstate of Residence (Cont'd)</u>
		53-58,60,63 ... Foreign residents: Refer to U.S. for specific code structure.
		<u>Northern Marianas</u>
		63 ... Northern Marianas
		01-52 ... U.S. resident is also considered a resident of Northern Marianas.
		53-58,60,62 ... Foreign residents: Refer to U.S. for specific code structure.
32-33	2	<u>STATERES</u> <u>State of Residence</u>
		<u>United States occurrence</u>
		01 ... Alabama
		02 ... Alaska
		03 ... Arizona
		04 ... Arkansas
		05 ... California
		06 ... Colorado
		07 ... Connecticut
		08 ... Delaware
		09 ... District of Columbia
		10 ... Florida

1998
Detail Natality Record

**Tape
Location**

**Field
Size**

Item and Code Outline

11	...	Georgia
12	...	Hawaii
13	...	Idaho
14	...	Illinois
15	...	Indiana
16	...	Iowa
17	...	Kansas
18	...	Kentucky
19	...	Louisiana
20	...	Maine
21	...	Maryland
22	...	Massachusetts
23	...	Michigan
24	...	Minnesota
25	...	Mississippi
26	...	Missouri
27	...	Montana
28	...	Nebraska

32-33

2

STATERES

State of Residence (Cont'd)

29	...	Nevada
30	...	New Hampshire
31	...	New Jersey
32	...	New Mexico
33	...	New York
34	...	North Carolina
35	...	North Dakota
36	...	Ohio
37	...	Oklahoma
38	...	Oregon
39	...	Pennsylvania
40	...	Rhode Island
41	...	South Carolina
42	...	South Dakota
43	...	Tennessee
44	...	Texas
45	...	Utah
46	...	Vermont
47	...	Virginia
48	...	Washington
49	...	West Virginia
50	...	Wisconsin
51	...	Wyoming
52-57,59,61,62..		Foreign Residents
52	...	Puerto Rico
53	...	Virgin Islands
54	...	Guam
61	...	American Samoa
62	...	Northern Marianas
55	...	Canada
56	...	Cuba
57	...	Mexico

1998
Detail Natality Record

Tape
Location

Field
Size

Item and Code Outline

59 ... Remainder of the world

1998
Detail Natality Record

Tape
Location

Field
Size

Item and Code Outline

32-33

STATERES

State of Residence (Cont'd)

Puerto Rico occurrence

52 ... Puerto Rico
01-51,53-57,59, ... Foreign Residents: Refer to
61,62 U.S. for specific code
structure.

Virgin Islands occurrence

53 ... Virgin Islands
01-52,54-57,59, ... Foreign Residents: Refer to
61,62 U.S. for specific code
structure.

Guam occurrence

54 ... Guam
01-51 ... U.S. resident is also
considered a resident of Guam.
52-53,55-57,59, ... Foreign Residents: Refer to
61,62 U.S. for specific code
structure.

American Samoa occurrence

61 ... American Samoa
01-51 ... U.S. resident is also
considered a resident of
American Samoa
52-57,59,62 ... Foreign Residents: Refer to
U.S. for specific code
structure.

Northern Marianas

62 ... Northern Marianas
01-51 ... U.S resident is also
considered a resident of
Northern Marianas.
52-57,59,61 ... Foreign Residents: Refer to
U.S. for specific code
structure.

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
34-36	3	<p><u>CNTYRES</u> <u>County of Residence</u></p> <p>A complete list of counties is shown in the Geographic Code Outline further back in this document.</p> <p>001-nnn ... Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county with a population of 100,000 or more in 1990. (Note: To uniquely identify a county, both the State and county codes must be used.)</p> <p>999 ... County of less than 100,000 population</p> <p>ZZZ ... Foreign Residents</p>
37-39	3	<p><u>CITYRES</u> <u>City of Residence</u></p> <p>A complete list of cities is shown in the Geographic Code Outline further back in this document.</p> <p>001-nnn ... Cities are numbered alphabetically within each State and identify each city with a population of 100,000 or more in 1990. (Note: To uniquely identify a city, both the State and city codes must be used. State, county and city codes may also be used.)</p> <p>999 ... Balance of county</p> <p>ZZZ ... Foreign residents</p>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>																											
40	1	<p><u>CITRSPOP</u> <u>Population Size of City of Residence</u></p> <p>Based on the results of the 1990 census</p> <table border="0"> <tr><td>0</td><td>...</td><td>Place of 1,000,000 or more</td></tr> <tr><td>1</td><td>...</td><td>Place of 500,000 to 1,000,000</td></tr> <tr><td>2</td><td>...</td><td>Place of 250,000 to 500,000</td></tr> <tr><td>3</td><td>...</td><td>Place of 100,000 to 250,000</td></tr> <tr><td>9</td><td>...</td><td>All other areas in the U.S.</td></tr> <tr><td>Z</td><td>...</td><td>Foreign residents</td></tr> </table>	0	...	Place of 1,000,000 or more	1	...	Place of 500,000 to 1,000,000	2	...	Place of 250,000 to 500,000	3	...	Place of 100,000 to 250,000	9	...	All other areas in the U.S.	Z	...	Foreign residents									
0	...	Place of 1,000,000 or more																											
1	...	Place of 500,000 to 1,000,000																											
2	...	Place of 250,000 to 500,000																											
3	...	Place of 100,000 to 250,000																											
9	...	All other areas in the U.S.																											
Z	...	Foreign residents																											
41	1	<p><u>METRORES</u> <u>Metropolitan - Nonmetropolitan County of Residence</u></p> <p>NOTE: VIRGIN ISLANDS, GUAM, NORTHERN MARIANAS AND AMERICAN SAMOA DO NOT HAVE ANY METROPOLITAN AREAS</p> <table border="0"> <tr><td>1</td><td>...</td><td>Metropolitan county</td></tr> <tr><td>2</td><td>...</td><td>Nonmetropolitan county</td></tr> <tr><td>Z</td><td>...</td><td>Foreign residents</td></tr> </table>	1	...	Metropolitan county	2	...	Nonmetropolitan county	Z	...	Foreign residents																		
1	...	Metropolitan county																											
2	...	Nonmetropolitan county																											
Z	...	Foreign residents																											
42-57	16	<p><u>FIPSRES</u> <u>Federal Information Processing Standards (FIPS) Geographic Codes (Residence)</u></p> <p>Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications. Some Geographic Codes have changed to reflect the results of the 1990 Census.</p>																											
42-43	2	<p><u>STRESFIP</u> <u>State of Residence (FIPS)</u></p> <table border="0"> <tr><td>00</td><td>...</td><td>Foreign residents</td></tr> <tr><td>01</td><td>...</td><td>Alabama</td></tr> <tr><td>02</td><td>...</td><td>Alaska</td></tr> <tr><td>04</td><td>...</td><td>Arizona</td></tr> <tr><td>05</td><td>...</td><td>Arkansas</td></tr> <tr><td>06</td><td>...</td><td>California</td></tr> <tr><td>08</td><td>...</td><td>Colorado</td></tr> <tr><td>09</td><td>...</td><td>Connecticut</td></tr> <tr><td>10</td><td>...</td><td>Delaware</td></tr> </table>	00	...	Foreign residents	01	...	Alabama	02	...	Alaska	04	...	Arizona	05	...	Arkansas	06	...	California	08	...	Colorado	09	...	Connecticut	10	...	Delaware
00	...	Foreign residents																											
01	...	Alabama																											
02	...	Alaska																											
04	...	Arizona																											
05	...	Arkansas																											
06	...	California																											
08	...	Colorado																											
09	...	Connecticut																											
10	...	Delaware																											
42-43	2	<p><u>STRESFIP</u> <u>State of Residence (Fips) (Cont'd)</u></p> <table border="0"> <tr><td>11</td><td>...</td><td>District of Columbia</td></tr> <tr><td>12</td><td>...</td><td>Florida</td></tr> </table>	11	...	District of Columbia	12	...	Florida																					
11	...	District of Columbia																											
12	...	Florida																											

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		13 ... Georgia
		15 ... Hawaii
		16 ... Idaho
		17 ... Illinois
		18 ... Indiana
		19 ... Iowa
		20 ... Kansas
		21 ... Kentucky
		22 ... Louisiana
		23 ... Maine
		24 ... Maryland
		25 ... Massachusetts
		26 ... Michigan
		27 ... Minnesota
		28 ... Mississippi
		29 ... Missouri
		30 ... Montana
		31 ... Nebraska
		32 ... Nevada
		33 ... New Hampshire
		34 ... New Jersey
		35 ... New Mexico
		36 ... New York
		37 ... North Carolina
		38 ... North Dakota
		39 ... Ohio
		40 ... Oklahoma
		41 ... Oregon
		42 ... Pennsylvania
		44 ... Rhode Island
		45 ... South Carolina
		46 ... South Dakota
		47 ... Tennessee
		48 ... Texas
		49 ... Utah
		50 ... Vermont
		51 ... Virginia
		53 ... Washington
		54 ... West Virginia
		55 ... Wisconsin
		56 ... Wyoming

42-43

2

STRESFIP
State of Residence (FIPS) (Cont'd)

Puerto Rico occurrence

00-56,60,66,78,69 ... Foreign Residents: Refer to
U.S. for specific code
structure
72 ... Puerto Rico

Virgin Islands occurrence

1998
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		00-56,60,66,72,69 ... Foreign Residents: Refer to U.S. for specific code structure
		78 ... Virgin Islands
		<u>Guam occurrence</u>
		00,60,72,78,69 ... Foreign Residents: Refer to U.S. for specific code structure
		01-56 ... U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure
		66 ... Guam
		<u>American Samoa occurrence</u>
		00,66,72,78,69 ... Foreign Residents: Refer to U.S. for specific code structure
		01-56 ... U.S. Resident is also considered a resident of American Samoa. Refer to specific code structure
		60 ... American Samoa
		<u>Northern Marianas</u>
		00,60,66,72,78 ... Foreign Residents: Refer to U.S. for specific code structure.
		01-56 ... U.S. Resident is also considered a resident of Northern Marianas. Refer to Specific code structure.
		69 ... Northern Marianas

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
44-46	3	<p><u>CNTYRFIP</u> <u>County of Residence (FIPS)</u></p> <p>001-nnn ... Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State. (Note: To uniquely identify a county, both the State and county codes must be used.)</p> <p>999 ... County of less than 100,000 population</p> <p>000 ... Foreign residents</p>
47-51	5	<p><u>PLACEFIP</u> <u>Place (City) of Residence</u></p> <p>A complete list of cities is shown in the Geographic code outline further back in this document. Effective with the 1994 data year, the FIPS place code has been added to the Natality record. It identifies each city of 100,000 population or more in 1990.</p> <p>00000 ... Foreign residents</p> <p>00001- nnnnn ... Code range</p> <p>99999 ... Balance of county; or city of less than 100,000 population</p>
52-53	2	<p><u>CMSA</u> <u>CMSA of Residence (FIPS)</u></p> <p>Consolidated Metropolitan Statistical Areas are groupings of certain Primary Metropolitan Statistical Areas and are defined by the U.S. Office of Management and Budget (OMB) as of June 30, 1990.</p> <p><u>All AREAS</u></p> <p>00 ... Not a CMSA</p> <p><u>United States occurrence</u></p> <p>07 ... Boston-Worcester-Lawrence, MA-NH-ME CT, CMSA</p> <p>14 ... Chicago-Gary-Kenosha, IL-IN-WI, CMSA</p> <p>21 ... Cincinnati-Hamilton, OH-KY-IN, CMSA</p> <p>28 ... Cleveland-Akron, OH, CMSA</p> <p>31 ... Dallas-Fort Worth, TX, CMSA</p>
52-53	2	<p><u>CMSA</u> <u>CMSA of Residence (FIPS) (Cont'd)</u></p> <p>34 ... Denver-Boulder-Greeley, CO, CMSA</p> <p>35 ... Detroit-Ann Arbor-Flint, MI, CMSA</p> <p>42 ... Houston-Galveston-Brazoria, TX, CMSA</p> <p>49 ... Los Angeles-Riverside-Orange County,</p>

1998
Detail Natality Record

**Tape
Location**

**Field
Size**

Item and Code Outline

CA, CMSA
 56 ... Miami-Fort Lauderdale, FL, CMSA
 63 ... Milwaukee-Racine, WI, CMSA
 70 ... New York-Northern New Jersey-Long
 Island, NY-NJ-CT-PA, CMSA
 77 ... Philadelphia-Wilmington-Atlantic
 City, PA-NJ-DE-MD, CMSA

 79 ... Portland-Salem, OR-WA, CMSA

 82 ... Sacramento-Yolo, CA, CMSA
 84 ... San Francisco-Oakland-San Jose, CA,
 CMSA
 91 ... Seattle-Tacoma-Bremerton, WA, CMSA
 97 ... Washington-Baltimore, DC-MD-VA-WV,
 CMSA

Puerto Rico occurrence

87 ... San Juan-Caguas-Arecibo, PR, CMSA

54-57

4

SMSARFIP

PMSA/MSA of Residence (FIPS)

Primary Metropolitan Statistical Areas and
 Metropolitan Statistical Areas are those defined by
 the U.S. Office of Management and Budget as of
 1990. For New England, the New England County
 Metropolitan Areas (NECMA's) are used.
 Further back in this document is a list of PMSA's,
 MSA's, NECMA's, and their component counties.

0000 ... Nonmetropolitan counties or foreign
 residents
 0040-9360 ... Code range
 9999 ... Area of less than 100,000 population

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>																		
58	1	<p><u>CNTRSPOP</u> <u>Population Size of County of Residence</u></p> <p>Based on the results of the 1990 Census.</p> <table border="0"> <tr> <td>0</td> <td>...</td> <td>County of 1,000,000 or more</td> </tr> <tr> <td>1</td> <td>...</td> <td>County of 500,000 to 1,000,000</td> </tr> <tr> <td>2</td> <td>...</td> <td>County of 250,000 to 500,000</td> </tr> <tr> <td>3</td> <td>...</td> <td>County of 100,000 to 250,000</td> </tr> <tr> <td>9</td> <td>...</td> <td>County of less than 100,000</td> </tr> <tr> <td>Z</td> <td>...</td> <td>Foreign resident</td> </tr> </table>	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	9	...	County of less than 100,000	Z	...	Foreign resident
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																		
9	...	County of less than 100,000																		
Z	...	Foreign resident																		
59-67	9	<p><u>RIA</u> <u>Reserved Positions</u></p>																		
68	1	<p><u>MAGERFLG</u> <u>Reported Age of Mother Used Flag</u></p> <p>This position is flagged whenever the mother's reported age is used. The reported age is used, if valid, when age could not be computed or when the computed age is outside the 10-54 code range.</p> <table border="0"> <tr> <td>Blank</td> <td>...</td> <td>Reported age is not used</td> </tr> <tr> <td>1</td> <td>...</td> <td>Reported age is used</td> </tr> </table>	Blank	...	Reported age is not used	1	...	Reported age is used												
Blank	...	Reported age is not used																		
1	...	Reported age is used																		
69	1	<p><u>MAGEIMP</u> <u>Age of Mother Imputation Flag</u></p> <table border="0"> <tr> <td>Blank</td> <td>...</td> <td>Age is not imputed</td> </tr> <tr> <td>1</td> <td>...</td> <td>Age is imputed</td> </tr> </table>	Blank	...	Age is not imputed	1	...	Age is imputed												
Blank	...	Age is not imputed																		
1	...	Age is imputed																		
70-71	2	<p><u>DMAGE</u> <u>Age of Mother</u></p> <p>This item is: a) computed using dates of birth of mother and of delivery; b) reported; or c) imputed. This is the age item used in NCHS publications.</p> <table border="0"> <tr> <td>10-54</td> <td>...</td> <td>Age in single years</td> </tr> </table>	10-54	...	Age in single years															
10-54	...	Age in single years																		
72-73	2	<p><u>MAGE36</u> <u>Age of Mother Recode 36</u></p> <table border="0"> <tr> <td>01</td> <td>...</td> <td>Under 15 years</td> </tr> <tr> <td>02</td> <td>...</td> <td>15 years</td> </tr> </table>	01	...	Under 15 years	02	...	15 years												
01	...	Under 15 years																		
02	...	15 years																		
72-73	2	<p><u>MAGE36</u> <u>Age of Mother Recode 36 (Cont'd)</u></p> <table border="0"> <tr> <td>03</td> <td>...</td> <td>16 years</td> </tr> <tr> <td>04</td> <td>...</td> <td>17 years</td> </tr> </table>	03	...	16 years	04	...	17 years												
03	...	16 years																		
04	...	17 years																		

1998
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		05 ... 18 years
		06 ... 19 years
		07 ... 20 years
		08 ... 21 years
		09 ... 22 years
		10 ... 23 years
		11 ... 24 years
		12 ... 25 years
		13 ... 26 years
		14 ... 27 years
		15 ... 28 years
		16 ... 29 years
		17 ... 30 years
		18 ... 31 years
		19 ... 32 years
		20 ... 33 years
		21 ... 34 years
		22 ... 35 years
		23 ... 36 years
		24 ... 37 years
		25 ... 38 years
		26 ... 39 years
		27 ... 40 years
		28 ... 41 years
		29 ... 42 years
		30 ... 43 years
		31 ... 44 years
		32 ... 45 years
		33 ... 46 years
		34 ... 47 years
		35 ... 48 years
		36 ... 49 years
		37 ... 50 years
		38 ... 51 years
		39 ... 52 years
		40 ... 53 years
		41 ... 54 years

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
74-75	2	<p><u>MAGE12</u> <u>Age of Mother Recode 12</u></p> <p>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</p>
76	1	<p><u>MAGE8</u> <u>Age of Mother Recode 8</u></p> <p>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</p>
77	1	<p><u>ORMOTH</u> <u>Hispanic Origin of Mother</u></p> <p>Hispanic origin is reported by all areas except Puerto Rico, and American Samoa</p> <p>0 ... Non-Hispanic 1 ... Mexican 2 ... Puerto Rican 3 ... Cuban 4 ... Central or South American 5 ... Other and unknown Hispanic 9 ... Origin unknown or not stated</p>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
78	1	<p><u>ORRACEM</u> <u>Hispanic Origin and Race of Mother Recode</u></p> <p>Hispanic origin is reported by all areas except Puerto Rico, and American Samoa</p> <p>1 ... Mexican 2 ... Puerto Rican 3 ... Cuban 4 ... Central or South American 5 ... Other and unknown Hispanic 6 ... Non-Hispanic White 7 ... Non-Hispanic Black 8 ... Non-Hispanic other races 9 ... Origin unknown or not stated</p>
79	1	<p><u>MRACEIMP</u> <u>Race of Mother Imputation Flag</u></p> <p>Blank ... Race is not imputed 1 ... Unknown race is imputed 2 ... All other races, formerly code 09, is imputed</p>
80-81	2	<p><u>MRACE</u> <u>Race of Mother</u></p> <p><u>United States occurrence</u> Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. Codes 18-68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. For consistency with Census race code 09 (all other races) used prior to 1992 has been imputed.</p> <p>01 ... White 02 ... Black 03 ... American Indian (includes Aleuts and Eskimos) 04 ... Chinese 05 ... Japanese 06 ... Hawaiian (includes part-Hawaiian) 07 ... Filipino 18 ... Asian Indian 28 ... Korean 38 ... Samoan</p>
80-81	2	<p><u>MRACE</u> <u>Race of Mother (Cont'd)</u></p> <p>48 ... Vietnamese 58 ... Guamanian 68 ... Other Asian or Pacific Islander in</p>

1998
Detail Natality Record

**Tape
Location**

**Field
Size**

Item and Code Outline

78 ... areas reporting codes 18-58
 Combined other Asian or Pacific
 Islander, includes codes 18-68 for
 areas that do not report them
 separately

Puerto Rico occurrence

01 ... White
02 ... Black
00 ... Other races

Virgin Islands occurrence

01 ... White
02 ... Black
03 ... American Indian (includes Aleuts and
 Eskimos)
04 ... Chinese
05 ... Japanese
06 ... Hawaiian (includes part-Hawaiian)
07 ... Filipino
08 ... Other Asian or Pacific Islander

Guam occurrence

01 ... White
02 ... Black
03 ... American Indian (includes Aleuts and
 Eskimos)
04 ... Chinese
05 ... Japanese
06 ... Hawaiian (includes part-Hawaiian)
07 ... Filipino
08 ... Other Asian or Pacific Islander
58 ... Guamanian

American Samoa occurrence

01 ... White
02 ... Black
03 ... American Indian (includes Aleuts and
 Eskimos)
04 ... Chinese

80-81

2

MRACE

Race of Mother (Cont'd)

05 ... Japanese
06 ... Hawaiian (includes part-Hawaiian)
07 ... Filipino
08 ... Other Asian or Pacific Islander

Northern Marianas occurrence

01 ... White
02 ... Black
03 ... American Indian (includes Aleuts and

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		Eskimos)
		04 ... Chinese
		05 ... Japanese
		06 ... Hawaiian (includes part-Hawaiian)
		07 ... Filipino
		08 ... Other Asian or Pacific Islander
82	1	<u>MRACE3</u> <u>Race of Mother Recode</u>
		<u>For All Areas</u>
		1 ... White
		2 ... Races other than White or Black
		3 ... Black
83-84	2	<u>DMEDUC</u> <u>Education of Mother</u>
		Effective with 1992 data, all areas report education.
		00 ... No formal education
		01-08 ... Years of elementary school
83-84	2	<u>DMEDUC</u> <u>Education of Mother</u>
		09 ... 1 year of high school
		10 ... 2 years of high school
		11 ... 3 years of high school
		12 ... 4 years of high school
		13 ... 1 year of college
		14 ... 2 years of college
		<u>DMEDUC</u> <u>Education of Mother (Cont'd)</u>
		15 ... 3 years of college
		16 ... 4 years of college
		17 ... 5 or more years of college
		99 ... Not stated
85	1	<u>MEDUC6</u> <u>Education of Mother Recode</u>
		1 ... 0 - 8 years
		2 ... 9 - 11 years
		3 ... 12 years
		4 ... 13 - 15 years
		5 ... 16 years and over
		6 ... Not stated

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
86	1	<u>DMARIMP</u> <u>Marital Status of Mother Imputation Flag</u> Blank ... Marital Status is not imputed 1 ... Marital Status is imputed
87	1	<u>DMAR</u> <u>Marital Status of Mother</u> Marital status is not reported by all areas. See reporting flags. <u>United States/Virgin Island/Guam/American Samoa/Northern Marianas</u> 1 ... Married 2 ... Unmarried 9 ... Unknown or not stated <u>Puerto Rico</u> 1 ... Married 2 ... Unmarried parents living together 3 ... Unmarried parents not living together 9 ... Unknown or not stated
88-89	2	<u>MPLBIR</u> <u>Place of Birth of Mother</u> 01 ... Alabama 02 ... Alaska
88-89	2	<u>MPLBIR (Cont'd)</u> 03 ... Arizona 04 ... Arkansas 05 ... California 06 ... Colorado 07 ... Connecticut 08 ... Delaware 09 ... District of Columbia 10 ... Florida 11 ... Georgia 12 ... Hawaii 13 ... Idaho 14 ... Illinois 15 ... Indiana 16 ... Iowa 17 ... Kansas 18 ... Kentucky 19 ... Louisiana 20 ... Maine 21 ... Maryland 22 ... Massachusetts 23 ... Michigan 24 ... Minnesota 25 ... Mississippi

1998
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>
		26 ... Missouri
		27 ... Montana
		28 ... Nebraska
		29 ... Nevada
		30 ... New Hampshire
		31 ... New Jersey
		32 ... New Mexico
		33 ... New York
		34 ... North Carolina
		35 ... North Dakota
		36 ... Ohio
		37 ... Oklahoma
		38 ... Oregon
		39 ... Pennsylvania
		40 ... Rhode Island
		41 ... South Carolina
		42 ... South Dakota
		43 ... Tennessee
		44 ... Texas

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>																																																			
88-89	2	<p><u>MPLBIR</u></p> <p><u>Place of Birth of Mother (Cont'd)</u></p> <table border="0"> <tr><td>45</td><td>...</td><td>Utah</td></tr> <tr><td>46</td><td>...</td><td>Vermont</td></tr> <tr><td>47</td><td>...</td><td>Virginia</td></tr> <tr><td>48</td><td>...</td><td>Washington</td></tr> <tr><td>49</td><td>...</td><td>West Virginia</td></tr> <tr><td>50</td><td>...</td><td>Wisconsin</td></tr> <tr><td>51</td><td>...</td><td>Wyoming</td></tr> <tr><td>52</td><td>...</td><td>Puerto Rico</td></tr> <tr><td>53</td><td>...</td><td>Virgin Islands</td></tr> <tr><td>54</td><td>...</td><td>Guam</td></tr> <tr><td>61</td><td>...</td><td>American Samoa</td></tr> <tr><td>62</td><td>...</td><td>Northern Marianas</td></tr> <tr><td>55</td><td>...</td><td>Canada</td></tr> <tr><td>56</td><td>...</td><td>Cuba</td></tr> <tr><td>57</td><td>...</td><td>Mexico</td></tr> <tr><td>59</td><td>...</td><td>Remainder of the World</td></tr> <tr><td>99</td><td>...</td><td>Not classifiable</td></tr> </table>	45	...	Utah	46	...	Vermont	47	...	Virginia	48	...	Washington	49	...	West Virginia	50	...	Wisconsin	51	...	Wyoming	52	...	Puerto Rico	53	...	Virgin Islands	54	...	Guam	61	...	American Samoa	62	...	Northern Marianas	55	...	Canada	56	...	Cuba	57	...	Mexico	59	...	Remainder of the World	99	...	Not classifiable
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90	1	<p><u>MPLBIRR</u></p> <p><u>Place of Birth of Mother Recode</u></p> <table border="0"> <tr><td>1</td><td>...</td><td>Native born</td></tr> <tr><td>2</td><td>...</td><td>Foreign born</td></tr> <tr><td>3</td><td>...</td><td>Unknown or not stated</td></tr> </table>	1	...	Native born	2	...	Foreign born	3	...	Unknown or not stated																																										
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2	...	Foreign born																																																			
3	...	Unknown or not stated																																																			
91-92	2	<p><u>DMAGERPT</u></p> <p><u>Reported Age of Mother</u></p> <table border="0"> <tr><td>10-54</td><td>...</td><td>Age in single years</td></tr> <tr><td>99</td><td>...</td><td>Unknown or not stated</td></tr> </table>	10-54	...	Age in single years	99	...	Unknown or not stated																																													
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99	...	Unknown or not stated																																																			
93	1	<p><u>ADEQUACY</u></p> <p><u>Adequacy Of Care Recode (Kessner Index)</u></p> <p>This recode is based on a modified Kessner criterion. Month Prenatal Care Began, Number of Prenatal Visits, and Gestation are the items used to generate this recode.</p> <table border="0"> <tr><td>1</td><td>...</td><td>Adequate</td></tr> <tr><td>2</td><td>...</td><td>Intermediate</td></tr> <tr><td>3</td><td>...</td><td>Inadequate</td></tr> <tr><td>4</td><td>...</td><td>Unknown</td></tr> </table>	1	...	Adequate	2	...	Intermediate	3	...	Inadequate	4	...	Unknown																																							
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1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
94-95	2	<p><u>NLBNL</u> <u>Number of Live Births, Now Living</u></p> <p>Does not include this birth or adoptions.</p> <p>00-30 ... Stated number of births 99 ... Unknown or not stated</p>
96-97	2	<p><u>NLBND</u> <u>Number of Live Births, Now Dead</u></p> <p>Does not include this birth or adoptions.</p> <p>00-30 ... Stated number of births 99 ... Unknown or not stated</p>
98-99	2	<p><u>NOTERM</u> <u>Number of Other Terminations</u></p> <p>Includes spontaneous and induced at any time after conception.</p> <p>00-30 ... Stated number of other terminations 99 ... Unknown or not stated</p>
100-101	2	<p><u>DLIVORD</u> <u>Detail Live Birth Order</u></p> <p>Sum of live births now living and now dead plus one. If either item is unknown, this item is made unknown.</p> <p>00-31 ... Number of children born alive to mother 99 ... Unknown</p>
102	1	<p><u>LIVORD9</u> <u>Live Birth Order Recode</u></p> <p>1 ... First Child 2 ... Second Child 3 ... Third Child 4 ... Fourth Child 5 ... Fifth Child</p>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
102	1	<u>LIVORD9</u> <u>Live Birth Order Recode (Cont'd)</u> 6 ... Sixth Child 7 ... Seventh Child 8 ... Eighth Child and over 9 ... Unknown or not stated
103-104	2	<u>DTOTORD</u> <u>Detail Total Birth Order</u> Sum of live birth order and other terminations. If either item is unknown, this item is made unknown. 01-40 ... Total number of live births and other terminations 99 ... Unknown
105	1	<u>TOTORD9</u> <u>Total Birth Order Recode</u> 1 ... First Child 2 ... Second Child 3 ... Third Child 4 ... Fourth Child 5 ... Fifth Child 6 ... Sixth Child 7 ... Seventh Child 8 ... Eighth Child and over 9 ... Unknown or not stated
106-107	2	<u>MONPRE</u> <u>Detail Month of Pregnancy Prenatal Care Began</u> 00 ... No prenatal care 01 ... 1st month 02 ... 2nd month 03 ... 3rd month 04 ... 4th month 05 ... 5th month 06 ... 6th month 07 ... 7th month 08 ... 8th month 09 ... 9th month 99 ... Unknown or not stated

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
108	1	<u>MPRE6</u> <u>Month Prenatal Care Began Recode 6</u> 1 ... 1st - 2nd month 2 ... 3rd month 3 ... 4th - 6th month 4 ... 7th - 9th month 5 ... No prenatal care 6 ... Unknown or not stated
109	1	<u>MPRE5</u> <u>Month Prenatal Care Began Recode 5</u> 1 ... 1st Trimester (1st-3rd month) 2 ... 2nd Trimester (4th-6th month) 3 ... 3rd Trimester (7th-9th month) 4 ... No Prenatal Care 5 ... Unknown or not stated
110-111	2	<u>NPREVIS</u> <u>Total Number of Prenatal Visits</u> 00 ... No prenatal visits 01-48 ... Stated number of visits 49 ... 49 or more visits 99 ... Unknown or not stated
112-113	2	<u>NPREV12</u> <u>Number of Prenatal Visits Recode</u> 01 ... No visits 02 ... 1 - 2 visits 03 ... 3 - 4 visits 04 ... 5 - 6 visits 05 ... 7 - 8 visits 06 ... 9 - 10 visits 07 ... 11 - 12 visits 08 ... 13 - 14 visits 09 ... 15 - 16 visits 10 ... 17 - 18 visits 11 ... 19 visits or more 12 ... Unknown or not stated number of visits

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
114-121	8	<u>LMPDATE</u> <u>Date Last Normal Menses Began</u>
114-115	2	<u>LMPMON</u> <u>Month Last Normal Menses Began</u>
		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 month of LMP
116-117	2	<u>LMPDAY</u> <u>Day Last Normal Menses Began</u>
		01-31 ... As applicable to month of LMP
		99 ... Unknown or not stated day of LMP
118-121	4	<u>LMPYR</u> <u>Year Last Normal Menses Began</u>
		1996 ... 1996
		1997 ... 1997
		9999 ... Unknown or not stated year of LMP
122-132	11	<u>R8</u> Item was dropped in 1994
		<u>R8A</u> <u>Reserved Position</u>
133-137	5	<u>Imputed Birthweight</u> Created beginning with 1995 data
133	1	<u>BWIMP</u> <u>Imputed Birthweight Flag</u>
		Blank ... Birthweight is not imputed
		1 ... Birthweight is imputed

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
134-137	4	<u>Imputed Birthweight</u> 0227-8165 ... Number of grams
138-152	15	<u>R2</u> <u>Reserved Positions</u>
153	1	<u>FAGERFLG</u> <u>Reported Age of Father Used Flag</u> This position is flagged whenever the father's reported age in years is used. The reported age is used, if valid, when age derived from date of birth is not available or when it is less than 10. Blank ... Reported age is not used 1 ... Reported age is used
154-155	2	<u>DFAGE</u> <u>Age of Father</u> This item is either computed from date of birth of father and of child or is the reported age. This is the age item used in NCHS publications. 10-98 ... Age in single years 99 ... Unknown or not stated
156-157	2	<u>FAGE11</u> <u>Age of Father Recode</u> 01 ... Under 15 years 02 ... 15 - 19 years 03 ... 20 - 24 years 04 ... 25 - 29 years 05 ... 30 - 34 years 06 ... 35 - 39 years 07 ... 40 - 44 years 08 ... 45 - 49 years

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
156-157	2	<p><u>FAGE11</u> <u>Age of Father Recode (Cont'd)</u></p> <p>09 ... 50 - 54 years 10 ... 55 - 98 years 11 ... Not stated</p>
158	1	<p><u>ORFATH</u> <u>Hispanic Origin of Father</u></p> <p>Hispanic origin of father is reported by all areas except Puerto Rico, Northern Marianas and American Samoa</p> <p>0 ... Non - Hispanic 1 ... Mexican 2 ... Puerto Rican 3 ... Cuban 4 ... Central or South American 5 ... Other and unknown Hispanic 9 ... Origin unknown or not stated</p>
159	1	<p><u>ORRACEF</u> <u>Hispanic Origin and Race of Father Recode</u></p> <p>Hispanic origin of father is reported by all areas except Puerto Rico, Northern Marianas and American Samoa.</p> <p>1 ... Mexican 2 ... Puerto Rican 3 ... Cuban 4 ... Central or South American 5 ... Other and unknown Hispanic 6 ... Non - Hispanic White 7 ... Non - Hispanic Black 8 ... Non - Hispanic other or unknown race 9 ... Origin unknown or not stated</p>

1998
Detail Natality Record

<u>Tape</u> <u>Location</u>	<u>Field</u> <u>Size</u>	<u>Item and Code Outline</u>																																																																														
160-161	2	<p><u>FRACE</u> <u>Race of Father</u> <u>United States occurrence</u> Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. Codes 18-68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. For consistency with Census race code 09 (all other races) used prior to 1992 has been Changed to 99.</p> <table border="0"> <tr><td>01</td><td>...</td><td>White</td></tr> <tr><td>02</td><td>...</td><td>Black</td></tr> <tr><td>03</td><td>...</td><td>American Indian (includes Aleuts and Eskimos)</td></tr> <tr><td>04</td><td>...</td><td>Chinese</td></tr> <tr><td>05</td><td>...</td><td>Japanese</td></tr> <tr><td>06</td><td>...</td><td>Hawaiian (includes part-Hawaiian)</td></tr> <tr><td>07</td><td>...</td><td>Filipino</td></tr> <tr><td>18</td><td>...</td><td>Asian Indian</td></tr> <tr><td>28</td><td>...</td><td>Korean</td></tr> <tr><td>38</td><td>...</td><td>Samoan</td></tr> <tr><td>48</td><td>...</td><td>Vietnamese</td></tr> <tr><td>58</td><td>...</td><td>Guamanian</td></tr> <tr><td>68</td><td>...</td><td>Other Asian or Pacific Islander in areas reporting codes 18-58</td></tr> <tr><td>78</td><td>...</td><td>Combined other Asian or Pacific Islander, includes codes 18-68 for areas that do not report them separately</td></tr> <tr><td>99</td><td>...</td><td>Unknown or Not Stated</td></tr> </table> <p><u>Puerto Rico occurrence</u></p> <table border="0"> <tr><td>01</td><td>...</td><td>White</td></tr> <tr><td>02</td><td>...</td><td>Black</td></tr> <tr><td>00</td><td>...</td><td>Other races</td></tr> <tr><td>99</td><td>...</td><td>Unknown or not stated</td></tr> </table> <p><u>Virgin Islands occurrence</u></p> <table border="0"> <tr><td>01</td><td>...</td><td>White</td></tr> <tr><td>02</td><td>...</td><td>Black</td></tr> <tr><td>03</td><td>...</td><td>American Indian (includes Aleuts and Eskimos)</td></tr> <tr><td>04</td><td>...</td><td>Chinese</td></tr> <tr><td>05</td><td>...</td><td>Japanese</td></tr> <tr><td>06</td><td>...</td><td>Hawaiian (includes part-Hawaiian)</td></tr> <tr><td>07</td><td>...</td><td>Filipino</td></tr> </table>	01	...	White	02	...	Black	03	...	American Indian (includes Aleuts and Eskimos)	04	...	Chinese	05	...	Japanese	06	...	Hawaiian (includes part-Hawaiian)	07	...	Filipino	18	...	Asian Indian	28	...	Korean	38	...	Samoan	48	...	Vietnamese	58	...	Guamanian	68	...	Other Asian or Pacific Islander in areas reporting codes 18-58	78	...	Combined other Asian or Pacific Islander, includes codes 18-68 for areas that do not report them separately	99	...	Unknown or Not Stated	01	...	White	02	...	Black	00	...	Other races	99	...	Unknown or not stated	01	...	White	02	...	Black	03	...	American Indian (includes Aleuts and Eskimos)	04	...	Chinese	05	...	Japanese	06	...	Hawaiian (includes part-Hawaiian)	07	...	Filipino
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160-161	2	<p><u>FRACE</u> <u>Race of Father (Cont'd)</u></p> <table border="0"> <tr><td>08</td><td>...</td><td>Other Asian or Pacific Islander</td></tr> <tr><td>99</td><td>...</td><td>Unknown or Not Stated</td></tr> </table>	08	...	Other Asian or Pacific Islander	99	...	Unknown or Not Stated																																																																								
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1998
Detail Natality Record

Tape
Location

Field
Size

Item and Code Outline

Guam occurrence

01	...	White
02	...	Black
03	...	American Indian (includes Aleuts and Eskimos)
04	...	Chinese
05	...	Japanese
06	...	Hawaiian (includes part-Hawaiian)
07	...	Filipino
08	...	Other Asian or Pacific Islander
58	...	Guamanian
99	...	Unknown or Not Stated

American Samoa occurrence

01	...	White
02	...	Black
03	...	American Indian (includes Aleuts and Eskimos)
04	...	Chinese
05	...	Japanese
06	...	Hawaiian (includes part-Hawaiian)
07	...	Filipino
08	...	Other Asian or Pacific Islander
99	...	Unknown or Not Stated

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		<u>Northern Marianas occurrence</u>
		01 ... White
		02 ... Black
		03 ... American Indian (includes Aleuts and Eskimos)
		04 ... Chinese
		05 ... Japanese
		06 ... Hawaiian (includes part-Hawaiian)
		07 ... Filipino
		08 ... Other Asian or Pacific Islander
162	1	<u>FRACE4</u> <u>Race of Father Recode</u>
		1 ... White
		2 ... Races other than White, Black, or unknown
		3 ... Black
		4 ... Unknown or not stated
163-165	3	<u>R2A</u> <u>Reserved positions</u>
		Item was dropped in 1995
166-167	2	<u>DFAGERPT</u> <u>Reported Age of Father</u>
		10-98 ... Age in single years
		99 ... Unknown or not stated

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
168	1	<u>FRACEIMP</u> <u>Race of Father Imputation Flag</u> (Unknown race of father is not imputed. However, the all other races code is changed to unknown.) Blank ... Race is not changed 3 ... All other races, formerly code 09, is changed to code 99
169	1	<u>R3</u> <u>Reserved Position</u>
170	1	<u>CDOBMIMP</u> <u>Month of Birth of Child Imputation Flag</u> Blank ... Month is not imputed 1 ... Month is imputed
171	1	<u>RB</u> <u>Reserved Position</u>
172-173	2	<u>BIRMON</u> <u>Month of Birth</u> 01 ... January 02 ... February 03 ... March 04 ... April 05 ... May 06 ... June 07 ... July 08 ... August 09 ... September 10 ... October 11 ... November 12 ... December
174-175	2	<u>RC</u> <u>Reserved Positions</u>
176-179	4	<u>BIRYR</u> <u>Year of Birth</u> 1998 ... 1998
180	1	<u>WEEKDAY</u> <u>Day of Week Child Born</u> 1 ... Sunday 2 ... Monday 3 ... Tuesday

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		4 ... Wednesday 5 ... Thursday 6 ... Friday 7 ... Saturday
181	1	<u>GESTESTM</u> <u>Clinical Estimate of Gestation Used Flag</u> This position is flagged whenever the clinical estimate of gestation is used. It is used when gestation could not be computed or when the computed gestation is outside the 17-47 code range. Blank ... Clinical Estimate is not used 1 ... Clinical Estimate is used
182	1	<u>GESTIMP</u> <u>Gestation Imputation Flag</u> Blank ... Gestation is not imputed 1 ... Gestation is imputed
183-184	2	<u>DGESTAT</u> <u>Gestation - Detail in Weeks</u> This item is: a) computed using dates of birth of child and last normal menses; b) imputed from LMP date; c) the clinical estimate; or d) unknown when there is insufficient data to impute or no valid clinical estimate. This is the gestation item used in NCHS publications. 17-47 ... 17th through 47th week of gestation 99 ... Unknown

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Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
185-186	2	<u>GESTAT10</u> <u>Gestation Recode 10</u> 01 ... Under 20 weeks 02 ... 20 - 27 weeks 03 ... 28 - 31 weeks 04 ... 32 - 35 weeks 05 ... 36 weeks 06 ... 37 - 39 weeks 07 ... 40 weeks 08 ... 41 weeks 09 ... 42 weeks and over 10 ... Not stated
187	1	<u>GESTAT3</u> <u>Gestation Recode 3</u> 1 ... Under 37 weeks 2 ... 37 weeks and over 3 ... Not stated
188	1	<u>CSEXIMP</u> <u>Sex Imputation Flag</u> Blank ... Sex is not imputed 1 ... Sex is imputed
189	1	<u>CSEX</u> <u>Sex</u> 1 ... Male 2 ... Female
190-192	3	<u>RD</u> <u>Reserved Positions</u>
193-196	4	<u>DBIRWT</u> <u>Birth Weight - Detail in Grams</u> 0227-8165 ... Number of grams 9999 ... Not stated birth weight
197-198	2	<u>BIRWT12</u> <u>Birth Weight Recode 12</u> 01 ... 499 grams or less 02 ... 500 - 999 grams
197-198	2	<u>BIRWT12</u> <u>Birth Weight Recode 12 Cont'd</u> 03 ... 1000 - 1499 grams 04 ... 1500 - 1999 grams 05 ... 2000 - 2499 grams

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Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		06 ... 2500 - 2999 grams 07 ... 3000 - 3499 grams 08 ... 3500 - 3999 grams 09 ... 4000 - 4499 grams 10 ... 4500 - 4999 grams 11 ... 5000 - 8165 grams 12 ... Not stated
199	1	<u>BIRWT4</u> <u>Birth Weight Recode 4</u> 1 ... 1499 grams or less 2 ... 1500 - 2499 grams 3 ... 2500 - grams or more 4 ... Unknown or not stated
200	1	<u>PLURIMP</u> <u>Plurality Imputation Flag</u> Blank ... Plurality is not imputed 1 ... Plurality is imputed
201	1	<u>DPLURAL</u> <u>Plurality</u> 1 ... Single 2 ... Twin 3 ... Triplet 4 ... Quadruplet 5 ... Quintuplet or higher
202-204	3	<u>R6</u> <u>Reserved positions</u> Item was dropped in 1995
205-206	2	<u>FMAPS</u> <u>Five Minute Apgar Score</u> Apgar Score is not reported by all areas. See reporting flags.
205-206	2	<u>FMAPS</u> <u>Five Minute Apgar Score Cont'd</u> 00-10 ... A score of 0-10 99 ... Unknown or not stated
207	1	<u>FMAPSR</u> <u>Five Minute Apgar Score Recode</u> Apgar Score is not reported by all areas. See reporting flags.

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Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		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
208-209	2	<u>CLINGEST</u> <u>Clinical Estimate of Gestation</u> Clinical estimate is not reported by all areas. See reporting flags. 17-47 ... Estimated gestation in weeks 99 ... Unknown or not stated
210-216	7	<u>R4</u> <u>Reserved Positions</u>
217-306	90	<u>MEDINFO</u> <u>Medical and Health Data</u> Some States do not report an entire item while other States do not report all of the categories within an item. If an item is not reported, it is indicated by code zero in the appropriate reporting flag. If a category within an item is not reported it is indicated by code 8 in the position for that category.

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Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
217-222	6	<u>DELMETH</u> <u>Method of Delivery</u> Each method is assigned a separate position, and the code structure for each method (position) is: 1 ... The method was used 2 ... The method was not used 8 ... Method not on certificate 9 ... Method unknown or not stated
217	1	<u>VAGINAL</u> <u>Vaginal</u>
218	1	<u>VBAC</u> <u>Vaginal birth after previous C-section</u>
219	1	<u>PRIMAC</u> <u>Primary C -section</u>
220	1	<u>REPEAC</u> <u>Repeat C -section</u>
221	1	<u>FORCEP</u> <u>Forceps</u>
222	1	<u>VACUUM</u> <u>Vacuum</u>
223	1	<u>R5</u> <u>Reserved Position</u>
224	1	<u>DELMETH5</u> <u>Method of Delivery Recode</u> 1 ... Vaginal (excludes vaginal after previous C-section) 2 ... Vaginal birth after previous C-section 3 ... Primary C -section 4 ... Repeat C -section 5 ... Not stated

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
225-241	17	<u>MEDRISK</u> <u>Medical Risk Factors</u> Each risk factor is assigned a separate position, and the code structure for each risk factor (position) is: 1 ... Factor reported 2 ... Factor not reported 8 ... Factor not on certificate 9 ... Factor not classifiable
225	1	<u>ANEMIA</u> <u>Anemia (Hct.<30/Hgb.<10)</u>
226	1	<u>CARDIAC</u> <u>Cardiac disease</u>
227	1	<u>LUNG</u> <u>Acute or chronic lung disease</u>
228	1	<u>DIABETES</u> <u>Diabetes</u>
229	1	<u>HERPES</u> <u>Genital herpes</u>
230	1	<u>HYDRA</u> <u>Hydramnios/Oligohydramnios</u>
231	1	<u>HEMO</u> <u>Hemoglobinopathy</u>
232	1	<u>CHYPER</u> <u>Hypertension, chronic</u>
233	1	<u>PHYPER</u> <u>Hypertension, pregnancy-associated</u>
234	1	<u>ECLAMP</u> <u>Eclampsia</u>
235	1	<u>INCERVIX</u> <u>Incompetent cervix</u>
236	1	<u>PRE4000</u> <u>Previous infant 4000+ grams</u>
237	1	<u>PRETERM</u> <u>Previous preterm or small-for-gestational-age infant</u>
238	1	<u>RENAL</u> <u>Renal disease</u>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
239	1	<u>RH</u> <u>Rh sensitization</u>
240	1	<u>UTERINE</u> <u>Uterine bleeding</u>
241	1	<u>OTHERMR</u> <u>Other Medical Risk Factors</u>
242-252	11	<u>OTHERRSK</u> <u>Other Risk Factors for this Pregnancy</u>
242-245	4	<u>TOBACRSK</u> <u>Tobacco Risks</u>
242	1	<u>TOBACCO</u> <u>Tobacco Use During Pregnancy</u>
		1 ... Yes
		2 ... No
		9 ... Unknown or not stated
243-244	2	<u>CIGAR</u> <u>Average Number of Cigarettes Per Day</u>
		00-97 ... As stated
		98 ... 98 or more cigarettes per day
		99 ... Unknown or not stated
245	1	<u>CIGAR6</u> <u>Average Number of Cigarettes Per Day Recode</u>
		0 ... Nonsmoker
		1 ... 1 - 5 cigarettes per day
		2 ... 6 - 10 cigarettes per day
		3 ... 11 - 20 cigarettes per day
		4 ... 21 - 40 cigarettes per day
		5 ... 41 or more cigarettes per day
		6 ... Unknown or not stated

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
246-249	4	<u>ALCOHRSK</u> <u>Alcohol</u>
246	1	<u>ALCOHOL</u> <u>Alcohol Use During Pregnancy</u>
		1 ... Yes
		2 ... No
		9 ... Unknown or not stated
247-249	2	<u>DRINK</u> <u>Average Number of Drinks Per Week</u>
		00-97 ... As stated
		98 ... 98 or more drinks per week
		99 ... Unknown or not stated
249	1	<u>DRINK5</u> <u>Average Number of Drinks Per Week Recode</u>
		0 ... Non drinker
		1 ... 1 drink per week
		2 ... 2 drinks per week
		3 ... 3 - 4 drinks per week
		4 ... 5 or more drinks per week
		5 ... Unknown or not stated
250-252	3	<u>WTGANRSK</u> <u>Weight Gain During Pregnancy</u>
250-251	2	<u>WTGAIN</u> <u>Weight Gain</u>
		00-97 ... Stated number of pounds
		98 ... 98 pounds or more
		99 ... Unknown or not stated

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
252	1	<u>WTGAIN9</u> <u>Weight Gain Recode</u> 1 ... Less than 16 pounds 2 ... 16 - 20 pounds 3 ... 21 - 25 pounds 4 ... 26 - 30 pounds 5 ... 31 - 35 pounds 6 ... 36 - 40 pounds 7 ... 41 - 45 pounds 8 ... 46 or more pounds 9 ... Unknown or not stated
253-259	7	<u>OBSTETRC</u> <u>Obstetric Procedures</u> Each procedure is assigned a separate position, and the code structure for each procedure (position) is: 1 ... Procedure reported 2 ... Procedure not reported 8 ... Procedure not on certificate 9 ... Procedure not classifiable
253	1	<u>AMNIO</u> <u>Amniocentesis</u>
254	1	<u>MONITOR</u> <u>Electronic fetal monitoring</u>
255	1	<u>INDUCT</u> <u>Induction of labor</u>
256	1	<u>STIMULA</u> <u>Stimulation of labor</u>
257	1	<u>TOCOL</u> <u>Tocolysis</u>
258	1	<u>ULTRAS</u> <u>Ultrasound</u>
259	1	<u>OTHEROB</u> <u>Other Obstetric Procedures</u>
260-275	16	<u>LABOR</u> <u>Complications of Labor and/or Delivery</u> Each complication is assigned a separate position, and the code structure for each complication (position) is:

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		1 ... Complication reported
		2 ... Complication not reported
		8 ... Complication not on certificate
		9 ... Complication not classifiable
260	1	<u>FEBRILE</u> <u>Febrile (>100 degrees F. or 38 degrees C.)</u>
261	1	<u>MECONIUM</u> <u>Meconium, moderate/heavy</u>
262	1	<u>RUPTURE</u> <u>Premature rupture of membrane (>12 hours)</u>
263	1	<u>ABRUPTIO</u> <u>Abruptio placenta</u>
264	1	<u>PREPLACE</u> <u>Placenta previa</u>
265	1	<u>EXCEBLD</u> <u>Other excessive bleeding</u>
266	1	<u>SEIZURE</u> <u>Seizures during labor</u>
267	1	<u>PRECIP</u> <u>Precipitous labor (<3 hours)</u>
268	1	<u>PROLONG</u> <u>Prolonged labor (>20 hours)</u>
269	1	<u>DYSFUNC</u> <u>Dysfunctional labor</u>
270	1	<u>BREECH</u> <u>Breech/Malpresentation</u>
271	1	<u>CEPHALO</u> <u>Cephalopelvic disproportion</u>
272	1	<u>CORD</u> <u>Cord prolapse</u>
273	1	<u>ANESTHE</u> <u>Anesthetic complications</u>
274	1	<u>DISTRESS</u> <u>Fetal distress</u>
275	1	<u>OTHERLB</u> <u>Other Complication of Labor and/or Delivery</u>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
276-284	9	<p><u>NEWBORN</u> <u>Abnormal Conditions of the Newborn</u></p> <p>Each condition is assigned a separate position, and the code structure for each condition (position) is:</p> <p>1 ... Condition reported 2 ... Condition not reported 8 ... Condition not on certificate 9 ... Condition not classifiable</p>
276	1	<p><u>NANEMIA</u> <u>Anemia (Hct.<39/Hgb.<13)</u></p>
277	1	<p><u>INJURY</u> <u>Birth injury</u></p>
278	1	<p><u>ALCOSYN</u> <u>Fetal alcohol syndrome</u></p>
279	1	<p><u>HYALINE</u> <u>Hyaline membrane disease</u></p>
280	1	<p><u>MECONSYN</u> <u>Meconium aspiration syndrome</u></p>
281	1	<p><u>VENL30</u> <u>Assisted ventilation, less than 30 minutes</u></p>
282	1	<p><u>VEN30M</u> <u>Assisted ventilation, 30 minutes or more</u></p>
283	1	<p><u>NSEIZ</u> <u>Seizures</u></p>
284	1	<p><u>OTHERAB</u> <u>Other Abnormal Conditions of the Newborn</u></p>
285-306	22	<p><u>CONGENIT</u> <u>Congenital Anomalies</u></p> <p>Each anomaly is assigned a separate position, and the code structure for each anomaly (position) is:</p> <p>1 ... Anomaly reported 2 ... Anomaly not reported 8 ... Anomaly not on certificate 9 ... Anomaly not classifiable</p>
285	1	<p><u>ANEN</u> <u>Anencephalus</u></p>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
286	1	<u>SPINA</u> <u>Spina bifida/Meningocele</u>
287	1	<u>HYDRO</u> <u>Hydrocephalus</u>
288	1	<u>MICROCE</u> <u>Microcephalus</u>
289	1	<u>NERVOUS</u> <u>Other central nervous system anomalies</u>
290	1	<u>HEART</u> <u>Heart malformations</u>
291	1	<u>CIRCUL</u> <u>Other circulatory/respiratory anomalies</u>
292	1	<u>RECTAL</u> <u>Rectal atresia/stenosis</u>
293	1	<u>TRACHEO</u> <u>Tracheo - esophageal fistula/Esophageal atresia</u>
294	1	<u>OMPHALO</u> <u>Omphalocele/Gastroschisis</u>
295	1	<u>GASTRO</u> <u>Other gastrointestinal anomalies</u>
296	1	<u>GENITAL</u> <u>Malformed genitalia</u>
297	1	<u>RENALAGE</u> <u>Renal agenesis</u>
298	1	<u>UROGEN</u> <u>Other urogenital anomalies</u>
299	1	<u>CLEFTLP</u> <u>Cleft lip/palate</u>
300	1	<u>ADACTYLY</u> <u>Polydactyly/Syndactyly/Adactyly</u>
301	1	<u>CLUBFOOT</u> <u>Club foot</u>
302	1	<u>HERNIA</u> <u>Diaphragmatic hernia</u>
303	1	<u>MUSCULO</u>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
		<u>Other musculoskeletal/integumental anomalies</u>
304	1	<u>DNWS</u> <u>Down's syndrome</u>
305	1	<u>CHROMO</u> <u>Other chromosomal anomalies</u>
306	1	<u>OTHERCON</u> <u>Other Congenital Anomalies</u>
307-326	20	<u>FLRES</u> <u>Reporting Flags for Place of Residence</u> These positions contain flags to indicate whether or not the specified item is included on the birth certificate of the State of residence or of the MSA of residence. The code structure for each flag (position) is: 0 ... The item is not reported 1 ... The item is reported or partially reported.
307	1	<u>ORIGM</u> <u>Origin of mother</u>
308	1	<u>ORIGF</u> <u>Origin of father</u>
309	1	<u>EDUCM</u> <u>Education of mother</u>
310	1	<u>EDUCF</u> <u>Education of father</u>
311	1	<u>GESTE</u> <u>Clinical estimate of gestation</u>
312	1	<u>R6A</u> <u>Reserved position</u>
313	1	<u>FMPSRF</u> <u>5 - minute Apgar score</u>
314	1	<u>DELMETRF</u> <u>Method of delivery</u>
315	1	<u>MEDRSK</u> <u>Medical risk factors</u>
316	1	<u>TOBUSE</u> <u>Tobacco use</u>

1998
Detail Natality Record

<u>Tape Location</u>	<u>Field Size</u>	<u>Item and Code Outline</u>
317	1	<u>ALCUSE</u> <u>Alcohol use</u>
318	1	<u>WTGN</u> <u>Weight gain</u>
319	1	<u>OBSTRC</u> <u>Obstetric procedures</u>
320	1	<u>CLABOR</u> <u>Complications of labor and/or delivery</u>
321	1	<u>ABNML</u> <u>Abnormal conditions of newborn</u>
322	1	<u>CONGAN</u> <u>Congenital anomalies</u>
323	1	<u>R6</u> <u>Reserved Position</u>
324	1	<u>EDUCMSA</u> <u>Education of Mother (Based on MSA)</u>
325	1	<u>APIFLAG</u> <u>Race codes 18-68 reported (beginning with 1992 data)</u>
326-346	21	<u>R7</u> <u>Reserved positions</u>
347-349	3	<u>SMSARES</u> <u>PSMA/MSA of Residence (NCHS)</u>
		<p>Primary Metropolitan Statistical Areas and Metropolitan Statistical Areas are those defined by the U.S. Office of Management and Budget (OMB) as of June 30, 1990. For New England, the New England County Metropolitan Areas (NECMA's) are used.</p> <p>Further back in this document is a list of PMSA's, MSA's, NECMA's, and their component counties.</p> <p>000 ... Nonmetropolitan counties 001-320 ... Code range 999 ... Area of less than 100,000 population ZZZ ... Foreign residents</p>
350	1	<u>POPSMAS</u> <u>PMSA/MSA Population Size</u>

Based on 1990 Census county population counts

1998
Detail Natality Record

Tape
Location

Field
Size

Item and Code Outline

1	...	Area of 250,000 or more
2	...	Area of 100,000 to 250,000
9	...	Area of less than 100,000 or nonmetropolitan area
Z	...	Foreign resident

Vital Statistics Geographic Code Outline for the United States

The following pages show in detail the geographic codes used by the Division of Vital Statistics in the processing of vital event data occurring in the United States. When an event occurs to a nonresident of the United States, residence data are coded only to the "State" level; several western hemisphere countries or the remainder of the world are uniquely identified. Along with the Division of Vital Statistics codes the Federal Information Processing Standards (FIPS) codes are shown for several items. Both sets of codes appear on the vital event public-use files. The Metropolitan Statistical Area codes are effective with the 1996 data year and are based on the 1990 Census.

To aid the user in interpreting the geographic codes, a brief explanation of the codes and of the column headings/abbreviations shown on the following pages are:

State (St): Each State and the District of Columbia are numbered alphabetically. In addition, several unique codes are used to identify nonresidents of the U.S.

County (Cnty): Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State.

P/MSA: Primary metropolitan statistical areas and metropolitan statistical areas are those established by the U.S. Office of Management and Budget (OMB) using 1990 Census population counts. For New England, the New England County Metropolitan Areas (NECMA) are used.

M/NM: Metropolitan counties (code 1) are component counties of P/MSA's. Nonmetropolitan counties (code 2) are not part of any P/MSA.

City or place: Cities/places are numbered alphabetically within each State and identify each city with a population of 10,000 or more in 1990.

P/S: Population size code for city of residence based on the 1990 Census. Refer to the code outline given earlier in this document for specific codes and meanings.

Name: Each State, county, and city name is listed along with its respective code. In addition, places used to identify nonresidents of the U.S. are also listed along with their codes.

FIPS: For an explanation of FIPS codes, reference should be made to various National Institute of Standards & Technology (NITS) publications.

So! How do I find Yavapai county, Arizona; or Tupelo city, Mississippi?

Since counties and cities/places are numbered within State, the State and county or the State and city/places codes must be used to select these areas. It is most helpful if the county is known when looking for a particular city since areas are shown by State, county, and city.

Yavapai county, Arizona - State and county codes NCHS: 03 014; FIPS: 04 025.

Tupelo, Mississippi - State and city/place codes NCHS: 25 032; FIPS: 28 74840;
or State, county, city/place codes NCHS: 25 041 032; FIPS: 28 081 74840.

Vital Statistics Geographic Code Outline for Puerto Rico, Virgin Islands, Guam, American Samoa and Northern Marianas

The following pages show in detail the geographic codes used by the Division of Vital Statistics in the processing of vital event data occurring in Puerto Rico, the Virgin Islands, or Guam. When an event occurs to a nonresident of these areas, residence data are coded only to the "State" level; each U.S. state, several western hemisphere countries or the remainder of the world are uniquely identified. Along with the Division of Vital Statistics codes, the Federal Information Processing Standards (FIPS) codes are shown for several items. Both sets of codes appear on the vital event public-use files. Codes are effective with the 1994 data year and are based on results of the 1990 Census.

To aid the user in interpreting the geographic codes, a brief explanation of the codes and of the column headings/abbreviations shown on the following pages are:

Puerto Rico:

State (St): Puerto Rico has its own unique code. In addition, several unique codes are used to identify nonresidents of Puerto Rico.

County (Cnty): Each municipio (county equivalent) is numbered alphabetically.

P/MSA: Primary metropolitan statistical areas and metropolitan statistical areas are those established by the U.S. Office of Management and Budget (OMB) using 1990 Census population counts.

M/NM: Metropolitan counties (code 1) are component counties of P/MSA's. Nonmetropolitan counties (code 2) are not part of any P/MSA.

City or Place: No city/places in Puerto Rico are identified.

Name: Puerto Rico and each municipio are listed along with their respective codes. In addition, places used to identify nonresidents of Puerto Rico are also listed along with their codes.

FIPS: For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.

Virgin Islands:

State (St): The Virgin Islands has its own unique code. In addition, several unique codes are used to identify nonresidents of the Virgin Islands.

County (Cnty): Several Islands (county equivalent) are numbered alphabetically.

P/MSA: None are identified in the Virgin Islands.

M/NM: No metropolitan areas are identified for the Virgin Islands.

City or Place: City/places are numbered alphabetically within each State and identify each city with a population of 10,000 or more in 1990.

P/S: Population size code for city of residence based on the 1990 Census.

Refer to the code outline given earlier in this document for specific codes and meanings.

Name: The Virgin Islands as a whole and several islands are listed along with their respective codes. In addition, places used to identify nonresidents of the Virgin Islands are also listed along with their codes.

Guam:

State (St): Guam has its own unique code. In addition, several unique codes are used to identify nonresidents of Guam.

County (Cnty): None are identified in Guam

P/MSA: None are identified in Guam.

M/NM: No metropolitan areas are identified for Guam.

City or Place: None are identified in Guam.

P/S: No population size groups are identified for Guam.

Name: Guam as a whole is listed along with its respective code. In addition, places used to identify nonresidents of Guam are also listed along with their codes.

American Samoa:

State (St): American Samoa has its own unique code. In addition, several unique codes are used to identify nonresidents of American Samoa.

County (Cnty): None are identified in American Samoa

P/MSA: None are identified in American Samoa.

M/NM: No metropolitan areas are identified for American Samoa.

City or Place: None are identified in American Samoa.

P/S: No population size groups are identified for American Samoa.

Name: American Samoa as a whole is listed along with its respective code. In addition, places used to identify nonresidents of American Samoa are also listed along with their codes.

Northern Marianas:

State (St): Northern Marianas has its own unique code. In addition, several unique codes are used to identify nonresidents of Northern Marianas.

County (Cnty): None are identified in Northern Marianas.

P/MSA: None are identified in Northern Marianas.

M/NM: No metropolitan areas are identified for Northern Marianas.

City or Place: None are identified in Northern Marianas.

P/S: No population size groups are identified for Northern Marianas.
Name: Northern Marianas as a whole is listed along with its respective code.
In addition, places used to identify nonresidents of Northern Marianas are also listed along with their codes.

Vital Statistics Geographic Code Outline For The United States Page 1
 Effective With 1998 Data.

Vital Statistics Codes				FIPS Codes				Place			
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St		Cnty	P/S	P/MSA
01						Alabama	01				
	001	188	1			Autauga		001	5	5240	
				035	6	Prattville, part					62328
				999	9	Balance of county					99999
	002	184	1			Baldwin		003	4	5160	
				010	6	Daphne					19648
				999	9	Balance of county					99999
	003	000	2			Barbour		005	5	0000	
				014	6	Eufaula					24568
				999	9	Balance of county					99999
	004	000	2			Bibb		007	6	0000	
	005	032	1			Blount		009	5	1000	
	006	000	2			Bullock		011	6	0000	
	007	000	2			Butler		013	6	0000	
	008	012	1			Calhoun		015	3	0450	
				004	5	Anniston					01852
				024	6	Jacksonville					38272
				999	9	Balance of county					99999
	009	000	2			Chambers		017	5	0000	
	010	000	2			Cherokee		019	6	0000	
	011	000	2			Chilton		021	5	0000	
	012	000	2			Choctaw		023	6	0000	
	013	000	2			Clarke		025	5	0000	
	014	000	2			Clay		027	6	0000	
	015	000	2			Cleburne		029	6	0000	
	016	000	2			Coffee		031	5	0000	
				013	6	Enterprise, part					24184
				999	9	Balance of county					99999
	017	094	1			Colbert		033	4	2650	
				040	6	Sheffield					69648
				999	9	Balance of county					99999
	018	000	2			Conecuh		035	6	0000	
	019	000	2			Coosa		037	6	0000	
	020	000	2			Covington		039	5	0000	
	021	000	2			Crenshaw		041	6	0000	
	022	000	2			Cullman		043	4	0000	
				009	6	Cullman					18976
				999	9	Balance of county					99999
	023	077	1			Dale		045	5	2180	
				012	4	Dothan, part					21184
				013	6	Enterprise, part					24184
				033	6	Ozark					57648
				999	9	Balance of county					99999
	024	000	2			Dallas		047	5	0000	
				039	6	Selma					69120
				999	9	Balance of county					99999
	025	000	2			De Kalb		049	4	0000	
				017	6	Fort Payne					27616
				999	9	Balance of county					99999
	026	188	1			Elmore		051	5	5240	
				035	6	Prattville, part					62328
				999	9	Balance of county					99999
	027	000	2			Escambia		053	5	0000	
	028	105	1			Etowah		055	4	2880	
				018	5	Gadsden					28696
				999	9	Balance of county					99999
	029	000	2			Fayette		057	6	0000	
	030	000	2			Franklin		059	5	0000	
	031	000	2			Geneva		061	6	0000	
	032	000	2			Greene		063	6	0000	
	033	000	2			Hale		065	6	0000	
	034	000	2			Henry		067	6	0000	
	035	077	1			Houston		069	4	2180	
				012	4	Dothan, part					21184
				999	9	Balance of county					99999
	036	000	2			Jackson		071	5	0000	
				038	6	Scottsboro					68736
				999	9	Balance of county					99999
	037	032	1			Jefferson		073	1	1000	
				007	5	Bessemer					05980
				008	2	Birmingham, part					07000
				015	6	Fairfield					25120
				020	6	Homewood					35800
				021	5	Hoover, part					35896
				022	6	Hueytown					36448

Vital Statistics Codes			FIPS Codes			Place		
St Cnty	P/MSA	M/NM	City	P/S	Area Names		St Cnty	P/S	P/MSA
01					Alabama	01		
	037				Jefferson, con.	073	1	1000
			030	6	Mountain Brook			51696
			046	6	Vestavia Hills			78552
			999	9	Leeds, part			99999
			999	9	Balance of county			99999
	038	000	2	999	Lamar	075	6	0000
	039	094	1		Lauderdale	077	4	2650
			016	5	Florence			26896
			999	9	Balance of county			99999
	040	072	1	999	Lawrence	079	5	2030
	041	000	2		Lee	081	4	0000
			006	5	Auburn			03076
			032	6	Opelika			57048
			034	5	Phenix City, part			59472
			999	9	Balance of county			99999
	042	129	1		Limestone	083	4	3440
			005	6	Athens			02956
			011	5	Decatur, part			20104
			023	3	Huntsville, part			37000
			027	6	Madison, part			45784
			999	9	Balance of county			99999
	043	000	2	999	Lowndes	085	6	0000
	044	000	2		Macon	087	6	0000
			045	6	Tuskegee			77304
			999	9	Balance of county			99999
	045	129	1		Madison	089	3	3440
			023	3	Huntsville, part			37000
			027	6	Madison, part			45784
			999	9	Balance of county			99999
	046	000	2	999	Marengo	091	6	0000
	047	000	2	999	Marion	093	5	0000
	048	000	2		Marshall	095	4	0000
			002	6	Albertville			00988
			999	9	Balance of county			99999
	049	184	1		Mobile	097	2	5160
			028	3	Mobile			50000
			036	5	Prichard			62496
			037	6	Saraland			68160
			999	9	Balance of county			99999
	050	000	2	999	Monroe	099	6	0000
	051	188	1		Montgomery	101	3	5240
			029	3	Montgomery			51000
			999	9	Balance of county			99999
	052	072	1		Morgan	103	3	2030
			011	5	Decatur, part			20104
			019	6	Hartselle			33448
			999	9	Balance of county			99999
	053	000	2	999	Perry	105	6	0000
	054	000	2	999	Pickens	107	6	0000
	055	000	2		Pike	109	5	0000
			043	6	Troy			76920
			999	9	Balance of county			99999
	056	000	2	999	Randolph	111	6	0000
	057	063	1		Russell	113	5	1800
			034	5	Phenix City, part			59472
			999	9	Balance of county			99999
	058	032	1	999	St. Clair	115	4	1000
			999	9	Balance of county			99999
			999	9	Leeds, part			99999
	059	032	1		Shelby	117	4	1000
			001	6	Alabaster			00820
			008	2	Birmingham, part			07000
			021	5	Hoover, part			35896
			999	9	Leeds, part			99999
			999	9	Balance of county			99999
	060	000	2	999	Sumter	119	6	0000
	061	000	2		Talladega	121	4	0000
			041	6	Sylacauga			74352
			042	6	Talladega			74592
			999	9	Balance of county			99999
	062	000	2		Tallapoosa	123	5	0000
			003	6	Alexander City			01132
			999	9	Balance of county			99999
	063	287	1		Tuscaloosa	125	3	8600
			031	6	Northport			55200

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
01						Alabama	01				
	063					Tuscaloosa, con.		125	3	8600	
				044	4	Tuscaloosa					77256
				999	9	Balance of county					99999
	064	000	2			Walker		127	4	0000	
				025	6	Jasper					38416
				999	9	Balance of county					99999
	065	000	2	999	9	Washington		129	6	0000	
	066	000	2	999	9	Wilcox		131	6	0000	
	067	000	2	999	9	Winston		133	6	0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
02						Alaska	02				
	001	000	2	999	9	Aleutians East		013	6	0000	
	002	000	2	999	9	Aleutians West		016	6	0000	
	003	010	1	001	3	Anchorage, coext. with Anchorage city		020	3	0380	03000
	004	000	2	999	9	Bethel		050	6	0000	
	005	000	2	999	9	Bristol Bay		060	6	0000	
	006	000	2	999	9	Dillingham		070	6	0000	
	007	000	2			Fairbanks North Star		090	4	0000	
				002	5	Fairbanks					24230
				999	9	Balance of area					99999
	008	000	2	999	9	Haines		100	6	0000	
	009	000	2	003	5	Juneau, coext. with Juneau city		110	5	0000	36400
	010	000	2	999	9	Kenai Peninsula		122	5	0000	
	011	000	2	999	9	Ketchikan Gateway		130	6	0000	
	012	000	2	999	9	Kodiak Island		150	6	0000	
	013	000	2	999	9	Lake and Peninsula		164	6	0000	
	014	000	2	999	9	Matanuska-Susitna		170	5	0000	
	015	000	2	999	9	Nome		180	6	0000	
	016	000	2	999	9	North Slope		185	6	0000	
	017	000	2	999	9	Northwest Arctic		188	6	0000	
	018	000	2	999	9	Prince of Wales-Outer Ketchikan		201	6	0000	
	019	000	2	999	9	Sitka		220	6	0000	
	020	000	2	999	9	Skagway-Hoonah-Angoon		232	6	0000	
	021	000	2	999	9	Southeast Fairbanks		240	6	0000	
	022	000	2	999	9	Valdez-Cordova		261	6	0000	
	023	000	2	999	9	Wade Hampton		270	6	0000	
	024	000	2	999	9	Wrangell-Petersburg		280	6	0000	
	025	000	2	999	9	Yakutat		282	6	0000	
	026	000	2	999	9	Yukon-Koyukuk		290	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
03						Arizona	04				
	001	000	2	999	9	Apache		001	4	0000	
	002	000	2			Cochise		003	4	0000	
				006	6	Douglas					20050
				020	5	Sierra Vista					66820
				999	9	Balance of county					99999
	003	000	2			Coconino		005	4	0000	
				007	5	Flagstaff					23620
				999	9	Balance of county					99999
	004	000	2	999	9	Gila		007	5	0000	
	005	000	2	999	9	Graham		009	5	0000	
	006	000	2	999	9	Greenlee		011	6	0000	
	007	000	2	999	9	La Paz		012	6	0000	
	008	215	1			Maricopa		013	0	6200	
				001	6	Apache Junction, part					02830
				002	6	Avondale					04720
				005	4	Chandler					12000
				008	6	Fountain Hills					25300
				009	5	Gilbert					27400
				010	3	Glendale					27820
				013	2	Mesa					46000
				015	6	Paradise Valley					52930
				016	4	Peoria					54050
				017	1	Phoenix					55000
				019	3	Scottsdale					65000
				021	3	Tempe					73000
				999	9	Balance of county					99999
	009	159	1			Mohave		015	4	4120	
				003	6	Bullhead City					08255
				011	6	Kingman					37620
				012	6	Lake Havasu City					39370
				999	9	Balance of county					99999
	010	000	2	999	9	Navajo		017	4	0000	
	011	285	1			Pima		019	1	8520	
				022	2	Tucson					77000
				999	9	Balance of county					99999
	012	215	1			Pinal		021	3	6200	
				001	6	Apache Junction, part					02830
				004	6	Casa Grande					10530
				999	9	Balance of county					99999
	013	000	2			Santa Cruz		023	5	0000	
				014	6	Nogales					49640
				999	9	Balance of county					99999
	014	000	2			Yavapai		025	3	0000	
				018	5	Prescott					57380
				999	9	Balance of county					99999
	015	311	1			Yuma		027	3	9360	
				023	4	Yuma					85540
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
04						Arkansas	05				
	001	000	2			Arkansas		001	6	0000	
				024	6	Stuttgart					67490
				999	9	Balance of county					99999
	002	000	2			Ashley		003	6	0000	
	003	000	2			Baxter		005	5	0000	
	004	092	1			Benton		007	4	2580	
				003	6	Bentonville					05320
				019	6	Rogers					60410
				023	5	Springdale, part					66080
				999	9	Balance of county					99999
	005	000	2			Boone		009	5	0000	
	006	000	2			Bradley		011	6	0000	
	007	000	2			Calhoun		013	6	0000	
	008	000	2			Carroll		015	6	0000	
	009	000	2			Chicot		017	6	0000	
	010	000	2			Clark		019	6	0000	
				001	6	Arkadelphia					01870
				999	9	Balance of county					99999
	011	000	2			Clay		021	6	0000	
	012	000	2			Cleburne		023	6	0000	
	013	000	2			Cleveland		025	6	0000	
	014	000	2			Columbia		027	5	0000	
				015	6	Magnolia					43460
				999	9	Balance of county					99999
	015	000	2			Conway		029	6	0000	
	016	000	2			Craighead		031	4	0000	
				013	5	Jonesboro					35710
				999	9	Balance of county					99999
	017	100	1			Crawford		033	5	2720	
				026	6	Van Buren					71480
				999	9	Balance of county					99999
	018	178	1			Crittenden		035	5	4920	
				028	5	West Memphis					74540
				999	9	Balance of county					99999
	019	000	2			Cross		037	6	0000	
	020	000	2			Dallas		039	6	0000	
	021	000	2			Desha		041	6	0000	
	022	000	2			Drew		043	6	0000	
	023	166	1			Faulkner		045	4	4400	
				006	5	Conway					15190
				999	9	Balance of county					99999
	024	000	2			Franklin		047	6	0000	
	025	000	2			Fulton		049	6	0000	
	026	000	2			Garland		051	4	0000	
				011	5	Hot Springs					33460
				999	9	Balance of county					99999
	027	000	2			Grant		053	6	0000	
	028	000	2			Greene		055	5	0000	
				017	6	Paragould					53390
				999	9	Balance of county					99999
	029	000	2			Hempstead		057	6	0000	
	030	000	2			Hot Spring		059	5	0000	
	031	000	2			Howard		061	6	0000	
	032	000	2			Independence		063	5	0000	
	033	000	2			Izard		065	6	0000	
	034	000	2			Jackson		067	6	0000	
	035	216	1			Jefferson		069	4	6240	
				018	4	Pine Bluff					55310
				999	9	Balance of county					99999
	036	000	2			Johnson		071	6	0000	
	037	000	2			Lafayette		073	6	0000	
	038	000	2			Lawrence		075	6	0000	
	039	000	2			Lee		077	6	0000	
	040	000	2			Lincoln		079	6	0000	
	041	000	2			Little River		081	6	0000	
	042	000	2			Logan		083	6	0000	
	043	166	1			Lonoke		085	5	4400	
	044	000	2			Madison		087	6	0000	
	045	000	2			Marion		089	6	0000	
	046	281	1			Miller		091	5	8360	
				025	6	Texarkana					68810
				999	9	Balance of county					99999
	047	000	2			Mississippi		093	4	0000	
				004	6	Blytheville					07330

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
04						Arkansas	05				
	047					Mississippi, con.		093	4	0000	
				999	9	Balance of county					99999
	048	000	2	999	9	Monroe		095	6	0000	
	049	000	2	999	9	Montgomery		097	6	0000	
	050	000	2	999	9	Nevada		099	6	0000	
	051	000	2	999	9	Newton		101	6	0000	
	052	000	2			Ouachita		103	5	0000	
				005	6	Camden					10720
				999	9	Balance of county					99999
	053	000	2	999	9	Perry		105	6	0000	
	054	000	2			Phillips		107	5	0000	
				027	6	West Helena					74450
				999	9	Balance of county					99999
	055	000	2	999	9	Pike		109	6	0000	
	056	000	2	999	9	Poinsett		111	6	0000	
	057	000	2	999	9	Polk		113	6	0000	
	058	000	2			Pope		115	5	0000	
				020	6	Russellville					61670
				999	9	Balance of county					99999
	059	000	2	999	9	Prairie		117	6	0000	
	060	166	1			Pulaski		119	2	4400	
				012	5	Jacksonville					34750
				014	3	Little Rock					41000
				016	4	North Little Rock					50450
				022	6	Sherwood					63800
				999	9	Balance of county					99999
	061	000	2	999	9	Randolph		121	6	0000	
	062	000	2			St. Francis		123	5	0000	
				009	6	Forrest City					24430
				999	9	Balance of county					99999
	063	166	1			Saline		125	4	4400	
				002	6	Benton					05290
				999	9	Balance of county					99999
	064	000	2	999	9	Scott		127	6	0000	
	065	000	2	999	9	Searcy		129	6	0000	
	066	100	1			Sebastian		131	4	2720	
				010	4	Fort Smith					24550
				999	9	Balance of county					99999
	067	000	2	999	9	Sevier		133	6	0000	
	068	000	2	999	9	Sharp		135	6	0000	
	069	000	2	999	9	Stone		137	6	0000	
	070	000	2			Union		139	5	0000	
				007	6	El Dorado					21070
				999	9	Balance of county					99999
	071	000	2	999	9	Van Buren		141	6	0000	
	072	092	1			Washington		143	3	2580	
				008	5	Fayetteville					23290
				023	5	Springdale, part					66080
				999	9	Balance of county					99999
	073	000	2			White		145	4	0000	
				021	6	Searcy					63020
				999	9	Balance of county					99999
	074	000	2	999	9	Woodruff		147	6	0000	
	075	000	2	999	9	Yell		149	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	001	201	1			Alameda		001	0	5775	
				002	4	Alameda					00562
				003	6	Albany					00674
				025	3	Berkeley					06000
				073	6	Dublin					20018
				090	3	Fremont					26000
				103	3	Hayward					33000
				135	4	Livermore					41992
				173	5	Newark					50916
				179	2	Oakland					53000
				199	6	Piedmont					56938
				204	4	Pleasanton					57792
				242	4	San Leandro					68084
				287	4	Union City					81204
				999	9	Balance of county					99999
	002	000	2	999	9	Alpine		003	6	0000	
	003	000	2	999	9	Amador		005	5	0000	
	004	056	1			Butte		007	3	1620	
				042	5	Chico					13014
				184	6	Oroville					54386
				193	5	Paradise					55520
				999	9	Balance of county					99999
	005	000	2	999	9	Calaveras		009	5	0000	
	006	000	2	999	9	Colusa		011	6	0000	
	007	201	1			Contra Costa		013	1	5775	
				006	4	Antioch					02252
				052	3	Concord					16000
				064	5	Danville					17988
				077	6	El Cerrito					21796
				105	6	Hercules					33308
				118	6	Lafayette					39122
				151	5	Martinez					46114
				167	6	Moraga Town					49194
				183	6	Orinda					54232
				200	6	Pinole					57288
				201	5	Pittsburg					57456
				203	5	Pleasant Hill					57764
				218	4	Richmond					60620
				247	5	San Pablo					68294
				249	5	San Ramon					68378
				295	4	Walnut Creek					83346
				999	9	Balance of county					99999
	008	000	2	999	9	Del Norte		015	6	0000	
	009	239	1			El Dorado		017	3	6920	
				270	6	South Lake Tahoe					73108
				999	9	Balance of county					99999
	010	104	1			Fresno		019	1	2840	
				047	4	Clovis					14218
				091	2	Fresno					27000
				216	6	Reedley					60242
				238	6	Sanger					67056
				264	6	Selma					70882
				999	9	Balance of county					99999
	011	000	2	999	9	Glenn		021	6	0000	
	012	000	2			Humboldt		023	3	0000	
				009	6	Arcata					02476
				083	5	Eureka					23042
				999	9	Balance of county					99999
	013	000	2			Imperial		025	3	0000	
				027	6	Brawley					08058
				032	6	Calexico					09710
				076	5	El Centro					21782
				999	9	Balance of county					99999
	014	000	2	999	9	Inyo		027	6	0000	
	015	020	1			Kern		029	1	0680	
				016	3	Bakersfield					03526
				066	6	Delano					18394
				219	5	Ridgecrest					60704
				296	6	Wasco					83542
				999	9	Balance of county					99999
	016	000	2			Kings		031	3	0000	
				053	6	Corcoran					16224
				100	5	Hanford					31960
				134	6	Lemoore					41152

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	016					Kings, con.		031	3	0000	
				999	9	Balance of county					99999
	017	000	2			Lake		033	4	0000	
				046	6	Clearlake					13945
				999	9	Balance of county					99999
	018	000	2			Lassen		035	5	0000	
	019	168	1			Los Angeles		037	0	4480	
				001	6	Agoura Hills					00394
				004	4	Alhambra					00884
				008	5	Arcadia					02462
				011	6	Artesia					02896
				015	5	Azusa					03386
				017	4	Baldwin Park					03666
				020	5	Bell					04870
				021	4	Bellflower					04982
				022	5	Bell Gardens					04996
				026	5	Beverly Hills					06308
				030	4	Burbank					08954
				038	4	Carson					11530
				041	4	Cerritos					12552
				045	5	Claremont					13756
				050	6	Commerce					14974
				051	4	Compton					15044
				057	5	Covina					16742
				058	6	Cudahy					17498
				059	5	Culver City					17568
				068	4	Diamond Bar					19192
				071	4	Downey					19766
				072	6	Duarte					19990
				078	3	El Monte					22230
				080	6	El Segundo					22412
				093	5	Gardena					28168
				096	3	Glendale					30000
				097	5	Glendora					30014
				101	6	Hawaiian Gardens					32506
				102	4	Hawthorne					32548
				106	6	Hermosa Beach					33364
				112	4	Huntington Park					36056
				115	3	Inglewood					36546
				117	6	La Canada Flintridge					39003
				123	4	Lakewood					39892
				125	5	La Mirada					40032
				126	4	Lancaster					40130
				128	5	La Puente					40340
				131	5	La Verne					40830
				132	5	Lawndale					40886
				138	6	Lomita					42468
				140	2	Long Beach					43000
				143	0	Los Angeles					44000
				146	4	Lynwood					44574
				148	5	Manhattan Beach					45400
				153	5	Maywood					46492
				161	5	Monrovia					48648
				163	4	Montebello					48816
				165	4	Monterey Park					48914
				176	4	Norwalk					52526
				188	4	Palmdale					55156
				192	6	Palos Verdes Estates					55380
				194	5	Paramount					55618
				195	3	Pasadena					56000
				198	4	Pico Rivera					56924
				205	3	Pomona					58072
				210	5	Rancho Palos Verdes					59514
				214	4	Redondo Beach					60018
				223	4	Rosemead					62896
				234	5	San Dimas					66070
				235	6	San Fernando					66140
				237	5	San Gabriel					67042
				245	6	San Marino					68224
				253	3	Santa Clarita					69088
				255	6	Santa Fe Springs					69154
				257	4	Santa Monica					70000
				265	6	Sierra Madre					71806
				268	6	South El Monte					72996

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	019					Los Angeles, con.		037	0	4480	
				269	4	South Gate					73080
				271	6	South Pasadena					73220
				278	5	Temple City					78148
				280	3	Torrance					80000
				294	5	Walnut					83332
				298	4	West Covina					84200
				299	5	West Hollywood					84410
				302	4	Whittier					85292
				999	9	Balance of county					99999
	020	104	1			Madera		039	4	2840	
				147	5	Madera					45022
				999	9	Balance of county					99999
	021	250	1			Marin		041	3	7360	
				130	6	Larkspur					40438
				157	6	Mill Valley					47710
				177	5	Novato					52582
				227	6	San Anselmo					64434
				248	5	San Rafael					68364
				999	9	Balance of county					99999
	022	000	2			Mariposa		043	6	0000	
	023	000	2			Mendocino		045	4	0000	
				286	6	Ukiah					81134
				999	9	Balance of county					99999
	024	179	1			Merced		047	3	4940	
				013	6	Atwater					03162
				144	6	Los Banos					44028
				155	4	Merced					46898
				999	9	Balance of county					99999
	025	000	2			Modoc		049	6	0000	
	026	000	2			Mono		051	6	0000	
	027	245	1			Monterey		053	2	7120	
				150	5	Marina					45778
				164	5	Monterey					48872
				187	6	Pacific Grove					54848
				226	3	Salinas					64224
				263	5	Seaside					70742
				999	9	Balance of county					99999
	028	290	1			Napa		055	3	8720	
				171	4	Napa					50258
				999	9	Balance of county					99999
	029	000	2			Nevada		057	4	0000	
	030	207	1			Orange		059	0	5945	
				005	2	Anaheim					02000
				028	5	Brea					08100
				029	4	Buena Park					08786
				056	4	Costa Mesa					16532
				061	5	Cypress					17750
				063	5	Dana Point					17946
				089	4	Fountain Valley					25380
				092	3	Fullerton					28000
				094	3	Garden Grove					29000
				111	3	Huntington Beach					36000
				116	3	Irvine					36770
				119	6	Laguna Beach					39178
				120	5	Laguna Niguel					39248
				121	4	La Habra					39290
				127	6	La Palma					40256
				141	6	Los Alamitos					43224
				159	4	Mission Viejo					48256
				174	4	Newport Beach					51182
				182	3	Orange					53980
				202	5	Placentia					57526
				232	5	San Clemente					65084
				241	5	San Juan Capistrano					68028
				250	2	Santa Ana					69000
				262	5	Seal Beach					70686
				273	5	Stanton					73962
				284	4	Tustin					80854
				300	4	Westminster					84550
				304	4	Yorba Linda					86832
				999	9	Balance of county					99999
	031	239	1			Placer		061	3	6920	
				014	6	Auburn					03204

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	031					Placer, con.	061	3		6920	
				221	6	Rocklin					62364
				224	5	Roseville					62938
				999	9	Balance of county					99999
	032	000	2	999	9	Plumas	063	6		0000	
	033	233	1			Riverside	065	0		6780	
				018	6	Banning					03820
				039	5	Cathedral City					12048
				048	6	Coachella					14260
				054	4	Corona					16350
				067	6	Desert Hot Springs					18996
				104	5	Hemet					33182
				114	5	Indio					36448
				122	6	Lake Elsinore					39486
				129	6	La Quinta					40354
				168	3	Moreno Valley					49270
				175	6	Norco					51560
				189	6	Palm Desert					55184
				190	5	Palm Springs					55254
				196	6	Perris					56700
				220	3	Riverside					62000
				239	6	San Jacinto					67112
				277	5	Temecula					78120
				999	9	Balance of county					99999
	034	239	1			Sacramento	067	0		6920	
				086	5	Folsom					24638
				225	2	Sacramento					64000
				999	9	Balance of county					99999
	035	000	2			San Benito	069	5		0000	
				110	6	Hollister					34120
				999	9	Balance of county					99999
	036	233	1			San Bernardino	071	0		6780	
				007	5	Apple Valley					02364
				019	6	Barstow					04030
				043	4	Chino					13210
				049	5	Colton					14890
				087	4	Fontana					24680
				098	6	Grand Terrace					30658
				107	4	Hesperia					33434
				108	5	Highland					33588
				137	6	Loma Linda					42370
				162	5	Montclair					48788
				181	3	Ontario					53896
				209	3	Rancho Cucamonga					59451
				213	4	Redlands					59962
				217	4	Rialto					60466
				228	3	San Bernardino					65000
				285	6	Twentynine Palms					80994
				288	4	Upland					81344
				291	5	Victorville					82590
				306	5	Yucaipa					87042
				999	9	Balance of county					99999
	037	249	1			San Diego	073	0		7320	
				036	4	Carlsbad					11194
				044	3	Chula Vista					13392
				055	5	Coronado					16378
				075	4	El Cajon					21712
				081	4	Encinitas					22678
				082	3	Escondido					22804
				113	5	Imperial Beach					36294
				124	4	La Mesa					40004
				133	6	Lemon Grove					41124
				172	4	National City					50398
				180	3	Oceanside					53322
				208	5	Poway					58520
				233	0	San Diego					66000
				244	5	San Marcos					68196
				260	4	Santee					70224
				267	6	Solana Beach					72506
				293	4	Vista					82996
				999	9	Balance of county					99999
	038	250	1	236	1	San Francisco, coext. with San Francisco	075	1		7360	67000
	039	274	1			San Joaquin	077	2		8120	
				136	4	Lodi					42202

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	039					San Joaquin, con.		077	2	8120	
				149	5	Manteca					45484
				274	3	Stockton					75000
				281	5	Tracy					80238
				999	9	Balance of county					99999
	040	252	1			San Luis Obispo		079	3	7460	
				010	6	Arroyo Grande					02868
				012	6	Atascadero					03064
				079	6	El Paso de Robles					22300
				099	6	Grover City					31400
				243	5	San Luis Obispo					68154
				999	9	Balance of county					99999
	041	250	1			San Mateo		081	1	7360	
				023	6	Belmont					05108
				031	5	Burlingame					09066
				062	4	Daly City					17918
				074	6	East Palo Alto					20956
				088	5	Foster City					25338
				109	6	Hillsborough					33798
				154	5	Menlo Park					46870
				156	6	Millbrae					47486
				186	5	Pacifica					54806
				215	4	Redwood City					60102
				229	5	San Bruno					65028
				231	5	San Carlos					65070
				246	4	San Mateo					68252
				272	4	South San Francisco					73262
				999	9	Balance of county					99999
	042	253	1			Santa Barbara		083	2	7480	
				037	6	Carpinteria					11446
				139	5	Lompoc					42524
				251	4	Santa Barbara					69070
				256	4	Santa Maria					69196
				999	9	Balance of county					99999
	043	251	1			Santa Clara		085	0	7400	
				034	5	Campbell					10340
				060	5	Cupertino					17610
				095	5	Gilroy					29504
				142	5	Los Altos					43280
				145	5	Los Gatos					44112
				158	4	Milpitas					47766
				169	6	Morgan Hill					49278
				170	4	Mountain View					49670
				191	4	Palo Alto					55282
				240	1	San Jose					68000
				252	4	Santa Clara					69084
				261	5	Saratoga					70280
				276	3	Sunnyvale					77000
				999	9	Balance of county					99999
	044	254	1			Santa Cruz		087	3	7485	
				035	6	Capitola					11040
				254	5	Santa Cruz					69112
				297	5	Watsonville					83668
				999	9	Balance of county					99999
	045	229	1			Shasta		089	3	6690	
				212	4	Redding					59920
				999	9	Balance of county					99999
	046	000	2			Sierra		091	6	0000	
	047	000	2			Siskiyou		093	5	0000	
	048	290	1			Solano		095	2	8720	
				024	6	Benicia					05290
				070	6	Dixon					19402
				084	4	Fairfield					23182
				275	6	Suisun City					75630
				289	4	Vacaville					81554
				290	3	Vallejo					81666
				999	9	Balance of county					99999
	049	256	1			Sonoma		097	2	7500	
				197	5	Petaluma					56784
				222	5	Rohnert Park					62546
				259	3	Santa Rosa					70098
				999	9	Balance of county					99999
	050	185	1			Stanislaus		099	2	5170	
				040	5	Ceres					12524

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
05						California	06				
	050					Stanislaus, con.		099	2	5170	
				160	3	Modesto					48354
				178	6	Oakdale					52694
				283	5	Turlock					80812
				999	9	Balance of county					99999
	051	310	1			Sutter		101	4	9340	
				305	5	Yuba City					86972
				999	9	Balance of county					99999
	052	000	2			Tehama		103	5	0000	
				211	6	Red Bluff					59892
				999	9	Balance of county					99999
	053	000	2			Trinity		105	6	0000	
	054	294	1			Tulare		107	2	8780	
				069	6	Dinuba					19318
				206	5	Porterville					58240
				282	5	Tulare					80644
				292	4	Visalia					82954
				999	9	Balance of county					99999
	055	000	2			Tuolumne		109	5	0000	
	056	291	1			Ventura		111	1	8735	
				033	4	Camarillo					10046
				085	6	Fillmore					24092
				166	5	Moorpark					49138
				185	3	Oxnard					54652
				207	6	Port Hueneme					58296
				230	4	San Buenaventura (Ventura)					65042
				258	5	Santa Paula					70042
				266	3	Simi Valley					72016
				279	3	Thousand Oaks					78582
				999	9	Balance of county					99999
	057	307	1			Yolo		113	3	9270	
				065	5	Davis					18100
				301	5	West Sacramento					84816
				303	5	Woodland					86328
				999	9	Balance of county					99999
	058	310	1			Yuba		115	4	9340	
				152	6	Marysville					46170
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
06						Colorado	08				
	001	074	1			Adams		001	2	2080	
				001	4	Arvada, part					03455
				002	3	Aurora, part					04000
				004	6	Brighton, part					08675
				005	6	Broomfield, part					09280
				008	6	Commerce City					16495
				023	5	Northglenn					54330
				026	4	Thornton					77290
				027	4	Westminster, part					83835
				999	9	Balance of county					99999
	002	000	2	999	9	Alamosa		003	6	0000	
	003	074	1			Arapahoe		005	2	2080	
				002	3	Aurora, part					04000
				011	5	Englewood					24785
				019	5	Littleton, part					45255
				999	9	Balance of county					99999
	004	000	2	999	9	Archuleta		007	6	0000	
	005	000	2	999	9	Baca		009	6	0000	
	006	000	2	999	9	Bent		011	6	0000	
	007	038	1			Boulder		013	3	1125	
				003	4	Boulder					07850
				005	6	Broomfield, part					09280
				017	6	Lafayette					41835
				020	4	Longmont					45970
				021	6	Louisville					46355
				999	9	Balance of county					99999
	008	000	2	999	9	Chaffee		015	6	0000	
	009	000	2	999	9	Cheyenne		017	6	0000	
	010	000	2	999	9	Clear Creek		019	6	0000	
	011	000	2	999	9	Conejos		021	6	0000	
	012	000	2	999	9	Costilla		023	6	0000	
	013	000	2	999	9	Crowley		025	6	0000	
	014	000	2	999	9	Custer		027	6	0000	
	015	000	2	999	9	Delta		029	6	0000	
	016	074	1	009	2	Denver, coext. with Denver city		031	2	2080	20000
	017	000	2	999	9	Dolores		033	6	0000	
	018	074	1			Douglas		035	4	2080	
				002	3	Aurora, part					04000
				019	5	Littleton, part					45255
				999	9	Balance of county					99999
	019	000	2	999	9	Eagle		037	6	0000	
	020	000	2	999	9	Elbert		039	6	0000	
	021	060	1			El Paso		041	2	1720	
				007	2	Colorado Springs					16000
				013	6	Fountain					27865
				999	9	Balance of county					99999
	022	000	2			Fremont		043	5	0000	
				006	6	Canon City					11810
				999	9	Balance of county					99999
	023	000	2	999	9	Garfield		045	5	0000	
	024	000	2	999	9	Gilpin		047	6	0000	
	025	000	2	999	9	Grand		049	6	0000	
	026	000	2	999	9	Gunnison		051	6	0000	
	027	000	2	999	9	Hinsdale		053	6	0000	
	028	000	2	999	9	Huerfano		055	6	0000	
	029	000	2	999	9	Jackson		057	6	0000	
	030	074	1			Jefferson		059	2	2080	
				001	4	Arvada, part					03455
				005	6	Broomfield, part					09280
				014	6	Golden					30835
				018	3	Lakewood					43000
				027	4	Westminster, part					83835
				028	5	Wheat Ridge					84440
				999	9	Balance of county					99999
	031	000	2	999	9	Kiowa		061	6	0000	
	032	000	2	999	9	Kit Carson		063	6	0000	
	033	000	2	999	9	Lake		065	6	0000	
	034	000	2			La Plata		067	5	0000	
				010	6	Durango					22035
				999	9	Balance of county					99999
	035	096	1			Larimer		069	3	2670	
				012	4	Fort Collins					27425
				022	5	Loveland					46465
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
06						Colorado	08				
	036	000	2	999	9	Las Animas		071	6	0000	
	037	000	2	999	9	Lincoln		073	6	0000	
	038	000	2			Logan		075	6	0000	
				025	6	Sterling					73935
				999	9	Balance of county					99999
	039	000	2			Mesa		077	4	0000	
				015	5	Grand Junction					31660
				999	9	Balance of county					99999
	040	000	2	999	9	Mineral		079	6	0000	
	041	000	2	999	9	Moffat		081	6	0000	
	042	000	2	999	9	Montezuma		083	6	0000	
	043	000	2	999	9	Montrose		085	6	0000	
	044	000	2	999	9	Morgan		087	6	0000	
	045	000	2	999	9	Otero		089	6	0000	
	046	000	2	999	9	Ouray		091	6	0000	
	047	000	2	999	9	Park		093	6	0000	
	048	000	2	999	9	Phillips		095	6	0000	
	049	000	2	999	9	Pitkin		097	6	0000	
	050	000	2	999	9	Prowers		099	6	0000	
	051	223	1			Pueblo		101	3	6560	
				024	4	Pueblo					62000
				999	9	Balance of county					99999
	052	000	2	999	9	Rio Blanco		103	6	0000	
	053	000	2	999	9	Rio Grande		105	6	0000	
	054	000	2	999	9	Routt		107	6	0000	
	055	000	2	999	9	Saguache		109	6	0000	
	056	000	2	999	9	San Juan		111	6	0000	
	057	000	2	999	9	San Miguel		113	6	0000	
	058	000	2	999	9	Sedgwick		115	6	0000	
	059	000	2	999	9	Summit		117	6	0000	
	060	000	2	999	9	Teller		119	6	0000	
	061	000	2	999	9	Washington		121	6	0000	
	062	114	1			Weld		123	3	3060	
				004	6	Brighton, part					08675
				005	6	Broomfield, part					09280
				016	4	Greeley					32155
				999	9	Balance of county					99999
	063	000	2	999	9	Yuma		125	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
07						Connecticut	09				
	001	194	1			Fairfield		001	1	5483	
				002	6	Bethel town					04720
				004	3	Bridgeport					08000
				007	4	Danbury					18430
				008	6	Darien town					18920
				014	4	Fairfield town					26620
				016	4	Greenwich town					33620
				029	4	Norwalk					55990
				033	5	Shelton					68100
				035	3	Stamford					73000
				036	5	Stratford town					74260
				038	5	Trumbull town					77270
				044	6	Westport town					83500
				999	9	Balance of county					99999
	002	122	1			Hartford		003	1	3283	
				005	4	Bristol					08420
				011	4	East Hartford town					22630
				013	5	Enfield town					25990
				015	5	Glastonbury town					31240
				018	3	Hartford					37000
				019	4	Manchester town					44700
				024	4	New Britain					50370
				026	5	Newington town					52210
				031	6	Plainville town					60120
				032	6	Rocky Hill town					65370
				034	5	Southington town					70550
				042	4	West Hartford town					82590
				045	5	Wethersfield town					84900
				046	6	Windsor Locks town					87070
				047	5	Windsor town					87000
				999	9	Balance of county					99999
	003	000	2			Litchfield		005	3	0000	
				037	5	Torrington					76500
				999	9	Balance of county					99999
	004	122	1			Middlesex		007	3	3283	
				021	5	Middletown					47290
				999	9	Balance of county					99999
	005	194	1			New Haven		009	1	5483	
				001	6	Ansonia					01150
				003	5	Branford town					07310
				006	5	Cheshire town					14160
				009	6	Derby					19480
				009	6	Derby					19480
				012	5	East Haven town					22980
				017	4	Hamden town					35650
				020	4	Meriden					46450
				022	5	Milford					47500
				023	5	Naugatuck borough					49880
				025	3	New Haven					52000
				028	6	North Haven town					54870
				040	5	Wallingford town					78740
				041	3	Waterbury					80000
				043	4	West Haven					82800
				999	9	Balance of county					99999
	006	195	1			New London		011	2	5523	
				027	5	New London					52280
				030	5	Norwich					56200
				999	9	Balance of county					99999
	007	122	1			Tolland		013	3	3283	
				039	5	Vernon town					78250
				999	9	Balance of county					99999
	008	000	2			Windham		015	3	0000	

Vital Statistics Geographic Code Outline For The United States
 Effective With 1998 Data.

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
08						Delaware	10				
	001	078	1			Kent		001	3	2190	
				001	5	Dover					21200
				999	9	Balance of county					99999
	002	304	1			New Castle		003	2	9160	
				002	5	Newark					50670
				003	4	Wilmington					77580
				999	9	Balance of county					99999
	003	000	2	999	9	Sussex		005	3	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
09	001	296	1	001	1	District of Columbia	11	001	1	8840	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
10						Florida	12				
	001	106	1			Alachua		001	3	2900	
				032	4	Gainesville					25175
				999	9	Balance of county					99999
	002	000	2			Baker		003	6	0000	
	003	210	1			Bay		005	3	6015	
				009	6	Callaway					09725
				080	5	Panama City					54700
				999	9	Balance of county					99999
	004	000	2			Bradford		007	6	0000	
	005	177	1			Brevard		009	2	4900	
				013	6	Cocoa					13150
				014	6	Cocoa Beach					13175
				055	4	Melbourne					43975
				078	4	Palm Bay					54000
				091	6	Rockledge					61500
				110	5	Titusville					71900
				999	9	Balance of county					99999
	006	097	1			Broward		011	0	2680	
				015	5	Coconut Creek					13275
				016	6	Cooper City					14125
				018	4	Coral Springs					14400
				019	6	Dania					16325
				020	5	Davie					16475
				022	5	Deerfield Beach					16725
				028	3	Fort Lauderdale					24000
				036	5	Hallandale					28450
				039	3	Hollywood					32000
				049	5	Lauderdale Lakes					39525
				050	5	Lauderhill					39550
				052	6	Lighthouse Point					40450
				054	5	Margate					43125
				060	5	Miramar					45975
				065	5	North Lauderdale					49425
				070	5	Oakland Park					50575
				081	4	Pembroke Pines					55775
				084	4	Plantation					57425
				086	4	Pompano Beach					58050
				103	4	Sunrise					69700
				106	5	Tamarac					70675
				114	6	Wilton Manors					78000
				999	9	Balance of county					99999
	007	000	2			Calhoun		013	6	0000	
	008	224	1			Charlotte		015	3	6580	
				089	6	Punta Gorda					59200
				999	9	Balance of county					99999
	009	000	2			Citrus		017	4	0000	
	010	135	1			Clay		019	3	3600	
	011	191	1			Collier		021	3	5345	
				061	6	Naples					47625
				999	9	Balance of county					99999
	012	000	2			Columbia		023	5	0000	
	013	180	1			Dade		025	0	5000	
				017	5	Coral Gables					14250
				037	3	Hialeah					30000
				040	5	Homestead					32275
				056	2	Miami					45000
				057	4	Miami Beach					45025
				058	6	Miami Shores					45175
				059	6	Miami Springs					45200
				066	5	North Miami					49450
				067	5	North Miami Beach					49475
				073	6	Opa-locka					51650
				101	6	South Miami					67550
				104	6	Sweetwater					70275
				999	9	Balance of county					99999
	014	000	2			De Soto		027	6	0000	
	015	000	2			Dixie		029	6	0000	
	016	135	1			Duval		031	1	3600	
				003	6	Atlantic Beach					02400
				041	1	Jacksonville					35000
				042	6	Jacksonville Beach					35050
				999	9	Balance of county					99999
	017	212	1			Escambia		033	2	6080	
				082	4	Pensacola					55925

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
10						Florida	12				
	017					Escambia, con.		033	2	6080	
				999	9	Balance of county					99999
	018	071	1	999	9	Flagler		035	5	2020	
	019	000	2	999	9	Franklin		037	6	0000	
	020	278	1	999	9	Gadsden		039	5	8240	
	021	000	2	999	9	Gilchrist		041	6	0000	
	022	000	2	999	9	Glades		043	6	0000	
	023	000	2	999	9	Gulf		045	6	0000	
	024	000	2	999	9	Hamilton		047	6	0000	
	025	000	2	999	9	Hardee		049	6	0000	
	026	000	2	999	9	Hendry		051	5	0000	
	027	279	1	999	9	Hernando		053	3	8280	
	028	000	2	999	9	Highlands		055	4	0000	
	029	279	1			Hillsborough		057	1	8280	
				085	6	Plant City					57550
				107	2	Tampa					71000
				109	6	Temple Terrace					71400
				999	9	Balance of county					99999
	030	000	2	999	9	Holmes		059	6	0000	
	031	000	2			Indian River		061	4	0000	
				099	6	Sebastian					64825
				112	6	Vero Beach					74150
				999	9	Balance of county					99999
	032	000	2	999	9	Jackson		063	5	0000	
	033	000	2	999	9	Jefferson		065	6	0000	
	034	000	2	999	9	Lafayette		067	6	0000	
	035	208	1			Lake		069	3	5960	
				027	6	Eustis					21350
				051	6	Leesburg					39875
				999	9	Balance of county					99999
	036	098	1			Lee		071	2	2700	
				010	4	Cape Coral					10275
				029	5	Fort Myers					24125
				999	9	Balance of county					99999
	037	278	1			Leon		073	3	8240	
				105	3	Tallahassee					70600
				999	9	Balance of county					99999
	038	000	2	999	9	Levy		075	5	0000	
	039	000	2	999	9	Liberty		077	6	0000	
	040	000	2	999	9	Madison		079	6	0000	
	041	257	1			Manatee		081	3	7510	
				008	5	Bradenton					07950
				999	9	Balance of county					99999
	042	202	1			Marion		083	3	5790	
				071	5	Ocala					50750
				999	9	Balance of county					99999
	043	099	1			Martin		085	3	2710	
				102	6	Stuart					68875
				999	9	Balance of county					99999
	044	000	2			Monroe		087	4	0000	
				044	6	Key West					36550
				999	9	Balance of county					99999
	045	135	1	999	9	Nassau		089	5	3600	
	046	101	1			Okaloosa		091	3	2750	
				031	6	Fort Walton Beach					24475
				064	6	Niceville					48750
				999	9	Balance of county					99999
	047	000	2	999	9	Okeechobee		093	5	0000	
	048	208	1			Orange		095	1	5960	
				002	6	Apopka					01700
				072	6	Ocoee					51075
				074	3	Orlando					53000
				116	6	Winter Park					78300
				999	9	Balance of county					99999
	049	208	1			Osceola		097	3	5960	
				045	5	Kissimmee					36950
				095	6	St. Cloud					62625
				999	9	Balance of county					99999
	050	299	1			Palm Beach		099	1	8960	
				005	6	Belle Glade					05200
				006	4	Boca Raton					07300
				007	5	Boynton Beach					07875
				024	5	Delray Beach					17100
				033	6	Greenacres City					27325

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
10						Florida	12				
	050					Palm Beach, con.		099	1	8960	
				043	6	Jupiter					35875
				047	5	Lake Worth					39075
				068	6	North Palm Beach					49600
				079	6	Palm Beach Gardens					54075
				090	5	Riviera Beach					60975
				092	6	Royal Palm Beach					62100
				113	4	West Palm Beach					76600
				999	9	Balance of county					99999
	051	279	1			Pasco		101	2	8280	
				062	6	New Port Richey					48500
				999	9	Balance of county					99999
	052	279	1			Pinellas		103	1	8280	
				012	4	Clearwater					12875
				025	5	Dunedin					18575
				034	6	Gulfport					28175
				048	4	Largo					39425
				083	5	Pinellas Park					56975
				093	6	Safety Harbor					62425
				096	3	St. Petersburg					63000
				108	6	Tarpon Springs					71150
				999	9	Balance of county					99999
	053	154	1			Polk		105	2	3980	
				004	6	Bartow					03675
				035	6	Haines City					28400
				046	4	Lakeland					38250
				115	6	Winter Haven					78275
				999	9	Balance of county					99999
	054	000	2			Putnam		107	4	0000	
				077	6	Palatka					53875
				999	9	Balance of county					99999
	055	135	1			St. Johns		109	4	3600	
				094	6	St. Augustine					62500
				999	9	Balance of county					99999
	056	099	1			St. Lucie		111	3	2710	
				030	5	Fort Pierce					24300
				088	4	Port St. Lucie					58725
				999	9	Balance of county					99999
	057	212	1			Santa Rosa		113	4	6080	
	058	257	1			Sarasota		115	2	7510	
				069	6	North Port					49675
				098	4	Sarasota					64175
				111	6	Venice					73900
				999	9	Balance of county					99999
	059	208	1			Seminole		117	2	5960	
				001	5	Altamonte Springs					00950
				011	6	Casselberry					11050
				053	6	Longwood					41250
				076	6	Oviedo					53575
				097	5	Sanford					63650
				117	6	Winter Springs					78325
				999	9	Balance of county					99999
	060	000	2			Sumter		119	5	0000	
	061	000	2			Suwannee		121	5	0000	
	062	000	2			Taylor		123	6	0000	
	063	000	2			Union		125	6	0000	
	064	071	1			Volusia		127	2	2020	
				021	4	Daytona Beach					16525
				023	6	DeLand					16875
				026	6	Edgewater					19825
				038	6	Holly Hill					31350
				063	6	New Smyrna Beach					48625
				075	5	Ormond Beach					53150
				087	5	Port Orange					58575
				100	6	South Daytona					67325
				999	9	Balance of county					99999
	065	000	2			Wakulla		129	6	0000	
	066	000	2			Walton		131	5	0000	
	067	000	2			Washington		133	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
11						Georgia	13				
	001	000	2	999	9	Appling		001	6	0000	
	002	000	2	999	9	Atkinson		003	6	0000	
	003	000	2	999	9	Bacon		005	6	0000	
	004	000	2	999	9	Baker		007	6	0000	
	005	000	2			Baldwin		009	5	0000	
				029	6	Milledgeville					51492
				999	9	Balance of county					99999
	006	000	2	999	9	Banks		011	6	0000	
	007	016	1	999	9	Barrow		013	5	0520	
	008	016	1			Bartow		015	4	0520	
				010	6	Cartersville					13688
				999	9	Balance of county					99999
	009	000	2	999	9	Ben Hill		017	6	0000	
	010	000	2	999	9	Berrien		019	6	0000	
	011	172	1			Bibb		021	3	4680	
				027	3	Macon, part					49000
				999	9	Balance of county					99999
	012	000	2	999	9	Bleckley		023	6	0000	
	013	000	2	999	9	Brantley		025	6	0000	
	014	000	2	999	9	Brooks		027	6	0000	
	015	258	1	999	9	Bryan		029	6	7520	
	016	000	2			Bulloch		031	5	0000	
				038	6	Statesboro					73256
				999	9	Balance of county					99999
	017	000	2	999	9	Burke		033	6	0000	
	018	000	2	999	9	Butts		035	6	0000	
	019	000	2	999	9	Calhoun		037	6	0000	
	020	000	2	999	9	Camden		039	5	0000	
	021	000	2	999	9	Candler		043	6	0000	
	022	016	1			Carroll		045	4	0520	
				009	6	Carrollton					13492
				999	9	Balance of county					99999
	023	053	1	999	9	Catoosa		047	5	1560	
	024	000	2	999	9	Charlton		049	6	0000	
	025	258	1			Chatham		051	3	7520	
				035	3	Savannah					69000
				999	9	Balance of county					99999
	026	063	1	999	9	Chattahoochee		053	6	1800	
	027	000	2	999	9	Chattooga		055	6	0000	
	028	016	1	999	9	Cherokee		057	4	0520	
	029	015	1			Clarke		059	4	0500	
				004	5	Athens					03432
				999	9	Balance of county					99999
	030	000	2	999	9	Clay		061	6	0000	
	031	016	1			Clayton		063	3	0520	
				011	6	College Park, part					17776
				021	6	Forest Park					30536
				999	9	Balance of county					99999
	032	000	2	999	9	Clinch		065	6	0000	
	033	016	1			Cobb		067	2	0520	
				028	5	Marietta					49756
				036	5	Smyrna					71492
				999	9	Balance of county					99999
	034	000	2			Coffee		069	5	0000	
				017	6	Douglas					23872
				999	9	Balance of county					99999
	035	000	2			Colquitt		071	5	0000	
				030	6	Moultrie					53060
				999	9	Balance of county					99999
	036	018	1	999	9	Columbia		073	4	0600	
	037	000	2	999	9	Cook		075	6	0000	
	038	016	1			Coweta		077	4	0520	
				031	6	Newnan					55020
				999	9	Balance of county					99999
	039	000	2	999	9	Crawford		079	6	0000	
	040	000	2			Crisp		081	6	0000	
				013	6	Cordele					19616
				999	9	Balance of county					99999
	041	053	1	999	9	Dade		083	6	1560	
	042	000	2	999	9	Dawson		085	6	0000	
	043	000	2			Decatur		087	5	0000	
				007	6	Bainbridge					04896
				999	9	Balance of county					99999
	044	016	1			De Kalb		089	1	0520	
				005	2	Atlanta, part					04000

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
11						Georgia	13				
	044					De Kalb, con.		089	1	0520	
				016	6	Decatur					22052
				999	9	Balance of county					99999
	045	000	2			Dodge		091	6	0000	
	046	000	2			Dooly		093	6	0000	
	047	003	1			Dougherty		095	4	0120	
				001	4	Albany					01052
				999	9	Balance of county					99999
	048	016	1			Douglas		097	4	0520	
				018	6	Douglasville					23900
				999	9	Balance of county					99999
	049	000	2			Early		099	6	0000	
	050	000	2			Echols		101	6	0000	
	051	258	1			Effingham		103	5	7520	
	052	000	2			Elbert		105	6	0000	
	053	000	2			Emanuel		107	6	0000	
	054	000	2			Evans		109	6	0000	
	055	000	2			Fannin		111	6	0000	
	056	016	1			Fayette		113	4	0520	
				032	6	Peachtree City					59724
				999	9	Balance of county					99999
	057	000	2			Floyd		115	4	0000	
				033	5	Rome					66668
				999	9	Balance of county					99999
	058	016	1			Forsyth		117	5	0520	
	059	000	2			Franklin		119	6	0000	
	060	016	1			Fulton		121	1	0520	
				002	6	Alpharetta					01696
				005	2	Atlanta, part					04000
				011	6	College Park, part					17776
				020	5	East Point					25720
				034	5	Roswell					67284
				999	9	Balance of county					99999
	061	000	2			Gilmer		123	6	0000	
	062	000	2			Glascok		125	6	0000	
	063	000	2			Glynn		127	4	0000	
				008	6	Brunswick					11560
				999	9	Balance of county					99999
	064	000	2			Gordon		129	5	0000	
	065	000	2			Grady		131	6	0000	
	066	000	2			Greene		133	6	0000	
	067	016	1			Gwinnett		135	2	0520	
				026	6	Lawrenceville					45488
				037	6	Snellville					71604
				999	9	Balance of county					99999
	068	000	2			Habersham		137	5	0000	
	069	000	2			Hall		139	4	0000	
				022	6	Gainesville					31908
				999	9	Balance of county					99999
	070	000	2			Hancock		141	6	0000	
	071	000	2			Haralson		143	6	0000	
	072	063	1			Harris		145	6	1800	
	073	000	2			Hart		147	6	0000	
	074	000	2			Heard		149	6	0000	
	075	016	1			Henry		151	4	0520	
	076	172	1			Houston		153	4	4680	
				043	5	Warner Robins					80508
				999	9	Balance of county					99999
	077	000	2			Irwin		155	6	0000	
	078	000	2			Jackson		157	5	0000	
	079	000	2			Jasper		159	6	0000	
	080	000	2			Jeff Davis		161	6	0000	
	081	000	2			Jefferson		163	6	0000	
	082	000	2			Jenkins		165	6	0000	
	083	000	2			Johnson		167	6	0000	
	084	172	1			Jones		169	6	4680	
				027	3	Macon, part					49000
				999	9	Balance of county					99999
	085	000	2			Lamar		171	6	0000	
	086	000	2			Lanier		173	6	0000	
	087	000	2			Laurens		175	5	0000	
				019	6	Dublin					24376
				999	9	Balance of county					99999
	088	003	1			Lee		177	6	0120	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
11						Georgia	13				
	089	000	2			Liberty		179	4	0000	
				024	6	Hinesville					38964
				999	9	Balance of county					99999
	090	000	2			Lincoln		181	6	0000	
	091	000	2			Long		183	6	0000	
	092	000	2			Lowndes		185	4	0000	
				041	5	Valdosta					78800
				999	9	Balance of county					99999
	093	000	2			Lumpkin		187	6	0000	
	094	018	1			McDuffie		189	6	0600	
	095	000	2			McIntosh		191	6	0000	
	096	000	2			Macon		193	6	0000	
	097	015	1			Madison		195	6	0500	
	098	000	2			Marion		197	6	0000	
	099	000	2			Meriwether		199	6	0000	
	100	000	2			Miller		201	6	0000	
	101	000	2			Mitchell		205	6	0000	
	102	000	2			Monroe		207	6	0000	
	103	000	2			Montgomery		209	6	0000	
				042	6	Vidalia, part					79388
				999	9	Balance of county					99999
	104	000	2			Morgan		211	6	0000	
	105	000	2			Murray		213	5	0000	
	106	063	1			Muscogee		215	3	1800	
				012	3	Columbus					19000
				999	9	Balance of county					99999
	107	016	1			Newton		217	5	0520	
				014	6	Covington					20064
				999	9	Balance of county					99999
	108	015	1			Oconee		219	6	0500	
	109	000	2			Oglethorpe		221	6	0000	
	110	016	1			Paulding		223	5	0520	
	111	172	1			Peach		225	6	4680	
	112	016	1			Pickens		227	6	0520	
	113	000	2			Pierce		229	6	0000	
				044	6	Waycross, part					80956
				999	9	Balance of county					99999
	114	000	2			Pike		231	6	0000	
	115	000	2			Polk		233	5	0000	
	116	000	2			Pulaski		235	6	0000	
	117	000	2			Putnam		237	6	0000	
	118	000	2			Quitman		239	6	0000	
	119	000	2			Rabun		241	6	0000	
	120	000	2			Randolph		243	6	0000	
	121	018	1			Richmond		245	3	0600	
				006	5	Augusta					04196
				999	9	Balance of county					99999
	122	016	1			Rockdale		247	4	0520	
	123	000	2			Schley		249	6	0000	
	124	000	2			Screven		251	6	0000	
	125	000	2			Seminole		253	6	0000	
	126	016	1			Spalding		255	4	0520	
				023	6	Griffin					35324
				999	9	Balance of county					99999
	127	000	2			Stephens		257	6	0000	
	128	000	2			Stewart		259	6	0000	
	129	000	2			Sumter		261	5	0000	
				003	6	Americus					02116
				999	9	Balance of county					99999
	130	000	2			Talbot		263	6	0000	
	131	000	2			Taliaferro		265	6	0000	
	132	000	2			Tattnall		267	6	0000	
	133	000	2			Taylor		269	6	0000	
	134	000	2			Telfair		271	6	0000	
	135	000	2			Terrell		273	6	0000	
	136	000	2			Thomas		275	5	0000	
				039	6	Thomasville					76224
				999	9	Balance of county					99999
	137	000	2			Tift		277	5	0000	
				040	6	Tifton					76476
				999	9	Balance of county					99999
	138	000	2			Toombs		279	6	0000	
				042	6	Vidalia, part					79388
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
11						Georgia	13				
	139	000	2	999	9	Towns		281	6	0000	
	140	000	2	999	9	Treutlen		283	6	0000	
	141	000	2			Troup		285	4	0000	
				025	5	La Grange					44340
				999	9	Balance of county					99999
	142	000	2	999	9	Turner		287	6	0000	
	143	172	1	999	9	Twiggs		289	6	4680	
	144	000	2	999	9	Union		291	6	0000	
	145	000	2	999	9	Upson		293	5	0000	
	146	053	1	999	9	Walker		295	4	1560	
	147	016	1	999	9	Walton		297	5	0520	
	148	000	2			Ware		299	5	0000	
				044	6	Waycross, part					80956
				999	9	Balance of county					99999
	149	000	2	999	9	Warren		301	6	0000	
	150	000	2	999	9	Washington		303	6	0000	
	151	000	2	999	9	Wayne		305	6	0000	
	152	000	2	999	9	Webster		307	6	0000	
	153	000	2	999	9	Wheeler		309	6	0000	
	154	000	2	999	9	White		311	6	0000	
	155	000	2			Whitfield		313	4	0000	
				015	6	Dalton					21380
				999	9	Balance of county					99999
	156	000	2	999	9	Wilcox		315	6	0000	
	157	000	2	999	9	Wilkes		317	6	0000	
	158	000	2	999	9	Wilkinson		319	6	0000	
	159	000	2	999	9	Worth		321	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
12						Hawaii	15				
	001	000	2			Hawaii		001	3	0000	
				002	5	Hilo					14650
				999	9	Balance of county					99999
	002	125	1			Honolulu		003	1	3320	
				001	6	Ewa Beach					07450
				003	2	Honolulu					17000
				005	5	Kailua					23150
				006	5	Kaneohe					28250
				007	5	Mililani Town					51050
				008	5	Pearl City					62600
				009	6	Schofield Barracks					69050
				010	6	Wahiawa					72650
				012	5	Waipahu					79700
				999	9	Balance of county					99999
	003	000	2	999	9	Kalawao		005	6	0000	
	004	000	2	999	9	Kauai		007	4	0000	
	005	000	2			Maui		009	3	0000	
				004	6	Kahului					22700
				011	6	Wailuku					77450
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
13						Idaho	16				
	001	036	1			Ada		001	3	1080	
				001	3	Boise City					08830
				999	9	Balance of county					99999
	002	000	2			Adams		003	6	0000	
	003	000	2			Bannock		005	4	0000	
				008	5	Pocatello, part					64090
				999	9	Balance of county					99999
	004	000	2			Bear Lake		007	6	0000	
	005	000	2			Benewah		009	6	0000	
	006	000	2			Bingham		011	5	0000	
	007	000	2			Blaine		013	6	0000	
	008	000	2			Boise		015	6	0000	
	009	000	2			Bonner		017	5	0000	
	010	000	2			Bonneville		019	4	0000	
				004	5	Idaho Falls					39700
				999	9	Balance of county					99999
	011	000	2			Boundary		021	6	0000	
	012	000	2			Butte		023	6	0000	
	013	000	2			Camas		025	6	0000	
	014	036	1			Canyon		027	4	1080	
				002	6	Caldwell					12250
				007	5	Nampa					56260
				999	9	Balance of county					99999
	015	000	2			Caribou		029	6	0000	
	016	000	2			Cassia		031	6	0000	
	017	000	2			Clark		033	6	0000	
	018	000	2			Clearwater		035	6	0000	
	019	000	2			Custer		037	6	0000	
	020	000	2			Elmore		039	6	0000	
	021	000	2			Franklin		041	6	0000	
	022	000	2			Fremont		043	6	0000	
	023	000	2			Gem		045	6	0000	
	024	000	2			Gooding		047	6	0000	
	025	000	2			Idaho		049	6	0000	
	026	000	2			Jefferson		051	6	0000	
	027	000	2			Jerome		053	6	0000	
	028	000	2			Kootenai		055	4	0000	
				003	6	Coeur d'Alene					16750
				999	9	Balance of county					99999
	029	000	2			Latah		057	5	0000	
				006	6	Moscow					54550
				999	9	Balance of county					99999
	030	000	2			Lemhi		059	6	0000	
	031	000	2			Lewis		061	6	0000	
	032	000	2			Lincoln		063	6	0000	
	033	000	2			Madison		065	6	0000	
				009	6	Rexburg					67420
				999	9	Balance of county					99999
	034	000	2			Minidoka		067	6	0000	
	035	000	2			Nez Perce		069	5	0000	
				005	5	Lewiston					46540
				999	9	Balance of county					99999
	036	000	2			Oneida		071	6	0000	
	037	000	2			Owyhee		073	6	0000	
	038	000	2			Payette		075	6	0000	
	039	000	2			Power		077	6	0000	
				008	5	Pocatello, part					64090
				999	9	Balance of county					99999
	040	000	2			Shoshone		079	6	0000	
	041	000	2			Teton		081	6	0000	
	042	000	2			Twin Falls		083	4	0000	
				010	5	Twin Falls					82810
				999	9	Balance of county					99999
	043	000	2			Valley		085	6	0000	
	044	000	2			Washington		087	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	001	000	2			Adams		001	4	0000	
				138	5	Quincy					62367
				999	9	Balance of county					99999
	002	000	2			Alexander		003	6	0000	
	003	000	2			Bond		005	6	0000	
	004	237	1			Boone		007	5	6880	
				011	6	Belvidere					05092
				999	9	Balance of county					99999
	005	000	2			Brown		009	6	0000	
	006	000	2			Bureau		011	5	0000	
	007	000	2			Calhoun		013	6	0000	
	008	000	2			Carroll		015	6	0000	
	009	000	2			Cass		017	6	0000	
	010	048	1			Champaign		019	3	1400	
				032	4	Champaign					12385
				139	6	Rantoul village					62783
				160	5	Urbana					77005
				999	9	Balance of county					99999
	011	000	2			Christian		021	5	0000	
				158	6	Taylorville					74574
				999	9	Balance of county					99999
	012	000	2			Clark		023	6	0000	
	013	000	2			Clay		025	6	0000	
	014	243	1			Clinton		027	5	7040	
				031	6	Centralia, part					12164
				999	9	Balance of county					99999
	015	000	2			Coles		029	4	0000	
				033	6	Charleston					12567
				105	6	Mattoon					47553
				999	9	Balance of county					99999
	016	055	1			Cook		031	0	1600	
				003	6	Alsip village					01010
				005	4	Arlington Heights village					02154
				007	6	Bartlett village, part					04013
				010	6	Bellwood village					04975
				012	6	Bensenville village, part					05248
				013	5	Berwyn					05573
				016	6	Blue Island					06704
				020	6	Bridgeview village					08225
				021	6	Brookfield village					08576
				022	5	Buffalo Grove village, part					09447
				023	5	Burbank					09642
				025	5	Calumet City					10487
				034	0	Chicago, part					14000
				035	5	Chicago Heights					14026
				036	6	Chicago Ridge village					14065
				037	4	Cicero					14351
				039	6	Country Club Hills					16691
				041	6	Crestwood village					17497
				046	6	Deerfield village, part					18992
				048	4	Des Plaines					19642
				050	6	Dolton village					20292
				057	4	Elgin, part					23074
				058	5	Elk Grove Village village, part					23256
				060	6	Elmwood Park village					23724
				061	4	Evanston					24582
				062	6	Evergreen Park village					24634
				064	6	Forest Park village					26935
				065	6	Franklin Park village					27702
				071	5	Glenview village					29938
				074	5	Hanover Park village, part					32746
				075	5	Harvey					33383
				076	6	Hazel Crest village					33695
				078	6	Hickory Hills					34514
				080	6	Hinsdale village, part					35307
				081	5	Hoffman Estates village, part					35411
				082	6	Homewood village					35879
				085	6	Justice village					38830
				088	6	La Grange Park village					40793
				089	6	La Grange village					40767
				092	5	Lansing village					42028
				095	6	Lincolnwood village					43744
				103	6	Markham					47007
				104	6	Matteson village					47540

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	016					Cook, con.		031	0	1600	
				106	5	Maywood village					47774
				107	6	Melrose Park village					48242
				108	6	Midlothian village					48892
				111	6	Morton Grove village					50647
				113	4	Mount Prospect village					51089
				117	5	Niles village					53000
				119	6	Norridge village					53377
				120	5	Northbrook village					53481
				122	6	Northlake					53871
				123	5	Oak Forest					54638
				124	4	Oak Lawn village					54820
				125	4	Oak Park village					54885
				127	5	Orland Park village					56640
				129	5	Palatine village					57225
				130	6	Palos Heights					57381
				131	6	Palos Hills					57394
				132	6	Park Forest village, part					57732
				133	5	Park Ridge					57875
				137	6	Prospect Heights					62016
				140	6	Richton Park village					63706
				141	6	Riverdale village					64278
				142	6	River Forest village					64304
				145	6	Rolling Meadows					65338
				147	6	Roselle village, part					65806
				150	4	Schaumburg village, part					68003
				151	6	Schiller Park village					68081
				152	4	Skokie village					70122
				153	6	South Holland village					70850
				156	5	Streamwood village					73157
				159	5	Tinley Park village, part					75484
				166	6	Westchester village					80047
				168	6	Western Springs village					80242
				171	5	Wheeling village, part					81087
				172	5	Wilmette village					82075
				173	6	Winnetka village					82530
				178	6	Worth village					83518
				999	9	Balance of county					99999
	017	000	2	999	9	Crawford		033	6	0000	
	018	000	2	999	9	Cumberland		035	6	0000	
	019	055	1			De Kalb		037	4	1600	
				047	5	De Kalb					19161
				999	9	Balance of county					99999
	020	000	2	999	9	De Witt		039	6	0000	
	021	000	2	999	9	Douglas		041	6	0000	
	022	055	1			Du Page		043	1	1600	
				001	5	Addison village					00243
				006	4	Aurora, part					03012
				007	6	Bartlett village, part					04013
				008	6	Batavia, part					04078
				012	6	Bensenville village, part					05248
				014	6	Bloomington village					06587
				017	5	Bolingbrook village, part					07133
				028	5	Carol Stream village					11332
				034	0	Chicago, part					14000
				044	6	Darien					18628
				051	5	Downers Grove village					20591
				058	5	Elk Grove Village village, part					23256
				059	5	Elmhurst					23620
				069	5	Glendale Heights village					29730
				070	6	Glen Ellyn village					29756
				074	5	Hanover Park village, part					32746
				080	6	Hinsdale village, part					35307
				096	6	Lisle village					43939
				097	5	Lombard village					44407
				116	4	Naperville, part					51622
				147	6	Roselle village, part					65806
				149	6	St. Charles, part					66703
				150	4	Schaumburg village, part					68003
				162	6	Villa Park village					77993
				163	6	Warrenville					78929
				167	6	West Chicago					80060
				169	6	Westmont village					80645
				170	4	Wheaton					81048

Vital Statistics Codes					FIPS Codes					
St	Cnty	P/MSA	M/NM	City P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14					Illinois	17				
	022				Du Page, con.	043	1		1600	
				174	6					82985
				175	5					83245
				999	9					99999
	023	000	2	999	9					
	024	000	2	999	9	045	6		0000	
	025	000	2	999	9	047	6		0000	
					Edgar	049	5		0000	
				056	6					22736
				999	9					99999
	026	000	2	999	9					
	027	000	2	999	9	051	6		0000	
	028	000	2	999	9	053	6		0000	
	029	000	2	999	9	055	5		0000	
					Effingham	057	5		0000	
				026	6					11007
				999	9					99999
	030	000	2	999	9					
	031	000	2	999	9	059	6		0000	
	032	055	1	999	9	061	6		0000	
					Gallatin	063	5		1600	
				110	6					50491
				999	9					99999
	033	000	2	999	9					
	034	000	2	999	9	065	6		0000	
	035	000	2	999	9	067	6		0000	
	036	000	2	999	9	069	6		0000	
	037	069	1	999	9	071	6		0000	
					Henry	073	4		1960	
				087	6					39727
				999	9					99999
	038	000	2	999	9					
	039	000	2	999	9	075	5		0000	
					Iroquois	077	4		0000	
				027	5					11163
				999	9					99999
	040	000	2	999	9					
	041	000	2	999	9	079	6		0000	
					Jasper	081	5		0000	
				114	6					51180
				999	9					99999
	042	243	1	999	9					
	043	000	2	999	9	083	6		7040	
	044	000	2	999	9	085	6		0000	
	045	055	1	999	9	087	6		0000	
					Johnson	089	2		1600	
				002	6					00685
				006	4					03012
				007	6					04013
				008	6					04078
				029	6					11358
				057	4					23074
				068	6					28872
				149	6					66703
				999	9					99999
	046	144	1	999	9					
					Kankakee	091	4		3740	
				018	6					07471
				019	6					07744
				086	5					38934
				999	9					99999
	047	055	1	999	9					
	048	000	2	999	9	093	5		1600	
					Kendall	095	4		0000	
				067	5					28326
				999	9					99999
	049	055	1	999	9					
					Lake	097	1		1600	
				022	5					09447
				046	6					18992
				073	6					32018
				079	5					34722
				090	6					41105
				091	6					41742
				093	6					43250
				115	6					51349
				121	5					53559
				148	6					66040
				161	6					77694
				165	4					79293
				171	5					81087
				179	6					84220
				999	9					99999
	050	000	2	999	9					
					Balance of county	099	3		0000	
				128	6					56926
					La Salle					
					Ottawa					

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	050					La Salle, con.		099	3	0000	
				157	6	Streator, part					73170
				999	9	Balance of county					99999
	051	000	2			Lawrence		101	6	0000	
	052	000	2			Lee		103	5	0000	
				049	6	Dixon					20162
				999	9	Balance of county					99999
	053	000	2			Livingston		105	5	0000	
				136	6	Pontiac					61015
				157	6	Streator, part					73170
				999	9	Balance of county					99999
	054	000	2			Logan		107	5	0000	
				094	6	Lincoln					43536
				999	9	Balance of county					99999
	055	000	2			McDonough		109	5	0000	
				101	6	Macomb					45889
				999	9	Balance of county					99999
	056	055	1			McHenry		111	3	1600	
				002	6	Algonquin village, part					00685
				030	6	Cary village					11592
				042	6	Crystal Lake					17887
				099	6	McHenry					45694
				177	6	Woodstock					83349
				999	9	Balance of county					99999
	057	035	1			McLean		113	3	1040	
				015	4	Bloomington					06613
				118	5	Normal					53234
				999	9	Balance of county					99999
	058	073	1			Macon		115	3	2040	
				045	4	Decatur					18823
				999	9	Balance of county					99999
	059	000	2			Macoupin		117	5	0000	
	060	243	1			Madison		119	3	7040	
				004	5	Alton					01114
				038	6	Collinsville, part					15599
				055	6	Edwardsville					22697
				072	5	Granite City					30926
				176	6	Wood River					83271
				999	9	Balance of county					99999
	061	000	2			Marion		121	5	0000	
				031	6	Centralia, part					12164
				999	9	Balance of county					99999
	062	000	2			Marshall		123	6	0000	
	063	000	2			Mason		125	6	0000	
	064	000	2			Massac		127	6	0000	
	065	269	1			Menard		129	6	7880	
	066	000	2			Mercer		131	6	0000	
	067	243	1			Monroe		133	6	7040	
	068	000	2			Montgomery		135	5	0000	
	069	000	2			Morgan		137	5	0000	
				083	6	Jacksonville					38115
				999	9	Balance of county					99999
	070	000	2			Moultrie		139	6	0000	
	071	237	1			Ogle		141	5	6880	
	072	213	1			Peoria		143	3	6120	
				134	5	Pekin, part					58447
				135	3	Peoria					59000
				999	9	Balance of county					99999
	073	000	2			Perry		145	6	0000	
	074	000	2			Piatt		147	6	0000	
	075	000	2			Pike		149	6	0000	
	076	000	2			Pope		151	6	0000	
	077	000	2			Pulaski		153	6	0000	
	078	000	2			Putnam		155	6	0000	
	079	000	2			Randolph		157	5	0000	
	080	000	2			Richland		159	6	0000	
	081	069	1			Rock Island		161	3	1960	
				052	6	East Moline					22073
				109	5	Moline					49867
				144	5	Rock Island					65078
				999	9	Balance of county					99999
	082	243	1			St. Clair		163	2	7040	
				009	5	Belleville					04845
				024	6	Cahokia village					10370

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
14						Illinois	17				
	082					St. Clair, con.		163	2	7040	
				038	6	Collinsville, part					15599
				054	5	East St. Louis					22255
				063	6	Fairview Heights					25141
				126	6	O'Fallon					55249
				999	9	Balance of county					99999
	083	000	2	999	9	Saline		165	5	0000	
	084	269	1			Sangamon		167	3	7880	
				154	3	Springfield					72000
				999	9	Balance of county					99999
	085	000	2	999	9	Schuyler		169	6	0000	
	086	000	2	999	9	Scott		171	6	0000	
	087	000	2	999	9	Shelby		173	6	0000	
	088	000	2	999	9	Stark		175	6	0000	
	089	000	2			Stephenson		177	5	0000	
				066	5	Freeport					27884
				999	9	Balance of county					99999
	090	213	1			Tazewell		179	3	6120	
				053	6	East Peoria					22164
				112	6	Morton village					50621
				134	5	Pekin, part					58447
				164	6	Washington					79033
				999	9	Balance of county					99999
	091	000	2	999	9	Union		181	6	0000	
	092	000	2			Vermilion		183	4	0000	
				043	5	Danville					18563
				999	9	Balance of county					99999
	093	000	2	999	9	Wabash		185	6	0000	
	094	000	2	999	9	Warren		187	6	0000	
	095	000	2	999	9	Washington		189	6	0000	
	096	000	2	999	9	Wayne		191	6	0000	
	097	000	2	999	9	White		193	6	0000	
	098	000	2			Whiteside		195	4	0000	
				155	6	Sterling					72546
				999	9	Balance of county					99999
	099	055	1			Will		197	2	1600	
				017	5	Bolingbrook village, part					07133
				040	6	Crest Hill					17458
				084	4	Joliet					38570
				116	4	Naperville, part					51622
				132	6	Park Forest village, part					57732
				146	6	Romeoville village					65442
				159	5	Tinley Park village, part					75484
				175	5	Woodridge village, part					83245
				999	9	Balance of county					99999
	100	000	2			Williamson		199	4	0000	
				077	6	Herrin					34358
				102	6	Marion					46916
				999	9	Balance of county					99999
	101	237	1			Winnebago		201	2	6880	
				098	6	Loves Park					45031
				100	6	Machesney Park village					45726
				143	3	Rockford					65000
				999	9	Balance of county					99999
	102	213	1	999	9	Woodford		203	5	6120	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
15						Indiana	18				
	001	102	1	999	9	Adams	001	5		2760	
	002	102	1			Allen	003	2		2760	
				015	3	Fort Wayne					25000
				047	6	New Haven					52992
				999	9	Balance of county					99999
	003	000	2			Bartholomew	005	4		0000	
				007	5	Columbus					14734
				999	9	Balance of county					99999
	004	000	2	999	9	Benton	007	6		0000	
	005	000	2	999	9	Blackford	009	6		0000	
	006	130	1			Boone	011	5		3480	
				035	6	Lebanon					42624
				999	9	Balance of county					99999
	007	000	2	999	9	Brown	013	6		0000	
	008	000	2	999	9	Carroll	015	6		0000	
	009	000	2			Cass	017	5		0000	
				036	6	Logansport					44658
				999	9	Balance of county					99999
	010	169	1			Clark	019	4		4520	
				006	6	Clarksville					12934
				029	6	Jeffersonville					38358
				999	9	Balance of county					99999
	011	280	1	999	9	Clay	021	6		8320	
	012	152	1			Clinton	023	5		3920	
				016	6	Frankfort					25324
				999	9	Balance of county					99999
	013	000	2	999	9	Crawford	025	6		0000	
	014	000	2			Daviess	027	5		0000	
				063	6	Washington					80504
				999	9	Balance of county					99999
	015	057	1	999	9	Dearborn	029	5		1640	
	016	000	2	999	9	Decatur	031	6		0000	
	017	102	1	999	9	De Kalb	033	5		2760	
	018	189	1			Delaware	035	3		5280	
				043	4	Muncie					51876
				999	9	Balance of county					99999
	019	000	2			Dubois	037	5		0000	
				028	6	Jasper					37782
				999	9	Balance of county					99999
	020	084	1			Elkhart	039	3		2330	
				013	5	Elkhart					20728
				019	6	Goshen					28386
				999	9	Balance of county					99999
	021	000	2			Fayette	041	5		0000	
				008	6	Connersville					14932
				999	9	Balance of county					99999
	022	169	1			Floyd	043	4		4520	
				045	5	New Albany					52326
				999	9	Balance of county					99999
	023	000	2	999	9	Fountain	045	6		0000	
	024	000	2	999	9	Franklin	047	6		0000	
	025	000	2	999	9	Fulton	049	6		0000	
	026	000	2	999	9	Gibson	051	5		0000	
	027	000	2			Grant	053	4		0000	
				038	5	Marion					46908
				999	9	Balance of county					99999
	028	000	2	999	9	Greene	055	5		0000	
	029	130	1			Hamilton	057	3		3480	
				005	5	Carmel					10342
				048	6	Noblesville					54180
				999	9	Balance of county					99999
	030	130	1			Hancock	059	5		3480	
				020	6	Greenfield					29520
				999	9	Balance of county					99999
	031	169	1	999	9	Harrison	061	5		4520	
	032	130	1			Hendricks	063	4		3480	
				050	6	Plainfield					60246
				999	9	Balance of county					99999
	033	000	2			Henry	065	5		0000	
				046	6	New Castle					52740
				999	9	Balance of county					99999
	034	149	1			Howard	067	4		3850	
				030	5	Kokomo					40392
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
15						Indiana	18				
	035	102	1			Huntington		069	5	2760	
				026	6	Huntington					35302
				999	9	Balance of county					99999
	036	000	2			Jackson		071	5	0000	
				054	6	Seymour					68832
				999	9	Balance of county					99999
	037	000	2			Jasper		073	6	0000	
	038	000	2			Jay		075	6	0000	
	039	000	2			Jefferson		077	5	0000	
				037	6	Madison					45990
				999	9	Balance of county					99999
	040	000	2			Jennings		079	6	0000	
	041	130	1			Johnson		081	4	3480	
				017	6	Franklin					25450
				021	5	Greenwood					29898
				999	9	Balance of county					99999
	042	000	2			Knox		083	5	0000	
				060	6	Vincennes					79208
				999	9	Balance of county					99999
	043	000	2			Kosciusko		085	4	0000	
				062	6	Warsaw					80306
				999	9	Balance of county					99999
	044	000	2			Lagrange		087	5	0000	
	045	108	1			Lake		089	2	2960	
				010	6	Crown Point					16138
				011	6	Dyer					19270
				012	5	East Chicago					19486
				018	3	Gary					27000
				022	6	Griffith					30042
				023	4	Hammond					31000
				024	6	Highland					33466
				025	6	Hobart					34114
				032	6	Lake Station					41535
				040	5	Merrillville					48528
				044	6	Munster					51912
				053	6	Schererville					68220
				999	9	Balance of county					99999
	046	000	2			La Porte		091	3	0000	
				033	6	La Porte					42246
				041	5	Michigan City					48798
				999	9	Balance of county					99999
	047	000	2			Lawrence		093	5	0000	
				002	6	Bedford					04114
				999	9	Balance of county					99999
	048	130	1			Madison		095	3	3480	
				001	4	Anderson					01468
				999	9	Balance of county					99999
	049	130	1			Marion		097	1	3480	
				003	6	Beech Grove					04204
				027	1	Indianapolis					36000
				034	5	Lawrence					42426
				057	6	Speedway					71828
				999	9	Balance of county					99999
	050	000	2			Marshall		099	5	0000	
	051	000	2			Martin		101	6	0000	
	052	000	2			Miami		103	5	0000	
				049	6	Peru					59328
				999	9	Balance of county					99999
	053	034	1			Monroe		105	3	1020	
				004	4	Bloomington					05860
				999	9	Balance of county					99999
	054	000	2			Montgomery		107	5	0000	
				009	6	Crawfordsville					15742
				999	9	Balance of county					99999
	055	130	1			Morgan		109	4	3480	
				039	6	Martinsville					47448
				999	9	Balance of county					99999
	056	000	2			Newton		111	6	0000	
	057	000	2			Noble		113	5	0000	
	058	057	1			Ohio		115	6	1640	
	059	000	2			Orange		117	6	0000	
	060	000	2			Owen		119	6	0000	
	061	000	2			Parke		121	6	0000	
	062	000	2			Perry		123	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
15						Indiana	18				
	063	000	2	999	9	Pike		125	6	0000	
	064	108	1			Porter		127	3	2960	
				051	5	Portage					61092
				059	6	Valparaiso					78326
				999	9	Balance of county					99999
	065	089	1	999	9	Posey		129	5	2440	
	066	000	2	999	9	Pulaski		131	6	0000	
	067	000	2	999	9	Putnam		133	5	0000	
	068	000	2	999	9	Randolph		135	5	0000	
	069	000	2	999	9	Ripley		137	6	0000	
	070	000	2	999	9	Rush		139	6	0000	
	071	267	1			St. Joseph		141	3	7800	
				042	5	Mishawaka					49932
				056	3	South Bend					71000
				999	9	Balance of county					99999
	072	169	1	999	9	Scott		143	6	4520	
	073	130	1			Shelby		145	5	3480	
				055	6	Shelbyville					69318
				999	9	Balance of county					99999
	074	000	2	999	9	Spencer		147	6	0000	
	075	000	2	999	9	Starke		149	6	0000	
	076	000	2	999	9	Steuben		151	5	0000	
	077	000	2	999	9	Sullivan		153	6	0000	
	078	000	2	999	9	Switzerland		155	6	0000	
	079	152	1			Tippecanoe		157	3	3920	
				031	5	Lafayette					40788
				064	5	West Lafayette					82862
				999	9	Balance of county					99999
	080	149	1	999	9	Tipton		159	6	3850	
	081	000	2	999	9	Union		161	6	0000	
	082	089	1			Vanderburgh		163	3	2440	
				014	3	Evansville					22000
				999	9	Balance of county					99999
	083	280	1	999	9	Vermillion		165	6	8320	
	084	280	1			Vigo		167	3	8320	
				058	4	Terre Haute					75428
				999	9	Balance of county					99999
	085	000	2			Wabash		169	5	0000	
				061	6	Wabash					79370
				999	9	Balance of county					99999
	086	000	2	999	9	Warren		171	6	0000	
	087	089	1	999	9	Warrick		173	5	2440	
	088	000	2	999	9	Washington		175	6	0000	
	089	000	2			Wayne		177	4	0000	
				052	5	Richmond					64260
				999	9	Balance of county					99999
	090	102	1	999	9	Wells		179	5	2760	
	091	000	2	999	9	White		181	6	0000	
	092	102	1	999	9	Whitley		183	5	2760	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
16						Iowa	19				
	001	000	2	999	9	Adair	001	6		0000	
	002	000	2	999	9	Adams	003	6		0000	
	003	000	2	999	9	Allamakee	005	6		0000	
	004	000	2	999	9	Appanoose	007	6		0000	
	005	000	2	999	9	Audubon	009	6		0000	
	006	000	2	999	9	Benton	011	6		0000	
	007	297	1			Black Hawk	013	3		8920	
				006	5	Cedar Falls					11755
				029	4	Waterloo					82425
				999	9	Balance of county					99999
	008	000	2			Boone	015	5		0000	
				004	6	Boone					07480
				999	9	Balance of county					99999
	009	000	2	999	9	Bremer	017	6		0000	
	010	000	2	999	9	Buchanan	019	6		0000	
	011	000	2	999	9	Buena Vista	021	6		0000	
	012	000	2	999	9	Butler	023	6		0000	
	013	000	2	999	9	Calhoun	025	6		0000	
	014	000	2	999	9	Carroll	027	6		0000	
	015	000	2	999	9	Cass	029	6		0000	
	016	000	2	999	9	Cedar	031	6		0000	
	017	000	2			Cerro Gordo	033	5		0000	
				021	5	Mason City					50160
				999	9	Balance of county					99999
	018	000	2	999	9	Cherokee	035	6		0000	
	019	000	2	999	9	Chickasaw	037	6		0000	
	020	000	2	999	9	Clarke	039	6		0000	
	021	000	2			Clay	041	6		0000	
				027	6	Spencer					74280
				999	9	Balance of county					99999
	022	000	2	999	9	Clayton	043	6		0000	
	023	000	2			Clinton	045	4		0000	
				008	5	Clinton					14430
				999	9	Balance of county					99999
	024	000	2	999	9	Crawford	047	6		0000	
	025	075	1			Dallas	049	5		2120	
				030	5	West Des Moines, part					83910
				999	9	Balance of county					99999
	026	000	2	999	9	Davis	051	6		0000	
	027	000	2	999	9	Decatur	053	6		0000	
	028	000	2	999	9	Delaware	055	6		0000	
	029	000	2			Des Moines	057	5		0000	
				005	5	Burlington					09550
				999	9	Balance of county					99999
	030	000	2	999	9	Dickinson	059	6		0000	
	031	079	1			Dubuque	061	4		2200	
				013	4	Dubuque					22395
				999	9	Balance of county					99999
	032	000	2	999	9	Emmet	063	6		0000	
	033	000	2	999	9	Fayette	065	6		0000	
	034	000	2	999	9	Floyd	067	6		0000	
	035	000	2	999	9	Franklin	069	6		0000	
	036	000	2	999	9	Fremont	071	6		0000	
	037	000	2	999	9	Greene	073	6		0000	
	038	000	2	999	9	Grundy	075	6		0000	
	039	000	2	999	9	Guthrie	077	6		0000	
	040	000	2	999	9	Hamilton	079	6		0000	
	041	000	2	999	9	Hancock	081	6		0000	
	042	000	2	999	9	Hardin	083	6		0000	
	043	000	2	999	9	Harrison	085	6		0000	
	044	000	2	999	9	Henry	087	6		0000	
	045	000	2	999	9	Howard	089	6		0000	
	046	000	2	999	9	Humboldt	091	6		0000	
	047	000	2	999	9	Ida	093	6		0000	
	048	000	2	999	9	Iowa	095	6		0000	
	049	000	2	999	9	Jackson	097	6		0000	
	050	000	2			Jasper	099	5		0000	
				023	6	Newton					56505
				999	9	Balance of county					99999
	051	000	2	999	9	Jefferson	101	6		0000	
	052	131	1			Johnson	103	4		3500	
				009	6	Coralville					16230
				017	4	Iowa City					38595
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
16						Iowa	19				
	053	000	2	999	9	Jones		105	6	0000	
	054	000	2	999	9	Keokuk		107	6	0000	
	055	000	2	999	9	Kossuth		109	6	0000	
	056	000	2			Lee		111	5	0000	
				015	6	Fort Madison					28605
				018	6	Keokuk					40845
				999	9	Balance of county					99999
	057	047	1			Linn		113	3	1360	
				007	3	Cedar Rapids					12000
				019	6	Marion					49485
				999	9	Balance of county					99999
	058	000	2	999	9	Louisa		115	6	0000	
	059	000	2	999	9	Lucas		117	6	0000	
	060	000	2	999	9	Lyon		119	6	0000	
	061	000	2	999	9	Madison		121	6	0000	
	062	000	2			Mahaska		123	6	0000	
				024	6	Oskaloosa					59925
				999	9	Balance of county					99999
	063	000	2	999	9	Marion		125	5	0000	
	064	000	2			Marshall		127	5	0000	
				020	5	Marshalltown					49755
				999	9	Balance of county					99999
	065	000	2	999	9	Mills		129	6	0000	
	066	000	2	999	9	Mitchell		131	6	0000	
	067	000	2	999	9	Monona		133	6	0000	
	068	000	2	999	9	Monroe		135	6	0000	
	069	000	2	999	9	Montgomery		137	6	0000	
	070	000	2			Muscatine		139	5	0000	
				022	6	Muscatine					55110
				999	9	Balance of county					99999
	071	000	2	999	9	O'Brien		141	6	0000	
	072	000	2	999	9	Osceola		143	6	0000	
	073	000	2	999	9	Page		145	6	0000	
	074	000	2	999	9	Palo Alto		147	6	0000	
	075	000	2	999	9	Plymouth		149	6	0000	
	076	000	2	999	9	Pocahontas		151	6	0000	
	077	075	1			Polk		153	2	2120	
				002	6	Ankeny					02305
				012	3	Des Moines					21000
				028	6	Urbandale					79950
				030	5	West Des Moines, part					83910
				999	9	Balance of county					99999
	078	206	1			Pottawattamie		155	4	5920	
				010	4	Council Bluffs					16860
				999	9	Balance of county					99999
	079	000	2	999	9	Poweshiek		157	6	0000	
	080	000	2	999	9	Ringgold		159	6	0000	
	081	000	2	999	9	Sac		161	6	0000	
	082	069	1			Scott		163	3	1960	
				003	5	Bettendorf					06355
				011	4	Davenport					19000
				999	9	Balance of county					99999
	083	000	2	999	9	Shelby		165	6	0000	
	084	000	2	999	9	Sioux		167	5	0000	
	085	000	2			Story		169	4	0000	
				001	5	Ames					01855
				999	9	Balance of county					99999
	086	000	2	999	9	Tama		171	6	0000	
	087	000	2	999	9	Taylor		173	6	0000	
	088	000	2	999	9	Union		175	6	0000	
	089	000	2	999	9	Van Buren		177	6	0000	
	090	000	2			Wapello		179	5	0000	
				025	6	Ottumwa					60465
				999	9	Balance of county					99999
	091	075	1			Warren		181	5	2120	
				016	6	Indianola					38280
				999	9	Balance of county					99999
	092	000	2	999	9	Washington		183	6	0000	
	093	000	2	999	9	Wayne		185	6	0000	
	094	000	2			Webster		187	5	0000	
				014	5	Fort Dodge					28515
				999	9	Balance of county					99999
	095	000	2	999	9	Winnebago		189	6	0000	
	096	000	2	999	9	Winneshiek		191	6	0000	

Vital Statistics Geographic Code Outline For The United States
 Effective With 1998 Data.

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
16						Iowa	19				
	097	265	1			Woodbury		193	4	7720	
				026	4	Sioux City					73335
				999	9	Balance of county					99999
	098	000	2			Worth		195	6	0000	
	099	000	2			Wright		197	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
17						Kansas	20				
	001	000	2	999	9	Allen		001	6	0000	
	002	000	2	999	9	Anderson		003	6	0000	
	003	000	2			Atchison		005	6	0000	
				002	6	Atchison					02900
				999	9	Balance of county					99999
	004	000	2	999	9	Barber		007	6	0000	
	005	000	2			Barton		009	5	0000	
				009	6	Great Bend					28300
				999	9	Balance of county					99999
	006	000	2	999	9	Bourbon		011	6	0000	
	007	000	2	999	9	Brown		013	6	0000	
	008	301	1			Butler		015	4	9040	
				006	6	El Dorado					20075
				999	9	Balance of county					99999
	009	000	2	999	9	Chase		017	6	0000	
	010	000	2	999	9	Chautauqua		019	6	0000	
	011	000	2	999	9	Cherokee		021	6	0000	
	012	000	2	999	9	Cheyenne		023	6	0000	
	013	000	2	999	9	Clark		025	6	0000	
	014	000	2	999	9	Clay		027	6	0000	
	015	000	2	999	9	Cloud		029	6	0000	
	016	000	2	999	9	Coffey		031	6	0000	
	017	000	2	999	9	Comanche		033	6	0000	
	018	000	2			Cowley		035	5	0000	
				001	6	Arkansas City					02300
				034	6	Winfield					79950
				999	9	Balance of county					99999
	019	000	2			Crawford		037	5	0000	
				028	6	Pittsburg					56025
				999	9	Balance of county					99999
	020	000	2	999	9	Decatur		039	6	0000	
	021	000	2	999	9	Dickinson		041	6	0000	
	022	000	2	999	9	Doniphan		043	6	0000	
	023	160	1			Douglas		045	4	4150	
				015	4	Lawrence					38900
				999	9	Balance of county					99999
	024	000	2	999	9	Edwards		047	6	0000	
	025	000	2	999	9	Elk		049	6	0000	
	026	000	2			Ellis		051	5	0000	
				010	6	Hays					31100
				999	9	Balance of county					99999
	027	000	2	999	9	Ellsworth		053	6	0000	
	028	000	2			Finney		055	5	0000	
				008	6	Garden City					25325
				999	9	Balance of county					99999
	029	000	2			Ford		057	5	0000	
				005	6	Dodge City					18250
				999	9	Balance of county					99999
	030	000	2			Franklin		059	6	0000	
				025	6	Ottawa					53550
				999	9	Balance of county					99999
	031	000	2			Geary		061	5	0000	
				013	6	Junction City					35750
				999	9	Balance of county					99999
	032	000	2	999	9	Gove		063	6	0000	
	033	000	2	999	9	Graham		065	6	0000	
	034	000	2	999	9	Grant		067	6	0000	
	035	000	2	999	9	Gray		069	6	0000	
	036	000	2	999	9	Greeley		071	6	0000	
	037	000	2	999	9	Greenwood		073	6	0000	
	038	000	2	999	9	Hamilton		075	6	0000	
	039	000	2	999	9	Harper		077	6	0000	
	040	301	1			Harvey		079	5	9040	
				023	6	Newton					50475
				999	9	Balance of county					99999
	041	000	2	999	9	Haskell		081	6	0000	
	042	000	2	999	9	Hodgeman		083	6	0000	
	043	000	2	999	9	Jackson		085	6	0000	
	044	000	2	999	9	Jefferson		087	6	0000	
	045	000	2	999	9	Jewell		089	6	0000	
	046	145	1			Johnson		091	2	3760	
				017	6	Leawood					39075
				018	5	Lenexa					39350
				022	6	Merriam					46000

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
17						Kansas	20				
	046					Johnson, con.	091	2		3760	
				024	4	Olathe					52575
				026	3	Overland Park					53775
				029	6	Prairie Village					57575
				031	5	Shawnee					64500
				999	9	Balance of county					99999
	047	000	2	999	9	Kearny	093	6		0000	
	048	000	2	999	9	Kingman	095	6		0000	
	049	000	2	999	9	Kiowa	097	6		0000	
	050	000	2			Labette	099	6		0000	
				027	6	Parsons					54675
				999	9	Balance of county					99999
	051	000	2	999	9	Lane	101	6		0000	
	052	145	1			Leavenworth	103	4		3760	
				016	5	Leavenworth					39000
				999	9	Balance of county					99999
	053	000	2	999	9	Lincoln	105	6		0000	
	054	000	2	999	9	Linn	107	6		0000	
	055	000	2	999	9	Logan	109	6		0000	
	056	000	2			Lyon	111	5		0000	
				007	5	Emporia					21275
				999	9	Balance of county					99999
	057	000	2			McPherson	113	5		0000	
				020	6	McPherson					43950
				999	9	Balance of county					99999
	058	000	2	999	9	Marion	115	6		0000	
	059	000	2	999	9	Marshall	117	6		0000	
	060	000	2	999	9	Meade	119	6		0000	
	061	145	1	999	9	Miami	121	6		3760	
	062	000	2	999	9	Mitchell	123	6		0000	
	063	000	2			Montgomery	125	5		0000	
				003	6	Coffeyville					14600
				012	6	Independence					33875
				999	9	Balance of county					99999
	064	000	2	999	9	Morris	127	6		0000	
	065	000	2	999	9	Morton	129	6		0000	
	066	000	2	999	9	Nemaha	131	6		0000	
	067	000	2	999	9	Neosho	133	6		0000	
	068	000	2	999	9	Ness	135	6		0000	
	069	000	2	999	9	Norton	137	6		0000	
	070	000	2	999	9	Osage	139	6		0000	
	071	000	2	999	9	Osborne	141	6		0000	
	072	000	2	999	9	Ottawa	143	6		0000	
	073	000	2	999	9	Pawnee	145	6		0000	
	074	000	2	999	9	Phillips	147	6		0000	
	075	000	2			Pottawatomie	149	6		0000	
				021	5	Manhattan, part					44250
				999	9	Balance of county					99999
	076	000	2	999	9	Pratt	151	6		0000	
	077	000	2	999	9	Rawlins	153	6		0000	
	078	000	2			Reno	155	4		0000	
				011	5	Hutchinson					33625
				999	9	Balance of county					99999
	079	000	2	999	9	Republic	157	6		0000	
	080	000	2	999	9	Rice	159	6		0000	
	081	000	2			Riley	161	4		0000	
				021	5	Manhattan, part					44250
				999	9	Balance of county					99999
	082	000	2	999	9	Rooks	163	6		0000	
	083	000	2	999	9	Rush	165	6		0000	
	084	000	2	999	9	Russell	167	6		0000	
	085	000	2			Saline	169	5		0000	
				030	5	Salina					62700
				999	9	Balance of county					99999
	086	000	2	999	9	Scott	171	6		0000	
	087	301	1			Sedgwick	173	2		9040	
				004	6	Derby					17800
				033	2	Wichita					79000
				999	9	Balance of county					99999
	088	000	2			Seward	175	6		0000	
				019	6	Liberal					39825
				999	9	Balance of county					99999
	089	283	1			Shawnee	177	3		8440	
				032	3	Topeka					71000

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
17						Kansas	20				
	089					Shawnee, con.		177	3	8440	
				999	9	Balance of county					99999
	090	000	2	999	9	Sheridan		179	6	0000	
	091	000	2	999	9	Sherman		181	6	0000	
	092	000	2	999	9	Smith		183	6	0000	
	093	000	2	999	9	Stafford		185	6	0000	
	094	000	2	999	9	Stanton		187	6	0000	
	095	000	2	999	9	Stevens		189	6	0000	
	096	000	2	999	9	Sumner		191	5	0000	
	097	000	2	999	9	Thomas		193	6	0000	
	098	000	2	999	9	Trego		195	6	0000	
	099	000	2	999	9	Wabaunsee		197	6	0000	
	100	000	2	999	9	Wallace		199	6	0000	
	101	000	2	999	9	Washington		201	6	0000	
	102	000	2	999	9	Wichita		203	6	0000	
	103	000	2	999	9	Wilson		205	6	0000	
	104	000	2	999	9	Woodson		207	6	0000	
	105	145	1			Wyandotte		209	3	3760	
				014	3	Kansas City					36000
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
18						Kentucky	21				
	001	000	2	999	9	Adair	001	6		0000	
	002	000	2	999	9	Allen	003	6		0000	
	003	000	2	999	9	Anderson	005	6		0000	
	004	000	2	999	9	Ballard	007	6		0000	
	005	000	2			Barren	009	5		0000	
				011	6	Glasgow					31114
				999	9	Balance of county					99999
	006	000	2	999	9	Bath	011	6		0000	
	007	000	2			Bell	013	5		0000	
				019	6	Middlesborough					51924
				999	9	Balance of county					99999
	008	057	1			Boone	015	4		1640	
				007	6	Florence					27982
				999	9	Balance of county					99999
	009	163	1	999	9	Bourbon	017	6		4280	
	010	128	1			Boyd	019	4		3400	
				001	6	Ashland					02368
				999	9	Balance of county					99999
	011	000	2			Boyle	021	5		0000	
				004	6	Danville					19882
				999	9	Balance of county					99999
	012	000	2	999	9	Bracken	023	6		0000	
	013	000	2	999	9	Breathitt	025	6		0000	
	014	000	2	999	9	Breckinridge	027	6		0000	
	015	169	1	999	9	Bullitt	029	5		4520	
	016	000	2	999	9	Butler	031	6		0000	
	017	000	2	999	9	Caldwell	033	6		0000	
	018	000	2			Calloway	035	5		0000	
				020	6	Murray					54642
				999	9	Balance of county					99999
	019	057	1			Campbell	037	4		1640	
				008	6	Fort Thomas					28594
				021	6	Newport					55884
				999	9	Balance of county					99999
	020	000	2	999	9	Carlisle	039	6		0000	
	021	000	2	999	9	Carroll	041	6		0000	
	022	128	1	999	9	Carter	043	6		3400	
	023	000	2	999	9	Casey	045	6		0000	
	024	058	1			Christian	047	4		1660	
				013	5	Hopkinsville					37918
				999	9	Balance of county					99999
	025	163	1			Clark	049	5		4280	
				030	6	Winchester					83676
				999	9	Balance of county					99999
	026	000	2	999	9	Clay	051	6		0000	
	027	000	2	999	9	Clinton	053	6		0000	
	028	000	2	999	9	Crittenden	055	6		0000	
	029	000	2	999	9	Cumberland	057	6		0000	
	030	209	1			Daviess	059	4		5990	
				023	4	Owensboro					58620
				999	9	Balance of county					99999
	031	000	2	999	9	Edmonson	061	6		0000	
	032	000	2	999	9	Elliott	063	6		0000	
	033	000	2	999	9	Estill	065	6		0000	
	034	163	1	016	3	Fayette, coext. with Lexington-Fayette	067	3		4280	46000
	035	000	2	999	9	Fleming	069	6		0000	
	036	000	2	999	9	Floyd	071	5		0000	
	037	000	2			Franklin	073	5		0000	
				009	5	Frankfort					28900
				999	9	Balance of county					99999
	038	000	2	999	9	Fulton	075	6		0000	
	039	057	1	999	9	Gallatin	077	6		1640	
	040	000	2	999	9	Garrard	079	6		0000	
	041	057	1	999	9	Grant	081	6		1640	
	042	000	2	999	9	Graves	083	5		0000	
	043	000	2	999	9	Grayson	085	6		0000	
	044	000	2	999	9	Green	087	6		0000	
	045	128	1	999	9	Greenup	089	5		3400	
	046	000	2	999	9	Hancock	091	6		0000	
	047	000	2			Hardin	093	4		0000	
				005	6	Elizabethtown					24274
				025	6	Radcliff					63912
				999	9	Balance of county					99999
	048	000	2	999	9	Harlan	095	5		0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
18						Kentucky	21				
	049	000	2	999	9	Harrison		097	6	0000	
	050	000	2	999	9	Hart		099	6	0000	
	051	089	1			Henderson		101	5	2440	
				012	5	Henderson					35866
				999	9	Balance of county					99999
	052	000	2	999	9	Henry		103	6	0000	
	053	000	2	999	9	Hickman		105	6	0000	
	054	000	2			Hopkins		107	5	0000	
				018	6	Madisonville					49368
				999	9	Balance of county					99999
	055	000	2	999	9	Jackson		109	6	0000	
	056	169	1			Jefferson		111	1	4520	
				015	6	Jeffersontown					40222
				017	2	Louisville					48000
				027	6	St. Matthews					67944
				028	6	Shively					70284
				999	9	Balance of county					99999
	057	163	1			Jessamine		113	5	4280	
				022	6	Nicholasville					56136
				999	9	Balance of county					99999
	058	000	2	999	9	Johnson		115	6	0000	
	059	057	1			Kenton		117	3	1640	
				003	5	Covington					17848
				006	6	Erlanger					25300
				014	6	Independence					39142
				999	9	Balance of county					99999
	060	000	2	999	9	Knott		119	6	0000	
	061	000	2	999	9	Knox		121	5	0000	
	062	000	2	999	9	Larue		123	6	0000	
	063	000	2	999	9	Laurel		125	5	0000	
	064	000	2	999	9	Lawrence		127	6	0000	
	065	000	2	999	9	Lee		129	6	0000	
	066	000	2	999	9	Leslie		131	6	0000	
	067	000	2	999	9	Letcher		133	5	0000	
	068	000	2	999	9	Lewis		135	6	0000	
	069	000	2	999	9	Lincoln		137	6	0000	
	070	000	2	999	9	Livingston		139	6	0000	
	071	000	2	999	9	Logan		141	6	0000	
	072	000	2	999	9	Lyon		143	6	0000	
	073	000	2			McCracken		145	4	0000	
				024	5	Paducah					58836
				999	9	Balance of county					99999
	074	000	2	999	9	McCreary		147	6	0000	
	075	000	2	999	9	McLean		149	6	0000	
	076	163	1			Madison		151	4	4280	
				026	6	Richmond					65226
				999	9	Balance of county					99999
	077	000	2	999	9	Magoffin		153	6	0000	
	078	000	2	999	9	Marion		155	6	0000	
	079	000	2	999	9	Marshall		157	5	0000	
	080	000	2	999	9	Martin		159	6	0000	
	081	000	2	999	9	Mason		161	6	0000	
	082	000	2	999	9	Meade		163	6	0000	
	083	000	2	999	9	Menifee		165	6	0000	
	084	000	2	999	9	Mercer		167	6	0000	
	085	000	2	999	9	Metcalfe		169	6	0000	
	086	000	2	999	9	Monroe		171	6	0000	
	087	000	2	999	9	Montgomery		173	6	0000	
	088	000	2	999	9	Morgan		175	6	0000	
	089	000	2	999	9	Muhlenberg		177	5	0000	
	090	000	2	999	9	Nelson		179	5	0000	
	091	000	2	999	9	Nicholas		181	6	0000	
	092	000	2	999	9	Ohio		183	6	0000	
	093	169	1	999	9	Oldham		185	5	4520	
	094	000	2	999	9	Owen		187	6	0000	
	095	000	2	999	9	Owsley		189	6	0000	
	096	057	1	999	9	Pendleton		191	6	1640	
	097	000	2	999	9	Perry		193	5	0000	
	098	000	2	999	9	Pike		195	4	0000	
	099	000	2	999	9	Powell		197	6	0000	
	100	000	2			Pulaski		199	5	0000	
				029	6	Somerset					71688
				999	9	Balance of county					99999
	101	000	2	999	9	Robertson		201	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
18						Kentucky	21				
	102	000	2	999	9	Rockcastle		203	6	0000	
	103	000	2	999	9	Rowan		205	6	0000	
	104	000	2	999	9	Russell		207	6	0000	
	105	163	1			Scott		209	6	4280	
				010	6	Georgetown					30700
				999	9	Balance of county					99999
	106	000	2	999	9	Shelby		211	6	0000	
	107	000	2	999	9	Simpson		213	6	0000	
	108	000	2	999	9	Spencer		215	6	0000	
	109	000	2	999	9	Taylor		217	6	0000	
	110	000	2	999	9	Todd		219	6	0000	
	111	000	2	999	9	Trigg		221	6	0000	
	112	000	2	999	9	Trimble		223	6	0000	
	113	000	2	999	9	Union		225	6	0000	
	114	000	2			Warren		227	4	0000	
				002	5	Bowling Green					08902
				999	9	Balance of county					99999
	115	000	2	999	9	Washington		229	6	0000	
	116	000	2	999	9	Wayne		231	6	0000	
	117	000	2	999	9	Webster		233	6	0000	
	118	000	2	999	9	Whitley		235	5	0000	
	119	000	2	999	9	Wolfe		237	6	0000	
	120	163	1	999	9	Woodford		239	6	4280	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
19						Louisiana	22				
	001	151	1			Acadia	001	4		3880	
				008	6	Crowley					18650
				009	6	Eunice, part					24565
				999	9	Balance of parish					99999
	002	000	2	999	9	Allen	003	6		0000	
	003	024	1	999	9	Ascension	005	4		0760	
	004	000	2	999	9	Assumption	007	6		0000	
	005	000	2	999	9	Avoyelles	009	5		0000	
	006	000	2	999	9	Beauregard	011	5		0000	
	007	000	2	999	9	Bienville	013	6		0000	
	008	264	1			Bossier	015	4		7680	
				007	4	Bossier City					08920
				026	3	Shreveport, part					70000
				999	9	Balance of parish					99999
	009	264	1			Caddo	017	3		7680	
				026	3	Shreveport, part					70000
				999	9	Balance of parish					99999
	010	153	1			Calcasieu	019	3		3960	
				016	4	Lake Charles					41155
				028	6	Sulphur					73640
				999	9	Balance of parish					99999
	011	000	2	999	9	Caldwell	021	6		0000	
	012	000	2	999	9	Cameron	023	6		0000	
	013	000	2	999	9	Catahoula	025	6		0000	
	014	000	2	999	9	Claiborne	027	6		0000	
	015	000	2	999	9	Concordia	029	6		0000	
	016	000	2	999	9	De Soto	031	5		0000	
	017	024	1			East Baton Rouge	033	2		0760	
				003	6	Baker					03985
				005	3	Baton Rouge					05000
				999	9	Balance of parish					99999
	018	000	2	999	9	East Carroll	035	6		0000	
	019	000	2	999	9	East Feliciana	037	6		0000	
	020	000	2	999	9	Evangeline	039	5		0000	
	021	000	2	999	9	Franklin	041	6		0000	
	022	000	2	999	9	Grant	043	6		0000	
	023	000	2			Iberia	045	4		0000	
				021	5	New Iberia					54035
				999	9	Balance of parish					99999
	024	000	2	999	9	Iberville	047	5		0000	
	025	000	2	999	9	Jackson	049	6		0000	
	026	196	1			Jefferson	051	2		5560	
				010	6	Gretna					31915
				014	4	Kenner					39475
				031	6	Westwego					81165
				999	9	Balance of parish					99999
	027	000	2			Jefferson Davis	053	5		0000	
				013	6	Jennings					38355
				999	9	Balance of parish					99999
	028	151	1			Lafayette	055	3		3880	
				015	4	Lafayette					40735
				999	9	Balance of parish					99999
	029	126	1			Lafourche	057	4		3350	
				029	6	Thibodaux					75425
				999	9	Balance of parish					99999
	030	000	2	999	9	La Salle	059	6		0000	
	031	000	2			Lincoln	061	5		0000	
				025	6	Ruston					66655
				999	9	Balance of parish					99999
	032	024	1	999	9	Livingston	063	4		0760	
	033	000	2	999	9	Madison	065	6		0000	
	034	000	2			Morehouse	067	5		0000	
				004	6	Bastrop					04685
				999	9	Balance of parish					99999
	035	000	2			Natchitoches	069	5		0000	
				020	6	Natchitoches					53545
				999	9	Balance of parish					99999
	036	196	1	022	2	Orleans, coext. with New Orleans city	071	2		5560	55000
	037	187	1			Ouachita	073	3		5200	
				018	4	Monroe					51410
				030	6	West Monroe					80955
				999	9	Balance of parish					99999
	038	196	1	999	9	Plaquemines	075	5		5560	
	039	000	2	999	9	Pointe Coupee	077	6		0000	

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
19						Louisiana	22				
	040	006	1			Rapides		079	3	0220	
				002	5	Alexandria					00975
				024	6	Pineville					60530
				999	9	Balance of parish					99999
	041	000	2	999	9	Red River		081	6	0000	
	042	000	2	999	9	Richland		083	6	0000	
	043	000	2	999	9	Sabine		085	6	0000	
	044	196	1	999	9	St. Bernard		087	4	5560	
	045	196	1	999	9	St. Charles		089	5	5560	
	046	000	2	999	9	St. Helena		091	6	0000	
	047	196	1	999	9	St. James		093	6	5560	
	048	196	1	999	9	St. John the Baptist		095	5	5560	
	049	151	1			St. Landry		097	4	3880	
				009	6	Eunice, part					24565
				023	6	Opelousas					58045
				999	9	Balance of parish					99999
	050	151	1	999	9	St. Martin		099	5	3880	
	051	000	2			St. Mary		101	4	0000	
				019	6	Morgan City					52040
				999	9	Balance of parish					99999
	052	196	1			St. Tammany		103	3	5560	
				027	6	Slidell					70805
				999	9	Balance of parish					99999
	053	000	2			Tangipahoa		105	4	0000	
				011	6	Hammond					32755
				999	9	Balance of parish					99999
	054	000	2	999	9	Tensas		107	6	0000	
	055	126	1			Terrebonne		109	4	3350	
				012	5	Houma					36255
				999	9	Balance of parish					99999
	056	000	2	999	9	Union		111	6	0000	
	057	000	2			Vermilion		113	4	0000	
				001	6	Abbeville					00100
				999	9	Balance of parish					99999
	058	000	2	999	9	Vernon		115	4	0000	
	059	000	2			Washington		117	5	0000	
				006	6	Bogalusa					08150
				999	9	Balance of parish					99999
	060	264	1			Webster		119	5	7680	
				017	6	Minden					50885
				999	9	Balance of parish					99999
	061	024	1	999	9	West Baton Rouge		121	6	0760	
	062	000	2	999	9	West Carroll		123	6	0000	
	063	000	2	999	9	West Feliciana		125	6	0000	
	064	000	2	999	9	Winn		127	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
20						Maine	23				
	001	162	1			Androscoggin		001	3	4243	
				001	6	Auburn					02060
				005	5	Lewiston					38740
				999	9	Balance of county					99999
	002	000	2			Aroostook		003	4	0000	
				007	6	Presque Isle					60825
				999	9	Balance of county					99999
	003	219	1			Cumberland		005	3	6403	
				006	4	Portland					60545
				009	6	South Portland					71990
				011	6	Westbrook					82105
				999	9	Balance of county					99999
	004	000	2	999	9	Franklin		007	5	0000	
	005	000	2	999	9	Hancock		009	5	0000	
	006	000	2			Kennebec		011	3	0000	
				002	6	Augusta					02100
				010	6	Waterville					80740
				999	9	Balance of county					99999
	007	000	2	999	9	Knox		013	5	0000	
	008	000	2	999	9	Lincoln		015	5	0000	
	009	000	2	999	9	Oxford		017	4	0000	
	010	022	1			Penobscot		019	3	0733	
				003	5	Bangor					02795
				999	9	Balance of county					99999
	011	000	2	999	9	Piscataquis		021	6	0000	
	012	000	2	999	9	Sagadahoc		023	5	0000	
	013	000	2	999	9	Somerset		025	5	0000	
	014	000	2	999	9	Waldo		027	5	0000	
	015	000	2	999	9	Washington		029	5	0000	
	016	000	2			York		031	3	0000	
				004	6	Biddeford					04860
				008	6	Saco					64675
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
21						Maryland	24				
	001	066	1			Allegany		001	4	1900	
				007	6	Cumberland					21325
				999	9	Balance of county					99999
	002	021	1			Anne Arundel		003	2	0720	
				002	5	Annapolis					01600
				999	9	Balance of county					99999
	003	021	1			Baltimore		005	1	0720	
	004	021	1			Baltimore city		510	1	0720	04000
	005	296	1			Calvert		009	4	8840	
	006	000	2			Caroline		011	5	0000	
	007	021	1			Carroll		013	3	0720	
				018	6	Westminster					83100
				999	9	Balance of county					99999
	008	304	1			Cecil		015	4	9160	
	009	296	1			Charles		017	3	8840	
	010	000	2			Dorchester		019	5	0000	
				005	6	Cambridge					12400
				999	9	Balance of county					99999
	011	296	1			Frederick		021	3	8840	
				008	5	Frederick					30325
				999	9	Balance of county					99999
	012	000	2			Garrett		023	5	0000	
	013	021	1			Harford		025	3	0720	
				001	6	Aberdeen					00125
				999	9	Balance of county					99999
	014	021	1			Howard		027	3	0720	
	015	000	2			Kent		029	6	0000	
	016	296	1			Montgomery		031	1	8840	
				009	5	Gaithersburg					31175
				015	5	Rockville					67675
				017	6	Takoma Park, part					76650
				999	9	Balance of county					99999
	017	296	1			Prince George's		033	1	8840	
				004	5	Bowie					08775
				006	6	College Park					18750
				010	6	Greenbelt					34775
				012	6	Hyattsville					41250
				013	6	Laurel					45900
				014	6	New Carrollton					55400
				017	6	Takoma Park, part					76650
				999	9	Balance of county					99999
	018	021	1			Queen Anne's		035	5	0720	
	019	000	2			St. Mary's		037	4	0000	
	020	000	2			Somerset		039	6	0000	
	021	000	2			Talbot		041	5	0000	
	022	119	1			Washington		043	3	3180	
				011	5	Hagerstown					36075
				999	9	Balance of county					99999
	023	000	2			Wicomico		045	4	0000	
				016	6	Salisbury					69925
				999	9	Balance of county					99999
	024	000	2			Worcester		047	5	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
22						Massachusetts	25				
	001	023	1			Barnstable		001	3	0743	
				008	5	Barnstable town					03635
				031	5	Falmouth town					23105
				999	9	Balance of county					999999
	002	218	1			Berkshire		003	3	6323	
				062	6	North Adams					46225
				067	5	Pittsfield					53960
				999	9	Balance of county					999999
	003	037	1			Bristol		005	1	1123	
				007	5	Attleboro					02690
				023	5	Dartmouth town					16425
				029	6	Fairhaven town					22130
				030	4	Fall River					23000
				059	4	New Bedford					45000
				064	5	North Attleborough town					46575
				077	6	Somerset town					62430
				083	5	Taunton					69170
				999	9	Balance of county					999999
	004	000	2			Dukes		007	6	0000	
	005	037	1			Essex		009	1	1123	
				003	6	Amesbury town					01185
				005	5	Andover town					01465
				010	5	Beverly					05595
				022	6	Danvers town					16250
				035	5	Gloucester					26150
				036	4	Haverhill					29405
				041	4	Lawrence					34550
				046	4	Lynn					37490
				047	6	Lynnfield town					37560
				049	6	Marblehead town					38400
				054	5	Methuen town					40675
				060	6	Newburyport					45245
				066	5	Peabody					52490
				074	5	Salem					59105
				075	5	Saugus town					60015
				082	6	Swampscott town					68645
				999	9	Balance of county					999999
	006	000	2			Franklin		011	4	0000	
	007	271	1			Hampden		013	2	8003	
				002	5	Agawam town					00800
				020	4	Chicopee					13660
				027	6	East Longmeadow town					19645
				038	5	Holyoke					30840
				044	6	Longmeadow town					36300
				079	3	Springfield					67000
				090	5	Westfield					76030
				091	5	West Springfield town					77850
				999	9	Balance of county					999999
	008	271	1			Hampshire		015	3	8003	
				004	5	Amherst town					01325
				026	6	Easthampton town					19330
				063	5	Northampton					46330
				999	9	Balance of county					999999
	009	037	1			Middlesex		017	0	1123	
				006	5	Arlington town					01605
				009	6	Belmont town					05070
				011	5	Billerica town					05805
				016	6	Burlington town					09840
				017	4	Cambridge					11000
				018	5	Chelmsford town					13135
				025	5	Dracut town					17475
				028	5	Everett					21990
				033	4	Framingham town					24925
				039	6	Hudson town					31540
				043	5	Lexington town					35215
				045	3	Lowell					37000
				048	4	Malden					37875
				050	5	Marlborough					38715
				051	6	Maynard town					39625
				052	4	Medford					39835
				053	5	Melrose					40115
				057	5	Natick town					43895
				061	4	Newton					45560
				071	6	Reading town					56130

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
22						Massachusetts	25				
	009					Middlesex, con.		017	0	1123	
				078	4	Somerville					62535
				080	6	Stoneham town					67665
				084	5	Tewksbury town					69415
				085	6	Wakefield town					72215
				086	4	Waltham					72600
				087	5	Watertown town					73405
				095	6	Wilmington town					80230
				096	6	Winchester town					80510
				098	5	Woburn					81035
				999	9	Balance of county					99999
	010	000	2			Nantucket		019	6	0000	
	011	037	1			Norfolk		021	1	1123	
				013	5	Braintree town					07665
				015	4	Brookline town					09175
				024	6	Dedham town					16495
				037	6	Holbrook town					30455
				056	5	Milton town					41690
				058	5	Needham town					44105
				065	5	Norwood town					50250
				069	4	Quincy					55745
				070	5	Randolph town					55955
				081	5	Stoughton town					67945
				089	5	Wellesley town					74175
				092	6	Westwood town					78690
				093	4	Weymouth town					78865
				999	9	Balance of county					99999
	012	037	1			Plymouth		023	2	1123	
				001	6	Abington town					00170
				014	4	Brockton					09000
				040	6	Hull town					31645
				068	5	Plymouth town					54310
				073	6	Rockland town					57775
				094	6	Whitman town					79530
				999	9	Balance of county					99999
	013	037	1			Suffolk		025	1	1123	
				012	1	Boston					07000
				019	5	Chelsea					13205
				072	5	Revere					56585
				097	6	Winthrop town					80930
	014	037	1			Worcester		027	1	1123	
				021	6	Clinton town					14395
				032	5	Fitchburg					23875
				034	6	Gardner					25485
				042	5	Leominster					35075
				055	5	Milford town					41165
				076	6	Shrewsbury town					61800
				088	6	Webster town					73895
				099	3	Worcester					82000
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
23						Michigan	26				
	001	000	2	999	9	Alcona	001	6		0000	
	002	000	2	999	9	Alger	003	6		0000	
	003	112	1			Allegan	005	4		3000	
				051	5	Holland, part					38640
				999	9	Balance of county					99999
	004	000	2			Alpena	007	5		0000	
				004	6	Alpena					01740
				999	9	Balance of county					99999
	005	000	2	999	9	Antrim	009	6		0000	
	006	000	2	999	9	Arenac	011	6		0000	
	007	000	2	999	9	Baraga	013	6		0000	
	008	000	2	999	9	Barry	015	4		0000	
	009	240	1			Bay	017	3		6960	
				007	6	Bangor township					05120
				009	5	Bay City					06020
				064	5	Midland, part					53780
				999	9	Balance of county					99999
	010	000	2	999	9	Benzie	019	6		0000	
	011	027	1			Berrien	021	3		0870	
				010	6	Benton Harbor					07520
				071	6	Niles, part					57760
				999	9	Balance of county					99999
	012	000	2	999	9	Branch	023	5		0000	
	013	143	1			Calhoun	025	3		3720	
				002	6	Albion					00980
				008	4	Battle Creek					05920
				999	9	Balance of county					99999
	014	000	2			Cass	027	5		0000	
				071	6	Niles, part					57760
				999	9	Balance of county					99999
	015	000	2	999	9	Charlevoix	029	6		0000	
	016	000	2	999	9	Cheboygan	031	6		0000	
	017	000	2			Chippewa	033	5		0000	
				091	6	Sault Ste. Marie					71740
				999	9	Balance of county					99999
	018	000	2	999	9	Clare	035	6		0000	
	019	156	1	999	9	Clinton	037	4		4040	
	020	000	2	999	9	Crawford	039	6		0000	
	021	000	2			Delta	041	5		0000	
				030	6	Escanaba					26360
				999	9	Balance of county					99999
	022	000	2	999	9	Dickinson	043	5		0000	
	023	156	1			Eaton	045	4		4040	
				024	5	Delta township					21520
				057	3	Lansing, part					46000
				999	9	Balance of county					99999
	024	000	2	999	9	Emmet	047	5		0000	
	025	093	1			Genesee	049	2		2640	
				016	5	Burton					12060
				034	3	Flint					29000
				035	5	Flint township					29020
				039	5	Grand Blanc township					33300
				067	5	Mount Morris township					55980
				999	9	Balance of county					99999
	026	000	2	999	9	Gladwin	051	6		0000	
	027	000	2	999	9	Gogebic	053	6		0000	
	028	000	2			Grand Traverse	055	4		0000	
				098	6	Traverse City, part					80340
				999	9	Balance of county					99999
	029	000	2	999	9	Gratiot	057	5		0000	
	030	000	2	999	9	Hillsdale	059	5		0000	
	031	000	2	999	9	Houghton	061	5		0000	
	032	000	2	999	9	Huron	063	5		0000	
	033	156	1			Ingham	065	2		4040	
				028	4	East Lansing					24120
				057	3	Lansing, part					46000
				063	5	Meridian township					53140
				999	9	Balance of county					99999
	034	000	2	999	9	Ionia	067	4		0000	
	035	000	2	999	9	Iosco	069	5		0000	
	036	000	2	999	9	Iron	071	6		0000	
	037	000	2			Isabella	073	4		0000	
				068	6	Mount Pleasant					56020
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
23						Michigan	26				
	038	132	1			Jackson		075	3	3520	
				053	5	Jackson					41420
				999	9	Balance of county					99999
	039	143	1			Kalamazoo		077	3	3720	
				054	4	Kalamazoo					42160
				055	6	Kalamazoo township					42180
				079	5	Portage					65560
				999	9	Balance of county					99999
	040	000	2			Kalkaska		079	6	0000	
	041	112	1			Kent		081	1	3000	
				027	6	East Grand Rapids					23980
				041	3	Grand Rapids					34000
				042	6	Grandville					34160
				056	5	Kentwood					42820
				101	6	Walker					82960
				109	4	Wyoming					88940
				999	9	Balance of county					99999
	042	000	2			Keweenaw		083	6	0000	
	043	000	2			Lake		085	6	0000	
	044	076	1			Lapeer		087	4	2160	
	045	000	2			Leelanau		089	6	0000	
				098	6	Traverse City, part					80340
				999	9	Balance of county					99999
	046	011	1			Lenawee		091	4	0440	
				001	6	Adrian					00440
				999	9	Balance of county					99999
	047	011	1			Livingston		093	3	0440	
	048	000	2			Luce		095	6	0000	
	049	000	2			Mackinac		097	6	0000	
	050	076	1			Macomb		099	1	2160	
				019	5	Chesterfield township					15340
				021	4	Clinton township					16520
				026	5	East Detroit					23920
				036	6	Fraser					30420
				048	6	Harrison township					36820
				066	6	Mount Clemens					55820
				086	4	Roseville					69800
				090	4	St. Clair Shores					70760
				092	5	Shelby township					72820
				095	3	Sterling Heights					76460
				102	3	Warren					84000
				999	9	Balance of county					99999
	051	000	2			Manistee		101	6	0000	
	052	000	2			Marquette		103	4	0000	
				061	6	Marquette					51900
				999	9	Balance of county					99999
	053	000	2			Mason		105	5	0000	
	054	000	2			Mecosta		107	5	0000	
				013	6	Big Rapids					08300
				999	9	Balance of county					99999
	055	000	2			Menominee		109	6	0000	
	056	240	1			Midland		111	4	6960	
				064	5	Midland, part					53780
				999	9	Balance of county					99999
	057	000	2			Missaukee		113	6	0000	
	058	076	1			Monroe		115	3	2160	
				065	6	Monroe					55020
				999	9	Balance of county					99999
	059	000	2			Montcalm		117	4	0000	
	060	000	2			Montmorency		119	6	0000	
	061	112	1			Muskegon		121	3	3000	
				069	5	Muskegon					56320
				070	6	Muskegon Heights					56360
				073	6	Norton Shores					59140
				999	9	Balance of county					99999
	062	000	2			Newaygo		123	5	0000	
	063	076	1			Oakland		125	0	2160	
				006	6	Auburn Hills					04105
				011	6	Berkley					07660
				012	6	Beverly Hills village					08160
				014	6	Birmingham					08640
				015	5	Bloomfield township					09100
				020	6	Clawson					16160
				031	6	Farmington					27380

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
23						Michigan	26				
	063					Oakland, con.		125	0	2160	
				032	4	Farmington Hills					27440
				033	5	Ferndale					27880
				049	6	Hazel Park					37420
				060	5	Madison Heights					50560
				074	5	Novi					59440
				075	5	Oak Park					59920
				078	4	Pontiac					65440
				084	4	Rochester Hills					69035
				087	4	Royal Oak					70040
				093	4	Southfield					74900
				100	4	Troy					80700
				103	4	Waterford township					84240
				105	4	West Bloomfield township					85490
				999	9	Balance of county					99999
	064	000	2	999	9	Oceana		127	6	0000	
	065	000	2	999	9	Ogemaw		129	6	0000	
	066	000	2	999	9	Ontonagon		131	6	0000	
	067	000	2	999	9	Osceola		133	6	0000	
	068	000	2	999	9	Oscoda		135	6	0000	
	069	000	2	999	9	Otsego		137	6	0000	
	070	112	1			Ottawa		139	3	3000	
				038	5	Georgetown township					31880
				040	6	Grand Haven					33340
				051	5	Holland, part					38640
				999	9	Balance of county					99999
	071	000	2	999	9	Presque Isle		141	6	0000	
	072	000	2	999	9	Roscommon		143	6	0000	
	073	240	1			Saginaw		145	3	6960	
				088	4	Saginaw					70520
				089	5	Saginaw township					70540
				999	9	Balance of county					99999
	074	076	1			St. Clair		147	3	2160	
				080	5	Port Huron					65820
				999	9	Balance of county					99999
	075	000	2			St. Joseph		149	4	0000	
				096	6	Sturgis					76960
				999	9	Balance of county					99999
	076	000	2	999	9	Sanilac		151	5	0000	
	077	000	2	999	9	Schoolcraft		153	6	0000	
	078	000	2			Shiawassee		155	4	0000	
				076	6	Owosso					61940
				999	9	Balance of county					99999
	079	000	2	999	9	Tuscola		157	4	0000	
	080	143	1	999	9	Van Buren		159	4	3720	
	081	011	1			Washtenaw		161	2	0440	
				005	3	Ann Arbor					03000
				110	6	Ypsilanti					89140
				111	5	Ypsilanti township					89160
				999	9	Balance of county					99999
	082	076	1			Wayne		163	0	2160	
				003	5	Allen Park					01380
				018	4	Canton township					13120
				022	4	Dearborn					21000
				023	4	Dearborn Heights					21020
				025	0	Detroit					22000
				029	6	Ecorse					24740
				037	5	Garden City					31420
				043	6	Grosse Pointe Farms					35520
				044	6	Grosse Pointe Park					35540
				045	6	Grosse Pointe Woods					35580
				046	6	Hamtramck					36280
				047	6	Harper Woods					36700
				050	6	Highland Park					38180
				052	5	Inkster					40680
				058	5	Lincoln Park					47800
				059	3	Livonia					49000
				062	6	Melvindale					52940
				072	6	Northville township					59000
				077	6	Plymouth township					65088
				081	4	Redford township					67660
				082	6	River Rouge					68760
				083	6	Riverview					68880
				085	6	Romulus					69420

Vital Statistics Geographic Code Outline For The United States
 Effective With 1998 Data.

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
23						Michigan	26				
	082					Wayne, con.		163	0	2160	
				094	5	Southgate					74960
				097	4	Taylor					79000
				099	6	Trenton					80420
				104	6	Wayne					84940
				106	4	Westland					86000
				107	6	Woodhaven					88380
				108	5	Wyandotte					88900
				999	9	Balance of county					99999
	083	000	2			Wexford		165	5	0000	
				017	6	Cadillac					12320
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
24						Minnesota	27				
	001	000	2	999	9	Aitkin		001	6	0000	
	002	183	1			Anoka		003	3	5120	
				002	6	Andover					01486
				003	6	Anoka					01720
				007	5	Blaine, part					06382
				017	6	Columbia Heights					12700
				018	4	Coon Rapids					13114
				029	5	Fridley					22814
				055	6	Ramsey					53026
				999	9	Balance of county					99999
	003	000	2	999	9	Becker		005	5	0000	
	004	000	2			Beltrami		007	5	0000	
				006	6	Bemidji					05068
				999	9	Balance of county					99999
	005	241	1			Benton		009	5	6980	
				061	5	St. Cloud, part					56896
				999	9	Balance of county					99999
	006	000	2	999	9	Big Stone		011	6	0000	
	007	000	2			Blue Earth		013	4	0000	
				037	5	Mankato, part					39878
				049	6	North Mankato, part					47068
				999	9	Balance of county					99999
	008	000	2			Brown		015	5	0000	
				047	6	New Ulm					46042
				999	9	Balance of county					99999
	009	000	2			Carlton		017	5	0000	
				016	6	Cloquet					12160
				999	9	Balance of county					99999
	010	183	1			Carver		019	5	5120	
				014	6	Chanhassen, part					10918
				015	6	Chaska					10972
				999	9	Balance of county					99999
	011	000	2	999	9	Cass		021	6	0000	
	012	000	2	999	9	Chippewa		023	6	0000	
	013	183	1	999	9	Chisago		025	5	5120	
	014	090	1			Clay		027	4	2520	
				043	5	Moorhead					43864
				999	9	Balance of county					99999
	015	000	2	999	9	Clearwater		029	6	0000	
	016	000	2	999	9	Cook		031	6	0000	
	017	000	2	999	9	Cottonwood		033	6	0000	
	018	000	2			Crow Wing		035	5	0000	
				009	6	Brainerd					07300
				999	9	Balance of county					99999
	019	183	1			Dakota		037	2	5120	
				004	5	Apple Valley					01900
				012	4	Burnsville					08794
				022	5	Eagan					17288
				031	6	Hastings, part					27530
				035	6	Inver Grove Heights					31076
				036	6	Lakeville					35180
				048	6	Northfield, part					46924
				066	6	South St. Paul					61510
				069	6	West St. Paul					69718
				999	9	Balance of county					99999
	020	000	2	999	9	Dodge		039	6	0000	
	021	000	2	999	9	Douglas		041	5	0000	
	022	000	2	999	9	Faribault		043	6	0000	
	023	000	2	999	9	Fillmore		045	6	0000	
	024	000	2			Freeborn		047	5	0000	
				001	6	Albert Lea					00694
				999	9	Balance of county					99999
	025	000	2			Goodhue		049	5	0000	
				056	6	Red Wing					53620
				999	9	Balance of county					99999
	026	000	2	999	9	Grant		051	6	0000	
	027	183	1			Hennepin		053	0	5120	
				008	4	Bloomington					06616
				010	5	Brooklyn Center					07948
				011	4	Brooklyn Park					07966
				013	6	Champlin					10846
				014	6	Chanhassen, part					10918
				020	6	Crystal					14158
				023	5	Eden Prairie					18116

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
24						Minnesota	27				
	027					Hennepin, con.		053	0	5120	
				024	5	Edina					18188
				030	6	Golden Valley					24308
				033	6	Hopkins					30140
				038	5	Maple Grove					40166
				041	2	Minneapolis					43000
				042	5	Minnetonka					43252
				046	6	New Hope					45628
				053	4	Plymouth					51730
				057	5	Richfield					54214
				058	6	Robbinsdale					54808
				062	5	St. Louis Park					57220
				999	9	Balance of county					99999
	028	150	1	999	9	Houston		055	6	3870	
	029	000	2	999	9	Hubbard		057	6	0000	
	030	183	1	999	9	Isanti		059	5	5120	
	031	000	2	999	9	Itasca		061	5	0000	
	032	000	2	999	9	Jackson		063	6	0000	
	033	000	2	999	9	Kanabec		065	6	0000	
	034	000	2			Kandiyohi		067	5	0000	
				071	6	Willmar					70420
				999	9	Balance of county					99999
	035	000	2	999	9	Kittson		069	6	0000	
	036	000	2	999	9	Koochiching		071	6	0000	
	037	000	2	999	9	Lac qui Parle		073	6	0000	
	038	000	2	999	9	Lake		075	6	0000	
	039	000	2	999	9	Lake of the Woods		077	6	0000	
	040	000	2	999	9	Le Sueur		079	6	0000	
	041	000	2	999	9	Lincoln		081	6	0000	
	042	000	2			Lyon		083	6	0000	
				040	6	Marshall					40688
				999	9	Balance of county					99999
	043	000	2			McLeod		085	5	0000	
				034	6	Hutchinson					30644
				999	9	Balance of county					99999
	044	000	2	999	9	Mahnomen		087	6	0000	
	045	000	2	999	9	Marshall		089	6	0000	
	046	000	2			Martin		091	6	0000	
				026	6	Fairmont					20330
				999	9	Balance of county					99999
	047	000	2	999	9	Meeker		093	6	0000	
	048	000	2	999	9	Mille Lacs		095	6	0000	
	049	000	2	999	9	Morrison		097	5	0000	
	050	000	2			Mower		099	5	0000	
				005	6	Austin					02908
				999	9	Balance of county					99999
	051	000	2	999	9	Murray		101	6	0000	
	052	000	2			Nicollet		103	5	0000	
				037	5	Mankato, part					39878
				049	6	North Mankato, part					47068
				999	9	Balance of county					99999
	053	000	2	999	9	Nobles		105	6	0000	
	054	000	2	999	9	Norman		107	6	0000	
	055	235	1			Olmsted		109	3	6820	
				059	4	Rochester					54880
				999	9	Balance of county					99999
	056	000	2			Otter Tail		111	4	0000	
				028	6	Fergus Falls					20906
				999	9	Balance of county					99999
	057	000	2	999	9	Pennington		113	6	0000	
	058	000	2	999	9	Pine		115	6	0000	
	059	000	2	999	9	Pipestone		117	6	0000	
	060	111	1	999	9	Polk		119	5	2985	
	061	000	2	999	9	Pope		121	6	0000	
	062	183	1			Ramsey		123	2	5120	
				007	5	Blaine, part					06382
				039	5	Maplewood					40382
				044	6	Mounds View					44530
				045	6	New Brighton					45430
				050	6	North St. Paul					47284
				060	5	Roseville					55852
				063	2	St. Paul					58000
				065	6	Shoreview					59998
				068	6	Vadnais Heights					66460

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
24						Minnesota	27				
	062					Ramsey, con.		123	2	5120	
				070	6	White Bear Lake, part					69970
				999	9	Balance of county					99999
	063	000	2			Red Lake		125	6	0000	
	064	000	2			Redwood		127	6	0000	
	065	000	2			Renville		129	6	0000	
	066	000	2			Rice		131	5	0000	
				027	6	Faribault					20546
				048	6	Northfield, part					46924
				999	9	Balance of county					99999
	067	000	2			Rock		133	6	0000	
	068	000	2			Roseau		135	6	0000	
	069	080	1			St. Louis		137	3	2240	
				021	4	Duluth					17000
				032	6	Hibbing					28790
				999	9	Balance of county					99999
	070	183	1			Scott		139	4	5120	
				054	6	Prior Lake					52594
				064	6	Shakopee					59350
				999	9	Balance of county					99999
	071	183	1			Sherburne		141	5	5120	
				025	6	Elk River					18674
				061	5	St. Cloud, part					56896
				999	9	Balance of county					99999
	072	000	2			Sibley		143	6	0000	
	073	241	1			Stearns		145	3	6980	
				061	5	St. Cloud, part					56896
				999	9	Balance of county					99999
	074	000	2			Steele		147	5	0000	
				052	6	Owatonna					49300
				999	9	Balance of county					99999
	075	000	2			Stevens		149	6	0000	
	076	000	2			Swift		151	6	0000	
	077	000	2			Todd		153	6	0000	
	078	000	2			Traverse		155	6	0000	
	079	000	2			Wabasha		157	6	0000	
	080	000	2			Wadena		159	6	0000	
	081	000	2			Waseca		161	6	0000	
	082	183	1			Washington		163	3	5120	
				019	6	Cottage Grove					13456
				031	6	Hastings, part					27530
				051	6	Oakdale					47680
				067	6	Stillwater					62824
				070	6	White Bear Lake, part					69970
				073	6	Woodbury					71428
				999	9	Balance of county					99999
	083	000	2			Watsonwan		165	6	0000	
	084	000	2			Wilkin		167	6	0000	
	085	000	2			Winona		169	5	0000	
				072	5	Winona					71032
				999	9	Balance of county					99999
	086	183	1			Wright		171	4	5120	
	087	000	2			Yellow Medicine		173	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
25						Mississippi	28				
	001	000	2			Adams	001	5		0000	
				023	6	Natchez					50440
				999	9	Balance of county					99999
	002	000	2			Alcorn	003	5		0000	
				009	6	Corinth					15700
				999	9	Balance of county					99999
	003	000	2			Amite	005	6		0000	
	004	000	2			Attala	007	6		0000	
	005	000	2			Benton	009	6		0000	
	006	000	2			Bolivar	011	5		0000	
				006	6	Cleveland					14260
				999	9	Balance of county					99999
	007	000	2			Calhoun	013	6		0000	
	008	000	2			Carroll	015	6		0000	
	009	000	2			Chickasaw	017	6		0000	
	010	000	2			Choctaw	019	6		0000	
	011	000	2			Claiborne	021	6		0000	
	012	000	2			Clarke	023	6		0000	
	013	000	2			Clay	025	6		0000	
	014	000	2			Coahoma	027	5		0000	
				005	6	Clarksdale					13820
				999	9	Balance of county					99999
	015	000	2			Copiah	029	5		0000	
	016	000	2			Covington	031	6		0000	
	017	178	1			De Soto	033	4		4920	
				030	6	Southaven					69280
				999	9	Balance of county					99999
	018	123	1			Forrest	035	4		3285	
				015	5	Hattiesburg, part					31020
				999	9	Balance of county					99999
	019	000	2			Franklin	037	6		0000	
	020	000	2			George	039	6		0000	
	021	000	2			Greene	041	6		0000	
	022	000	2			Grenada	043	6		0000	
				013	6	Grenada					29460
				999	9	Balance of county					99999
	023	030	1			Hancock	045	5		0920	
	024	030	1			Harrison	047	3		0920	
				001	5	Biloxi					06220
				014	5	Gulfport					29700
				019	6	Long Beach					41680
				999	9	Balance of county					99999
	025	133	1			Hinds	049	2		3560	
				007	6	Clinton					14420
				017	3	Jackson, part					36000
				999	9	Balance of county					99999
	026	000	2			Holmes	051	6		0000	
	027	000	2			Humphreys	053	6		0000	
	028	000	2			Issaquena	055	6		0000	
	029	000	2			Itawamba	057	6		0000	
	030	030	1			Jackson	059	3		0920	
				010	6	Gautier					26860
				022	6	Moss Point					49240
				024	6	Ocean Springs					53520
				026	5	Pascagoula					55360
				999	9	Balance of county					99999
	031	000	2			Jasper	061	6		0000	
	032	000	2			Jefferson	063	6		0000	
	033	000	2			Jefferson Davis	065	6		0000	
	034	000	2			Jones	067	4		0000	
				018	6	Laurel					39640
				999	9	Balance of county					99999
	035	000	2			Kemper	069	6		0000	
	036	000	2			Lafayette	071	5		0000	
				025	6	Oxford					54840
				999	9	Balance of county					99999
	037	123	1			Lamar	073	5		3285	
				015	5	Hattiesburg, part					31020
				999	9	Balance of county					99999
	038	000	2			Lauderdale	075	4		0000	
				021	5	Meridian					46640
				999	9	Balance of county					99999
	039	000	2			Lawrence	077	6		0000	
	040	000	2			Leake	079	6		0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
25						Mississippi	28				
	041	000	2			Lee		081	4	0000	
				032	5	Tupelo					74840
				999	9	Balance of county					99999
	042	000	2			Leflore		083	5	0000	
				012	6	Greenwood					29340
				999	9	Balance of county					99999
	043	000	2			Lincoln		085	5	0000	
				003	6	Brookhaven					08820
				999	9	Balance of county					99999
	044	000	2			Lowndes		087	4	0000	
				008	6	Columbus					15380
				999	9	Balance of county					99999
	045	133	1			Madison		089	4	3560	
				004	6	Canton					11100
				017	3	Jackson, part					36000
				029	6	Ridgeland					62520
				999	9	Balance of county					99999
	046	000	2			Marion		091	5	0000	
	047	000	2			Marshall		093	5	0000	
	048	000	2			Monroe		095	5	0000	
	049	000	2			Montgomery		097	6	0000	
	050	000	2			Neshoba		099	6	0000	
	051	000	2			Newton		101	6	0000	
	052	000	2			Noxubee		103	6	0000	
	053	000	2			Oktibbeha		105	5	0000	
				031	6	Starkville					70240
				999	9	Balance of county					99999
	054	000	2			Panola		107	5	0000	
	055	000	2			Pearl River		109	5	0000	
				028	6	Picayune					57160
				999	9	Balance of county					99999
	056	000	2			Perry		111	6	0000	
	057	000	2			Pike		113	5	0000	
				020	6	McComb					43280
				999	9	Balance of county					99999
	058	000	2			Pontotoc		115	6	0000	
	059	000	2			Prentiss		117	6	0000	
	060	000	2			Quitman		119	6	0000	
	061	133	1			Rankin		121	4	3560	
				002	6	Brandon					08300
				017	3	Jackson, part					36000
				027	6	Pearl					55760
				999	9	Balance of county					99999
	062	000	2			Scott		123	6	0000	
	063	000	2			Sharkey		125	6	0000	
	064	000	2			Simpson		127	6	0000	
	065	000	2			Smith		129	6	0000	
	066	000	2			Stone		131	6	0000	
	067	000	2			Sunflower		133	5	0000	
				016	6	Indianola					34740
				999	9	Balance of county					99999
	068	000	2			Tallahatchie		135	6	0000	
	069	000	2			Tate		137	6	0000	
	070	000	2			Tippah		139	6	0000	
	071	000	2			Tishomingo		141	6	0000	
	072	000	2			Tunica		143	6	0000	
	073	000	2			Union		145	6	0000	
	074	000	2			Walthall		147	6	0000	
	075	000	2			Warren		149	5	0000	
				033	6	Vicksburg					76720
				999	9	Balance of county					99999
	076	000	2			Washington		151	4	0000	
				011	5	Greenville					29180
				999	9	Balance of county					99999
	077	000	2			Wayne		153	6	0000	
	078	000	2			Webster		155	6	0000	
	079	000	2			Wilkinson		157	6	0000	
	080	000	2			Winston		159	6	0000	
	081	000	2			Yalobusha		161	6	0000	
	082	000	2			Yazoo		163	5	0000	
				034	6	Yazoo City					81520
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
26						Missouri	29				
	001	000	2			Adair	001	6		0000	
				030	6	Kirksville					39026
				999	9	Balance of county					99999
	002	242	1			Andrew	003	6		7000	
	003	000	2			Atchison	005	6		0000	
	004	000	2			Audrain	007	6		0000	
				037	6	Mexico					47648
				999	9	Balance of county					99999
	005	000	2			Barry	009	5		0000	
	006	000	2			Barton	011	6		0000	
	007	000	2			Bates	013	6		0000	
	008	000	2			Benton	015	6		0000	
	009	000	2			Bollinger	017	6		0000	
	010	061	1			Boone	019	3		1740	
				012	4	Columbia					15670
				999	9	Balance of county					99999
	011	242	1			Buchanan	021	4		7000	
				047	4	St. Joseph					64550
				999	9	Balance of county					99999
	012	000	2			Butler	023	5		0000	
				041	6	Poplar Bluff					59096
				999	9	Balance of county					99999
	013	000	2			Caldwell	025	6		0000	
	014	000	2			Callaway	027	5		0000	
				019	6	Fulton					26182
				025	5	Jefferson City, part					37000
				999	9	Balance of county					99999
	015	000	2			Camden	029	5		0000	
	016	000	2			Cape Girardeau	031	4		0000	
				008	5	Cape Girardeau					11242
				999	9	Balance of county					99999
	017	000	2			Carroll	033	6		0000	
	018	000	2			Carter	035	6		0000	
	019	145	1			Cass	037	4		3760	
				004	6	Belton					04384
				028	2	Kansas City, part					38000
				032	5	Lee's Summit, part					41348
				999	9	Balance of county					99999
	020	000	2			Cedar	039	6		0000	
	021	000	2			Chariton	041	6		0000	
	022	270	1			Christian	043	5		7920	
	023	000	2			Clark	045	6		0000	
	024	145	1			Clay	047	3		3760	
				015	6	Excelsior Springs, part					23086
				020	5	Gladstone					27190
				024	3	Independence, part					35000
				028	2	Kansas City, part					38000
				033	6	Liberty					42032
				999	9	Balance of county					99999
	025	145	1			Clinton	049	6		3760	
	026	000	2			Cole	051	4		0000	
				025	5	Jefferson City, part					37000
				999	9	Balance of county					99999
	027	000	2			Cooper	053	6		0000	
	028	000	2			Crawford	055	6		0000	
	029	000	2			Dade	057	6		0000	
	030	000	2			Dallas	059	6		0000	
	031	000	2			Daviess	061	6		0000	
	032	000	2			De Kalb	063	6		0000	
	033	000	2			Dent	065	6		0000	
	034	000	2			Douglas	067	6		0000	
	035	000	2			Dunklin	069	5		0000	
				029	6	Kennett					38306
				999	9	Balance of county					99999
	036	243	1			Franklin	071	4		7040	
				055	6	Washington					77416
				999	9	Balance of county					99999
	037	000	2			Gasconade	073	6		0000	
	038	000	2			Gentry	075	6		0000	
	039	270	1			Greene	077	3		7920	
				052	3	Springfield					70000
				999	9	Balance of county					99999
	040	000	2			Grundy	079	6		0000	
	041	000	2			Harrison	081	6		0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
26						Missouri	29				
	042	000	2	999	9	Henry	083	6		0000	
	043	000	2	999	9	Hickory	085	6		0000	
	044	000	2	999	9	Holt	087	6		0000	
	045	000	2	999	9	Howard	089	6		0000	
	046	000	2	999	9	Howell	091	5		0000	
	047	000	2	999	9	Iron	093	6		0000	
	048	145	1			Jackson	095	1		3760	
				006	5	Blue Springs					06652
				021	6	Grandview					28324
				024	3	Independence, part					35000
				028	2	Kansas City, part					38000
				032	5	Lee's Summit, part					41348
				042	5	Raytown					60788
				999	9	Balance of county					99999
	049	142	1			Jasper	097	4		3710	
				009	6	Carthage					11656
				027	5	Joplin, part					37592
				999	9	Balance of county					99999
	050	243	1			Jefferson	099	3		7040	
				001	6	Arnold					01972
				999	9	Balance of county					99999
	051	000	2			Johnson	101	5		0000	
				054	6	Warrensburg					77092
				999	9	Balance of county					99999
	052	000	2	999	9	Knox	103	6		0000	
	053	000	2	999	9	Laclede	105	5		0000	
	054	145	1	999	9	Lafayette	107	5		3760	
	055	000	2	999	9	Lawrence	109	5		0000	
	056	000	2	999	9	Lewis	111	6		0000	
	057	243	1	999	9	Lincoln	113	5		7040	
	058	000	2	999	9	Linn	115	6		0000	
	059	000	2	999	9	Livingston	117	6		0000	
	060	000	2	999	9	McDonald	119	6		0000	
	061	000	2	999	9	Macon	121	6		0000	
	062	000	2	999	9	Madison	123	6		0000	
	063	000	2	999	9	Maries	125	6		0000	
	064	000	2			Marion	127	5		0000	
				022	6	Hannibal, part					30214
				999	9	Balance of county					99999
	065	000	2	999	9	Mercer	129	6		0000	
	066	000	2	999	9	Miller	131	6		0000	
	067	000	2	999	9	Mississippi	133	6		0000	
	068	000	2	999	9	Moniteau	135	6		0000	
	069	000	2	999	9	Monroe	137	6		0000	
	070	000	2	999	9	Montgomery	139	6		0000	
	071	000	2	999	9	Morgan	141	6		0000	
	072	000	2			New Madrid	143	6		0000	
				051	6	Sikeston, part					67790
				999	9	Balance of county					99999
	073	142	1			Newton	145	5		3710	
				027	5	Joplin, part					37592
				999	9	Balance of county					99999
	074	000	2			Nodaway	147	6		0000	
				036	6	Maryville					46640
				999	9	Balance of county					99999
	075	000	2	999	9	Oregon	149	6		0000	
	076	000	2	999	9	Osage	151	6		0000	
	077	000	2	999	9	Ozark	153	6		0000	
	078	000	2	999	9	Pemiscot	155	6		0000	
	079	000	2	999	9	Perry	157	6		0000	
	080	000	2			Pettis	159	5		0000	
				050	6	Sedalia					66440
				999	9	Balance of county					99999
	081	000	2			Phelps	161	5		0000	
				044	6	Rolla					62912
				999	9	Balance of county					99999
	082	000	2	999	9	Pike	163	6		0000	
	083	145	1			Platte	165	4		3760	
				028	2	Kansas City, part					38000
				999	9	Balance of county					99999
	084	000	2	999	9	Polk	167	6		0000	
	085	000	2	999	9	Pulaski	169	5		0000	
	086	000	2	999	9	Putnam	171	6		0000	
	087	000	2			Ralls	173	6		0000	
				022	6	Hannibal, part					30214

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
26						Missouri	29				
	087					Ralls, con.		173	6	0000	
				999	9	Balance of county					99999
	088	000	2			Randolph		175	6	0000	
				038	6	Moberly					49034
				999	9	Balance of county					99999
	089	145	1			Ray		177	6	3760	
				015	6	Excelsior Springs, part					23086
				999	9	Balance of county					99999
	090	000	2			Reynolds		179	6	0000	
	091	000	2			Ripley		181	6	0000	
	092	243	1			St. Charles		183	3	7040	
				039	6	O'Fallon					54074
				046	4	St. Charles					64082
				049	5	St. Peters					65126
				999	9	Balance of county					99999
	093	000	2			St. Clair		185	6	0000	
	094	000	2			Ste. Genevieve		186	6	0000	
	095	000	2			St. Francois		187	5	0000	
				016	6	Farmington					23752
				999	9	Balance of county					99999
	096	243	1			St. Louis		189	1	7040	
				002	6	Ballwin					03160
				003	6	Bellefontaine Neighbors					04222
				005	6	Berkeley					04906
				007	6	Bridgeton					08398
				010	5	Chesterfield					13600
				011	6	Clayton					14572
				013	6	Crestwood					17218
				014	6	Creve Coeur					17272
				017	6	Ferguson					23986
				018	4	Florissant					24778
				023	6	Hazelwood					31276
				026	6	Jennings					37178
				031	5	Kirkwood					39044
				035	5	Maryland Heights					46586
				040	6	Overland					55550
				043	6	Richmond Heights					61706
				045	6	St. Ann					63956
				053	5	University City					75220
				056	6	Webster Groves					78154
				999	9	Balance of county					99999
	097	243	1			St. Louis city		510	2	7040	
	098	000	2			Saline		195	6	0000	
				034	6	Marshall					46316
				999	9	Balance of county					99999
	099	000	2			Schuyler		197	6	0000	
	100	000	2			Scotland		199	6	0000	
	101	000	2			Scott		201	5	0000	
				051	6	Sikeston, part					67790
				999	9	Balance of county					99999
	102	000	2			Shannon		203	6	0000	
	103	000	2			Shelby		205	6	0000	
	104	000	2			Stoddard		207	5	0000	
	105	000	2			Stone		209	6	0000	
	106	000	2			Sullivan		211	6	0000	
	107	000	2			Taney		213	5	0000	
	108	000	2			Texas		215	6	0000	
	109	000	2			Vernon		217	6	0000	
	110	243	1			Warren		219	6	7040	
	111	000	2			Washington		221	6	0000	
	112	000	2			Wayne		223	6	0000	
	113	270	1			Webster		225	6	7920	
	114	000	2			Worth		227	6	0000	
	115	000	2			Wright		229	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
27						Montana	30				
	001	000	2	999	9	Beaverhead		001	6	0000	
	002	000	2	999	9	Big Horn		003	6	0000	
	003	000	2	999	9	Blaine		005	6	0000	
	004	000	2	999	9	Broadwater		007	6	0000	
	005	000	2	999	9	Carbon		009	6	0000	
	006	000	2	999	9	Carter		011	6	0000	
	007	113	1			Cascade		013	4	3040	
				005	4	Great Falls					32800
				999	9	Balance of county					99999
	008	000	2	999	9	Chouteau		015	6	0000	
	009	000	2	999	9	Custer		017	6	0000	
	010	000	2	999	9	Daniels		019	6	0000	
	011	000	2	999	9	Dawson		021	6	0000	
	012	000	2	001	6	Deer Lodge, coext. with Anaconda-Deer Lo		023	6	0000	01675
	013	000	2	999	9	Fallon		025	6	0000	
	014	000	2	999	9	Fergus		027	6	0000	
	015	000	2			Flathead		029	4	0000	
				008	6	Kalispell					40075
				999	9	Balance of county					99999
	016	000	2			Gallatin		031	4	0000	
				003	6	Bozeman					08950
				999	9	Balance of county					99999
	017	000	2	999	9	Garfield		033	6	0000	
	018	000	2	999	9	Glacier		035	6	0000	
	019	000	2	999	9	Golden Valley		037	6	0000	
	020	000	2	999	9	Granite		039	6	0000	
	021	000	2			Hill		041	6	0000	
				006	6	Havre					35050
				999	9	Balance of county					99999
	022	000	2	999	9	Jefferson		043	6	0000	
	023	000	2	999	9	Judith Basin		045	6	0000	
	024	000	2	999	9	Lake		047	6	0000	
	025	000	2			Lewis and Clark		049	5	0000	
				007	6	Helena					35600
				999	9	Balance of county					99999
	026	000	2	999	9	Liberty		051	6	0000	
	027	000	2	999	9	Lincoln		053	6	0000	
	028	000	2	999	9	McCone		055	6	0000	
	029	000	2	999	9	Madison		057	6	0000	
	030	000	2	999	9	Meagher		059	6	0000	
	031	000	2	999	9	Mineral		061	6	0000	
	032	000	2			Missoula		063	4	0000	
				009	5	Missoula					50200
				999	9	Balance of county					99999
	033	000	2	999	9	Musselshell		065	6	0000	
	034	000	2	999	9	Park		067	6	0000	
	035	000	2	999	9	Petroleum		069	6	0000	
	036	000	2	999	9	Phillips		071	6	0000	
	037	000	2	999	9	Pondera		073	6	0000	
	038	000	2	999	9	Powder River		075	6	0000	
	039	000	2	999	9	Powell		077	6	0000	
	040	000	2	999	9	Prairie		079	6	0000	
	041	000	2	999	9	Ravalli		081	5	0000	
	042	000	2	999	9	Richland		083	6	0000	
	043	000	2	999	9	Roosevelt		085	6	0000	
	044	000	2	999	9	Rosebud		087	6	0000	
	045	000	2	999	9	Sanders		089	6	0000	
	046	000	2	999	9	Sheridan		091	6	0000	
	047	000	2			Silver Bow		093	5	0000	
				004	5	Butte-Silver Bow					11390
				999	9	Balance of county					99999
	048	000	2	999	9	Stillwater		095	6	0000	
	049	000	2	999	9	Sweet Grass		097	6	0000	
	050	000	2	999	9	Teton		099	6	0000	
	051	000	2	999	9	Toole		101	6	0000	
	052	000	2	999	9	Treasure		103	6	0000	
	053	000	2	999	9	Valley		105	6	0000	
	054	000	2	999	9	Wheatland		107	6	0000	
	055	000	2	999	9	Wibaux		109	6	0000	
	056	029	1			Yellowstone		111	3	0880	
				002	4	Billings					06550
				999	9	Balance of county					99999
	057	000	2	999	9	Yellowstone National Park		113	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
28						Nebraska	31				
	001	000	2			Adams		001	5	0000	
				006	6	Hastings					21415
				999	9	Balance of county					99999
	002	000	2			Antelope		003	6	0000	
	003	000	2			Arthur		005	6	0000	
	004	000	2			Banner		007	6	0000	
	005	000	2			Blaine		009	6	0000	
	006	000	2			Boone		011	6	0000	
	007	000	2			Box Butte		013	6	0000	
	008	000	2			Boyd		015	6	0000	
	009	000	2			Brown		017	6	0000	
	010	000	2			Buffalo		019	5	0000	
				007	6	Kearney					25055
				999	9	Balance of county					99999
	011	000	2			Burt		021	6	0000	
	012	000	2			Butler		023	6	0000	
	013	206	1			Cass		025	6	5920	
	014	000	2			Cedar		027	6	0000	
	015	000	2			Chase		029	6	0000	
	016	000	2			Cherry		031	6	0000	
	017	000	2			Cheyenne		033	6	0000	
	018	000	2			Clay		035	6	0000	
	019	000	2			Colfax		037	6	0000	
	020	000	2			Cuming		039	6	0000	
	021	000	2			Custer		041	6	0000	
	022	265	1			Dakota		043	6	7720	
	023	000	2			Dawes		045	6	0000	
	024	000	2			Dawson		047	6	0000	
	025	000	2			Deuel		049	6	0000	
	026	000	2			Dixon		051	6	0000	
	027	000	2			Dodge		053	5	0000	
				004	6	Fremont					17670
				999	9	Balance of county					99999
	028	206	1			Douglas		055	2	5920	
				011	2	Omaha					37000
				999	9	Balance of county					99999
	029	000	2			Dundy		057	6	0000	
	030	000	2			Fillmore		059	6	0000	
	031	000	2			Franklin		061	6	0000	
	032	000	2			Frontier		063	6	0000	
	033	000	2			Furnas		065	6	0000	
	034	000	2			Gage		067	6	0000	
				001	6	Beatrice					03390
				999	9	Balance of county					99999
	035	000	2			Garden		069	6	0000	
	036	000	2			Garfield		071	6	0000	
	037	000	2			Gosper		073	6	0000	
	038	000	2			Grant		075	6	0000	
	039	000	2			Greeley		077	6	0000	
	040	000	2			Hall		079	5	0000	
				005	5	Grand Island					19595
				999	9	Balance of county					99999
	041	000	2			Hamilton		081	6	0000	
	042	000	2			Harlan		083	6	0000	
	043	000	2			Hayes		085	6	0000	
	044	000	2			Hitchcock		087	6	0000	
	045	000	2			Holt		089	6	0000	
	046	000	2			Hooker		091	6	0000	
	047	000	2			Howard		093	6	0000	
	048	000	2			Jefferson		095	6	0000	
	049	000	2			Johnson		097	6	0000	
	050	000	2			Kearney		099	6	0000	
	051	000	2			Keith		101	6	0000	
	052	000	2			Keya Paha		103	6	0000	
	053	000	2			Kimball		105	6	0000	
	054	000	2			Knox		107	6	0000	
	055	165	1			Lancaster		109	3	4360	
				008	3	Lincoln					28000
				999	9	Balance of county					99999
	056	000	2			Lincoln		111	5	0000	
				010	6	North Platte					35000
				999	9	Balance of county					99999
	057	000	2			Logan		113	6	0000	
	058	000	2			Loup		115	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
28						Nebraska	31				
	059	000	2	999	9	McPherson		117	6	0000	
	060	000	2			Madison		119	5	0000	
				009	6	Norfolk					34615
				999	9	Balance of county					99999
	061	000	2	999	9	Merrick		121	6	0000	
	062	000	2	999	9	Morrill		123	6	0000	
	063	000	2	999	9	Nance		125	6	0000	
	064	000	2	999	9	Nemaha		127	6	0000	
	065	000	2	999	9	Nuckolls		129	6	0000	
	066	000	2	999	9	Otoe		131	6	0000	
	067	000	2	999	9	Pawnee		133	6	0000	
	068	000	2	999	9	Perkins		135	6	0000	
	069	000	2	999	9	Phelps		137	6	0000	
	070	000	2	999	9	Pierce		139	6	0000	
	071	000	2			Platte		141	5	0000	
				003	6	Columbus					10110
				999	9	Balance of county					99999
	072	000	2	999	9	Polk		143	6	0000	
	073	000	2	999	9	Red Willow		145	6	0000	
	074	000	2	999	9	Richardson		147	6	0000	
	075	000	2	999	9	Rock		149	6	0000	
	076	000	2	999	9	Saline		151	6	0000	
	077	206	1			Sarpy		153	3	5920	
				002	5	Bellevue					03950
				012	6	Papillion					38295
				999	9	Balance of county					99999
	078	000	2	999	9	Saunders		155	6	0000	
	079	000	2			Scotts Bluff		157	5	0000	
				013	6	Scottsbluff					44245
				999	9	Balance of county					99999
	080	000	2	999	9	Seward		159	6	0000	
	081	000	2	999	9	Sheridan		161	6	0000	
	082	000	2	999	9	Sherman		163	6	0000	
	083	000	2	999	9	Sioux		165	6	0000	
	084	000	2	999	9	Stanton		167	6	0000	
	085	000	2	999	9	Thayer		169	6	0000	
	086	000	2	999	9	Thomas		171	6	0000	
	087	000	2	999	9	Thurston		173	6	0000	
	088	000	2	999	9	Valley		175	6	0000	
	089	206	1	999	9	Washington		177	6	5920	
	090	000	2	999	9	Wayne		179	6	0000	
	091	000	2	999	9	Webster		181	6	0000	
	092	000	2	999	9	Wheeler		183	6	0000	
	093	000	2	999	9	York		185	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
29						Nevada	32				
	001	000	2	002	5	Carson City city		510	5	0000	09700
	002	000	2	999	9	Churchill		001	6	0000	
	003	159	1			Clark		003	1	4120	
				001	6	Boulder City					06500
				004	4	Henderson					31900
				005	2	Las Vegas					40000
				006	5	North Las Vegas					51800
				999	9	Balance of county					99999
	004	000	2	999	9	Douglas		005	5	0000	
	005	000	2			Elko		007	5	0000	
				003	6	Elko					22500
				999	9	Balance of county					99999
	006	000	2	999	9	Esmeralda		009	6	0000	
	007	000	2	999	9	Eureka		011	6	0000	
	008	000	2	999	9	Humboldt		013	6	0000	
	009	000	2	999	9	Lander		015	6	0000	
	010	000	2	999	9	Lincoln		017	6	0000	
	011	000	2	999	9	Lyon		019	6	0000	
	012	000	2	999	9	Mineral		021	6	0000	
	013	159	1	999	9	Nye		023	6	4120	
	014	000	2	999	9	Pershing		027	6	0000	
	015	000	2	999	9	Storey		029	6	0000	
	016	230	1			Washoe		031	2	6720	
				007	3	Reno					60600
				008	4	Sparks					68400
				999	9	Balance of county					99999
	017	000	2	999	9	White Pine		033	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
30						New Hampshire	33				
	001	000	2			Belknap		001	5	0000	
				006	6	Laconia					40180
				999	9	Balance of county					99999
	002	000	2			Carroll		003	5	0000	
	003	000	2			Cheshire		005	4	0000	
				005	6	Keene					39300
				999	9	Balance of county					99999
	004	000	2			Coos		007	5	0000	
				001	6	Berlin					05140
				999	9	Balance of county					99999
	005	000	2			Grafton		009	4	0000	
				007	6	Lebanon					41300
				999	9	Balance of county					99999
	006	037	1			Hillsborough		011	2	1123	
				008	4	Manchester					45140
				009	4	Nashua					50260
				999	9	Balance of county					99999
	007	000	2			Merrimack		013	3	0000	
				003	5	Concord					14200
				999	9	Balance of county					99999
	008	037	1			Rockingham		015	3	1123	
				010	5	Portsmouth					62900
				012	5	Salem town					66660
				999	9	Balance of county					99999
	009	037	1			Strafford		017	3	1123	
				004	5	Dover					18820
				011	5	Rochester					65140
				013	6	Somersworth					69940
				999	9	Balance of county					99999
	010	000	2			Sullivan		019	5	0000	
				002	6	Claremont					12900
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
31						New Jersey	34				
	001	017	1			Atlantic		001	3	0560	
				003	5	Atlantic City					02080
				014	6	Brigantine					07810
				057	6	Hammonton					29430
				130	6	Pleasantville					59640
				148	6	Somers Point					68430
				163	6	Ventnor City					75620
				999	9	Balance of county					99999
	002	028	1			Bergen		003	1	0875	
				007	6	Bergenfield borough					05170
				022	6	Cliffside Park borough					13570
				031	6	Dumont borough					18400
				038	6	Elmwood Park borough					21300
				039	6	Englewood					21480
				042	5	Fair Lawn borough					22470
				043	6	Fairview borough					22560
				045	5	Fort Lee borough					24420
				048	5	Garfield					25770
				050	6	Glen Rock borough					26640
				053	5	Hackensack					28680
				060	6	Hasbrouck Heights borough					30420
				081	6	Lodi borough					41100
				083	6	Lyndhurst township					42090
				106	6	New Milford borough					51660
				108	6	North Arlington borough					52320
				113	6	Oakland borough					53850
				117	6	Palisades Park borough					55770
				118	5	Paramus borough					55950
				135	6	Ramsey borough					61680
				137	6	Ridgefield Park village					62940
				138	6	Ridgewood village					63000
				140	6	River Edge borough					63360
				143	6	Rutherford borough					65280
				144	6	Saddle Brook township					65340
				156	5	Teaneck township					72360
				157	6	Tenafly borough					72420
				167	6	Wallington borough					76490
				175	6	Westwood borough					80270
				180	6	Wyckoff township					83050
				999	9	Balance of county					99999
	003	214	1			Burlington		005	2	6160	
				019	6	Cinnaminson township					12940
				026	6	Delran township					17440
				040	5	Evesham township					22110
				044	6	Florence township					23850
				088	6	Maple Shade township					43740
				098	6	Moorestown township					47880
				101	6	Mount Holly township					48900
				102	5	Mount Laurel township					49020
				122	5	Pemberton township					57510
				176	5	Willingboro township					81440
				999	9	Balance of county					99999
	004	214	1			Camden		007	1	6160	
				006	6	Bellmawr borough					04750
				015	4	Camden					10000
				018	4	Cherry Hill township					12280
				024	6	Collingswood borough					14260
				051	6	Gloucester City					26820
				052	4	Gloucester township					26760
				054	6	Haddonfield borough					28770
				055	6	Haddon township					28740
				078	6	Lindenwold borough					40440
				123	5	Pennsauken township					57660
				166	6	Voorhees township					76220
				177	5	Winslow township					81740
				999	9	Balance of county					99999
	005	017	1			Cape May		009	4	0560	
				114	6	Ocean City					54360
				999	9	Balance of county					99999
	006	293	1			Cumberland		011	3	8760	
				012	6	Bridgeton					07600
				095	5	Millville					46680
				165	4	Vineland					76070
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
31						New Jersey	34				
	007	198	1			Essex		013	1	5640	
				005	5	Belleville township					04690
				010	5	Bloomfield township					06250
				017	6	Cedar Grove township					11230
				033	4	East Orange					19390
				069	4	Irvington township					34430
				080	5	Livingston township					40920
				089	6	Maplewood township					43830
				094	6	Millburn township					46410
				097	5	Montclair township					47485
				104	2	Newark					51000
				112	5	Nutley township					53670
				151	6	South Orange Village township					69274
				164	6	Verona township					75800
				999	9	Balance of county					99999
				999	9	Balance of county					99999
	008	214	1			Gloucester		015	3	6160	
				028	6	Deptford township					17710
				049	6	Glassboro borough					26340
				096	5	Monroe township					47250
				168	5	Washington township					77180
				171	6	West Deptford township					78800
				179	6	Woodbury					82120
				999	9	Balance of county					99999
	009	139	1			Hudson		017	1	3640	
				004	4	Bayonne					03580
				059	6	Harrison					30210
				066	5	Hoboken					32250
				071	3	Jersey City					36000
				073	5	Kearny					36510
				109	5	North Bergen township					52440
				147	6	Secaucus					66570
				161	4	Union City					74630
				170	6	Weehawken township					77960
				173	5	West New York					79610
				999	9	Balance of county					99999
	010	181	1	999	9	Hunterdon		019	3	5015	
	011	284	1			Mercer		021	2	8480	
				034	6	East Windsor township					19780
				041	5	Ewing township					22180
				056	4	Hamilton township					29310
				075	5	Lawrence township					39510
				133	6	Princeton borough					60900
				160	4	Trenton					74000
				999	9	Balance of county					99999
	012	181	1			Middlesex		023	1	5015	
				016	6	Carteret borough					10750
				032	5	East Brunswick township					18970
				036	4	Edison township					20260
				063	6	Highland Park borough					31470
				091	6	Metuchen borough					45690
				092	6	Middlesex borough					45900
				105	5	New Brunswick					51210
				110	5	North Brunswick township					52590
				116	4	Old Bridge township					54705
				125	5	Perth Amboy					58200
				127	5	Piscataway township					58980
				129	6	Plainsboro township					59280
				145	5	Sayreville borough					65790
				150	5	South Brunswick township					68790
				152	6	South Plainfield borough					69390
				153	6	South River borough					69420
				178	6	Woodbridge township					81950
				999	9	Balance of county					99999
	013	186	1			Monmouth		025	1	5190	
				001	6	Aberdeen township					00070
				002	6	Asbury Park					01960
				035	6	Eatontown borough					19840
				047	6	Freehold borough					25200
				062	6	Hazlet township					30690
				068	5	Howell township					33300
				072	6	Keansburg borough					36480
				082	5	Long Branch					41310
				085	5	Manalapan township					42990

Vital Statistics Codes				FIPS Codes			
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	Place
31						New Jersey	34
	013					Monmouth, con.	025 1 5190
				090	5	Marlboro township	44070
				093	4	Middletown township	45990
				103	5	Neptune township	49890
				115	5	Ocean township	54270
				136	6	Red Bank borough	62430
				158	6	Tinton Falls borough	73020
				999	9	Balance of county	99999
	014	198	1			Morris	027 2 5640
				027	6	Denville township	17650
				029	6	Dover	18070
				058	6	Hanover township	29655
				076	6	Lincoln Park borough	40290
				084	6	Madison borough	42510
				099	6	Morristown	48300
				100	6	Morris township	48090
				119	5	Parsippany-Troy Hills township	56475
				124	6	Pequannock township	58125
				999	9	Balance of county	99999
	015	186	1			Ocean	029 2 5190
				009	5	Berkeley township	05300
				011	4	Brick township	07520
				030	4	Dover township	18130
				070	5	Jackson township	34680
				074	5	Lakewood township	38550
				086	5	Manchester township	43140
				131	6	Point Pleasant borough	59880
				999	9	Balance of county	99999
	016	028	1			Passaic	031 2 0875
				023	4	Clifton	13690
				061	6	Hawthorne borough	30570
				079	6	Little Falls township	40650
				120	4	Passaic	56550
				121	3	Paterson	57000
				132	6	Pompton Lakes borough	60090
				139	6	Ringwood borough	63150
				159	6	Totowa borough	73140
				169	5	Wayne township	77870
				174	6	West Paterson borough	79820
				999	9	Balance of county	99999
	017	214	1			Salem	033 4 6160
	018	181	1			Somerset	035 3 5015
				013	5	Bridgewater township	07720
				046	5	Franklin township	24900
				064	5	Hillsborough township	31890
				087	6	Manville borough	43620
				111	6	North Plainfield borough	53280
				149	6	Somerville borough	68460
				999	9	Balance of county	99999
	019	198	1			Sussex	037 3 5640
				067	6	Hopatcong borough	32910
				999	9	Balance of county	99999
	020	198	1			Union	039 2 5640
				008	6	Berkeley Heights township	05350
				021	6	Clark township	13180
				025	6	Cranford township	15670
				037	3	Elizabeth	21000
				065	6	Hillside township	32010
				077	5	Linden	40350
				107	6	New Providence borough	51810
				128	5	Plainfield	59190
				134	5	Rahway	61530
				141	6	Roselle borough	64620
				142	6	Roselle Park borough	64650
				146	6	Scotch Plains township	66090
				154	6	Springfield township	70050
				155	6	Summit	71430
				162	4	Union township	74510
				172	5	Westfield	79040
				999	9	Balance of county	99999
	021	198	1			Warren	041 4 5640
				126	6	Phillipsburg	58350
				999	9	Balance of county	99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
32						New Mexico	35				
	001	005	1			Bernalillo		001	2	0200	
				002	2	Albuquerque					02000
				999	9	Balance of county					99999
	002	000	2			Catron		003	6	0000	
	003	000	2			Chaves		005	4	0000	
				014	5	Roswell					64930
				999	9	Balance of county					99999
	004	000	2			Cibola		006	6	0000	
	005	000	2			Colfax		007	6	0000	
	006	000	2			Curry		009	5	0000	
				005	5	Clovis					16420
				999	9	Balance of county					99999
	007	000	2			De Baca		011	6	0000	
	008	158	1			Dona Ana		013	3	4100	
				010	4	Las Cruces					39380
				999	9	Balance of county					99999
	009	000	2			Eddy		015	5	0000	
				003	6	Artesia					05220
				004	6	Carlsbad					12150
				999	9	Balance of county					99999
	010	000	2			Grant		017	5	0000	
				016	6	Silver City					73260
				999	9	Balance of county					99999
	011	000	2			Guadalupe		019	6	0000	
	012	000	2			Harding		021	6	0000	
	013	000	2			Hidalgo		023	6	0000	
	014	000	2			Lea		025	4	0000	
				009	5	Hobbs					32520
				999	9	Balance of county					99999
	015	000	2			Lincoln		027	6	0000	
	016	255	1			Los Alamos		028	6	7490	
	017	000	2			Luna		029	6	0000	
				006	6	Deming					20270
				999	9	Balance of county					99999
	018	000	2			McKinley		031	4	0000	
				008	6	Gallup					28460
				999	9	Balance of county					99999
	019	000	2			Mora		033	6	0000	
	020	000	2			Otero		035	4	0000	
				001	5	Alamogordo					01780
				999	9	Balance of county					99999
	021	000	2			Quay		037	6	0000	
	022	000	2			Rio Arriba		039	5	0000	
	023	000	2			Roosevelt		041	6	0000	
				012	6	Portales					59260
				999	9	Balance of county					99999
	024	005	1			Sandoval		043	4	0200	
				013	5	Rio Rancho					63530
				999	9	Balance of county					99999
	025	000	2			San Juan		045	4	0000	
				007	5	Farlington					25800
				999	9	Balance of county					99999
	026	000	2			San Miguel		047	5	0000	
				011	6	Las Vegas					39940
				999	9	Balance of county					99999
	027	255	1			Santa Fe		049	4	7490	
				015	4	Santa Fe					70500
				999	9	Balance of county					99999
	028	000	2			Sierra		051	6	0000	
	029	000	2			Socorro		053	6	0000	
	030	000	2			Taos		055	6	0000	
	031	000	2			Torrance		057	6	0000	
	032	000	2			Union		059	6	0000	
	033	005	1			Valencia		061	5	0200	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
33						New York	36				
	001	004	1			Albany		001	2	0160	
				001	3	Albany					01000
				007	5	Bethlehem town					06354
				017	6	Cohoes					16749
				097	6	Watervliet					78674
				999	9	Balance of county					99999
	002	000	2			Allegany		003	4	0000	
	003	031	1			Broome		007	3	0960	
				008	4	Binghamton					06607
				024	6	Endicott village					24515
				043	6	Johnson City village					38748
				095	5	Vestal town					77255
				999	9	Balance of county					99999
	004	000	2			Cattaraugus		009	4	0000	
				065	6	Olean					54716
				999	9	Balance of county					99999
	005	276	1			Cayuga		011	4	8160	
				003	5	Auburn					03078
				999	9	Balance of county					99999
	006	137	1			Chautauqua		013	3	3610	
				021	6	Dunkirk					21105
				026	6	Fredonia village					27419
				042	5	Jamestown					38264
				999	9	Balance of county					99999
	007	085	1			Chemung		015	4	2335	
				023	5	Elmira					24229
				999	9	Balance of county					99999
	008	000	2			Chenango		017	4	0000	
	009	000	2			Clinton		019	4	0000	
				073	6	Plattsburgh					58574
				999	9	Balance of county					99999
	010	000	2			Columbia		021	4	0000	
	011	000	2			Cortland		023	5	0000	
				019	6	Cortland					18388
				999	9	Balance of county					99999
	012	000	2			Delaware		025	5	0000	
	013	081	1			Dutchess		027	2	2281	
				006	6	Beacon					05100
				076	5	Poughkeepsie					59641
				999	9	Balance of county					99999
	014	043	1			Erie		029	1	1280	
				012	2	Buffalo					11000
				020	6	Depew village					20313
				036	6	Hamburg village					31643
				044	6	Kenmore village					39232
				046	6	Lackawanna					40189
				047	6	Lancaster village					41135
				091	6	Tonawanda					74166
				099	5	West Seneca town					80918
				999	9	Balance of county					99999
	015	000	2			Essex		031	5	0000	
	016	000	2			Franklin		033	5	0000	
	017	000	2			Fulton		035	4	0000	
				034	6	Gloversville					29443
				999	9	Balance of county					99999
	018	236	1			Genesee		037	4	6840	
				005	6	Batavia					04715
				999	9	Balance of county					99999
	019	000	2			Greene		039	5	0000	
	020	000	2			Hamilton		041	6	0000	
	021	289	1			Herkimer		043	4	8680	
	022	000	2			Jefferson		045	3	0000	
				096	5	Watertown					78608
				999	9	Balance of county					99999
	023	000	2			Lewis		049	5	0000	
	024	236	1			Livingston		051	4	6840	
	025	276	1			Madison		053	4	8160	
				066	6	Oneida					54837
				999	9	Balance of county					99999
	026	236	1			Monroe		055	1	6840	
				009	5	Brighton town					08246
				015	5	Chili town					15462
				030	5	Gates town					28442
				035	4	Greece town					30290

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
33						New York	36				
	026					Monroe, con.	055	1		6840	
				039	5	Henrietta town					34099
				040	4	Irondequoit town					37726
				072	5	Penfield town					57144
				078	3	Rochester					63000
				999	9	Balance of county					99999
	027	004	1			Montgomery	057	4		0160	
				002	6	Amsterdam					02066
				999	9	Balance of county					99999
	028	193	1			Nassau	059	0		5380	
				022	6	East Rockaway village					22876
				025	6	Floral Park village					26264
				027	5	Freeport village					27485
				029	6	Garden City village					28178
				032	6	Glen Cove					29113
				038	5	Hempstead village					33139
				050	5	Long Beach					43335
				051	6	Lynbrook village					43874
				054	6	Massapequa Park village					45997
				057	6	Mineola village					47636
				079	6	Rockville Centre village					63264
				094	5	Valley Stream village					76705
				098	6	Westbury village					79444
				999	9	Balance of county					99999
	029	197	1			New York city				5600	51000
				010	0	Bronx borough, Bronx county	005	0			
				011	0	Brooklyn borough, Kings county	047	0			
				053	0	Manhattan borough, New York county	061	0			
				077	0	Queens borough, Queens county	081	0			
				087	0	Staten Island borough, Richmond county	085	0			
	030	043	1			Niagara	063	3		1280	
				049	6	Lockport					43082
				061	4	Niagara Falls					51055
				063	5	North Tonawanda					53682
				999	9	Balance of county					99999
	031	289	1			Oneida	065	2		8680	
				080	5	Rome					63418
				093	4	Utica					76540
				999	9	Balance of county					99999
	032	276	1			Onondaga	067	2		8160	
				089	3	Syracuse					73000
				999	9	Balance of county					99999
	033	236	1			Ontario	069	4		6840	
				013	6	Canandaigua					12144
				031	6	Geneva, part					28640
				999	9	Balance of county					99999
	034	199	1			Orange	071	2		5660	
				056	6	Middletown					47042
				059	5	Newburgh					50034
				999	9	Balance of county					99999
	035	236	1			Orleans	073	5		6840	
	036	276	1			Oswego	075	3		8160	
				028	6	Fulton					27815
				069	6	Oswego					55574
				999	9	Balance of county					99999
	037	000	2			Otsego	077	4		0000	
				067	6	Oneonta					54881
				999	9	Balance of county					99999
	038	197	1			Putnam	079	4		5600	
				014	5	Carmel town					12529
				999	9	Balance of county					99999
	039	004	1			Rensselaer	083	3		0160	
				092	4	Troy					75484
				999	9	Balance of county					99999
	040	197	1			Rockland	087	2		5600	
				086	6	Spring Valley village					70420
				088	6	Suffern village					71894
				999	9	Balance of county					99999
	041	000	2			St. Lawrence	089	3		0000	
				055	6	Massena village					46019
				064	6	Ogdensburg					54485
				075	6	Potsdam village					59564
				999	9	Balance of county					99999
	042	004	1			Saratoga	091	3		0160	
				016	5	Clifton Park town					16353

Vital Statistics Codes					FIPS Codes					
St	Cnty	P/MSA	M/NM	City P/S	Area Names	St	Cnty	P/S	P/MSA	Place
33					New York	36				
	042			083 5	Saratoga, con.		091	3	0160	
				999 9	Saratoga Springs					65255
					Balance of county					99999
	043	004	1	062 6	Schenectady		093	3	0160	
				081 5	Niskayuna town					51264
				085 4	Rotterdam town					63935
				999 9	Schenectady					65508
					Balance of county					99999
	044	004	1	999 9	Schoharie		095	5	0160	
	045	000	2	999 9	Schuyler		097	6	0000	
	046	000	2		Seneca		099	5	0000	
				031 6	Geneva, part					28640
				999 9	Balance of county					99999
	047	000	2		Steuben		101	4	0000	
				018 6	Corning					18256
				999 9	Balance of county					99999
	048	193	1		Suffolk		103	0	5380	
				004 6	Babylon village					03408
				048 5	Lindenhurst village					42554
				070 6	Patchogue village					56660
				999 9	Balance of county					99999
	049	000	2	999 9	Sullivan		105	4	0000	
	050	031	1	999 9	Tioga		107	4	0960	
	051	000	2		Tompkins		109	4	0000	
				041 5	Ithaca					38077
				999 9	Balance of county					99999
	052	000	2		Ulster		111	3	0000	
				045 6	Kingston					39727
				999 9	Balance of county					99999
	053	109	1		Warren		113	4	2975	
				033 6	Glens Falls					29333
				999 9	Balance of county					99999
	054	109	1	999 9	Washington		115	4	2975	
	055	236	1	999 9	Wayne		117	4	6840	
	056	197	1		Westchester		119	1	5600	
				037 6	Harrison village					32402
				052 6	Mamaroneck village					44831
				058 4	Mount Vernon					49121
				060 4	New Rochelle					50617
				068 6	Ossining village					55530
				071 6	Peekskill					56979
				074 6	Port Chester village					59223
				082 6	Rye					64309
				084 6	Scarsdale village					65431
				090 6	Tarrytown village					73176
				100 5	White Plains					81677
				101 3	Yonkers					84000
				102 5	Yorktown town					84077
				999 9	Balance of county					99999
	057	000	2	999 9	Wyoming		121	5	0000	
	058	000	2	999 9	Yates		123	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
34						North Carolina	37				
	001	116	1			Alamance		001	3	3120	
				005	5	Burlington					09060
				018	6	Graham					27280
				999	9	Balance of county					99999
	002	124	1	999	9	Alexander		003	5	3290	
	003	000	2	999	9	Alleghany		005	6	0000	
	004	000	2	999	9	Anson		007	6	0000	
	005	000	2	999	9	Ashe		009	6	0000	
	006	000	2	999	9	Avery		011	6	0000	
	007	000	2	999	9	Beaufort		013	5	0000	
	008	000	2	999	9	Bertie		015	6	0000	
	009	000	2	999	9	Bladen		017	5	0000	
	010	305	1	999	9	Brunswick		019	4	9200	
	011	014	1			Buncombe		021	3	0480	
				003	4	Asheville					02140
				999	9	Balance of county					99999
	012	124	1			Burke		023	4	3290	
				023	5	Hickory, part					31060
				036	6	Morganton					44400
				999	9	Balance of county					99999
	013	051	1			Cabarrus		025	4	1520	
				010	5	Concord					14100
				026	5	Kannapolis, part					35200
				999	9	Balance of county					99999
	014	124	1			Caldwell		027	4	3290	
				030	6	Lenoir					37760
				999	9	Balance of county					99999
	015	000	2			Camden		029	6	0000	
				013	6	Elizabeth City, part					20580
				999	9	Balance of county					99999
	016	000	2	999	9	Carteret		031	4	0000	
	017	000	2	999	9	Caswell		033	6	0000	
	018	124	1			Catawba		035	3	3290	
				023	5	Hickory, part					31060
				999	9	Balance of county					99999
	019	226	1	999	9	Chatham		037	5	6640	
	020	000	2	999	9	Cherokee		039	6	0000	
	021	000	2	999	9	Chowan		041	6	0000	
	022	000	2	999	9	Clay		043	6	0000	
	023	000	2			Cleveland		045	4	0000	
				044	6	Shelby					61200
				999	9	Balance of county					99999
	024	000	2	999	9	Columbus		047	5	0000	
	025	000	2			Craven		049	4	0000	
				021	6	Havelock					30120
				037	6	New Bern					46340
				999	9	Balance of county					99999
	026	091	1			Cumberland		051	2	2560	
				014	4	Fayetteville					22920
				999	9	Balance of county					99999
	027	200	1	999	9	Currituck		053	6	5720	
	028	000	2	999	9	Dare		055	6	0000	
	029	116	1			Davidson		057	3	3120	
				024	4	High Point, part					31400
				031	6	Lexington					38060
				047	6	Thomasville					67420
				999	9	Balance of county					99999
	030	116	1	999	9	Davie		059	5	3120	
	031	000	2	999	9	Duplin		061	5	0000	
	032	226	1			Durham		063	3	6640	
				008	5	Chapel Hill, part					11800
				011	3	Durham, part					19000
				999	9	Balance of county					99999
	033	238	1			Edgecombe		065	4	6895	
				041	5	Rocky Mount, part					57500
				046	6	Tarboro					66700
				999	9	Balance of county					99999
	034	116	1			Forsyth		067	2	3120	
				024	4	High Point, part					31400
				027	6	Kernersville, part					35600
				050	3	Winston-Salem					75000
				999	9	Balance of county					99999
	035	226	1	999	9	Franklin		069	5	6640	
	036	051	1			Gaston		071	3	1520	
				016	4	Gastonia					25580

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
34						North Carolina	37				
	036					Gaston, con.	071	3		1520	
				999	9	Balance of county					99999
	037	000	2	999	9	Gates	073	6		0000	
	038	000	2	999	9	Graham	075	6		0000	
	039	000	2	999	9	Granville	077	5		0000	
	040	000	2	999	9	Greene	079	6		0000	
	041	116	1			Guilford	081	2		3120	
				019	3	Greensboro					28000
				024	4	High Point, part					31400
				027	6	Kernersville, part					35600
				999	9	Balance of county					99999
	042	000	2			Halifax	083	4		0000	
				040	6	Roanoke Rapids					56900
				999	9	Balance of county					99999
	043	000	2	999	9	Harnett	085	4		0000	
	044	000	2	999	9	Haywood	087	5		0000	
	045	000	2	999	9	Henderson	089	4		0000	
	046	000	2	999	9	Hertford	091	6		0000	
	047	000	2	999	9	Hoke	093	6		0000	
	048	000	2	999	9	Hyde	095	6		0000	
	049	000	2			Iredell	097	4		0000	
				045	6	Statesville					64740
				999	9	Balance of county					99999
	050	000	2	999	9	Jackson	099	5		0000	
	051	226	1	999	9	Johnston	101	4		6640	
	052	000	2	999	9	Jones	103	6		0000	
	053	000	2			Lee	105	5		0000	
				043	6	Sanford					59280
				999	9	Balance of county					99999
	054	000	2			Lenoir	107	4		0000	
				028	5	Kinston					35920
				999	9	Balance of county					99999
	055	051	1	999	9	Lincoln	109	4		1520	
	056	000	2	999	9	McDowell	111	5		0000	
	057	000	2	999	9	Macon	113	6		0000	
	058	014	1	999	9	Madison	115	6		0480	
	059	000	2	999	9	Martin	117	5		0000	
	060	051	1			Mecklenburg	119	1		1520	
				009	2	Charlotte					12000
				033	6	Matthews					41960
				034	6	Mint Hill					43480
				999	9	Balance of county					99999
	061	000	2	999	9	Mitchell	121	6		0000	
	062	000	2	999	9	Montgomery	123	6		0000	
	063	000	2	999	9	Moore	125	4		0000	
	064	238	1			Nash	127	4		6895	
				041	5	Rocky Mount, part					57500
				999	9	Balance of county					99999
	065	305	1			New Hanover	129	3		9200	
				048	4	Wilmington					74440
				999	9	Balance of county					99999
	066	000	2	999	9	Northampton	131	6		0000	
	067	136	1			Onslow	133	3		3605	
				025	5	Jacksonville					34200
				999	9	Balance of county					99999
	068	226	1			Orange	135	4		6640	
				006	6	Carrboro					10620
				008	5	Chapel Hill, part					11800
				011	3	Durham, part					19000
				999	9	Balance of county					99999
	069	000	2	999	9	Pamlico	137	6		0000	
	070	000	2			Pasquotank	139	5		0000	
				013	6	Elizabeth City, part					20580
				999	9	Balance of county					99999
	071	000	2	999	9	Pender	141	5		0000	
	072	000	2	999	9	Perquimans	143	6		0000	
	073	000	2	999	9	Person	145	5		0000	
	074	117	1			Pitt	147	3		3150	
				020	5	Greenville					28080
				999	9	Balance of county					99999
	075	000	2	999	9	Polk	149	6		0000	
	076	116	1			Randolph	151	3		3120	
				002	6	Asheboro					02080
				024	4	High Point, part					31400

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
34						North Carolina	37				
	076					Randolph, con.		151	3	3120	
				999	9	Balance of county					99999
	077	000	2	999	9	Richmond		153	5	0000	
	078	000	2			Robeson		155	3	0000	
				032	6	Lumberton					39700
				999	9	Balance of county					99999
	079	000	2			Rockingham		157	4	0000	
				012	6	Eden					20080
				039	6	Reidsville					55900
				999	9	Balance of county					99999
	080	051	1			Rowan		159	3	1520	
				026	5	Kannapolis, part					35200
				042	6	Salisbury					58860
				999	9	Balance of county					99999
	081	000	2	999	9	Rutherford		161	4	0000	
	082	000	2	999	9	Sampson		163	5	0000	
	083	000	2			Scotland		165	5	0000	
				029	6	Laurinburg					37220
				999	9	Balance of county					99999
	084	000	2			Stanly		167	4	0000	
				001	6	Albemarle					00680
				999	9	Balance of county					99999
	085	116	1	999	9	Stokes		169	5	3120	
	086	000	2	999	9	Surry		171	4	0000	
	087	000	2	999	9	Swain		173	6	0000	
	088	000	2	999	9	Transylvania		175	5	0000	
	089	000	2	999	9	Tyrrell		177	6	0000	
	090	051	1			Union		179	4	1520	
				035	6	Monroe					43920
				999	9	Balance of county					99999
	091	000	2			Vance		181	5	0000	
				022	6	Henderson					30660
				999	9	Balance of county					99999
	092	226	1			Wake		183	2	6640	
				007	5	Cary					10740
				015	6	Garner					25480
				038	3	Raleigh					55000
				999	9	Balance of county					99999
	093	000	2	999	9	Warren		185	6	0000	
	094	000	2	999	9	Washington		187	6	0000	
	095	000	2			Watauga		189	5	0000	
				004	6	Boone					07080
				999	9	Balance of county					99999
	096	110	1			Wayne		191	3	2980	
				017	5	Goldsboro					26880
				999	9	Balance of county					99999
	097	000	2	999	9	Wilkes		193	4	0000	
	098	000	2			Wilson		195	4	0000	
				049	5	Wilson					74540
				999	9	Balance of county					99999
	099	116	1	999	9	Yadkin		197	5	3120	
	100	000	2	999	9	Yancey		199	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
35						North Dakota	38				
	001	000	2	999	9	Adams	001	6		0000	
	002	000	2	999	9	Barnes	003	6		0000	
	003	000	2	999	9	Benson	005	6		0000	
	004	000	2	999	9	Billings	007	6		0000	
	005	000	2	999	9	Bottineau	009	6		0000	
	006	000	2	999	9	Bowman	011	6		0000	
	007	000	2	999	9	Burke	013	6		0000	
	008	033	1			Burleigh	015	4		1010	
				001	5	Bismarck					07200
				999	9	Balance of county					99999
	009	090	1			Cass	017	3		2520	
				003	4	Fargo					25700
				008	6	West Fargo					84780
				999	9	Balance of county					99999
	010	000	2	999	9	Cavalier	019	6		0000	
	011	000	2	999	9	Dickey	021	6		0000	
	012	000	2	999	9	Divide	023	6		0000	
	013	000	2	999	9	Dunn	025	6		0000	
	014	000	2	999	9	Eddy	027	6		0000	
	015	000	2	999	9	Emmons	029	6		0000	
	016	000	2	999	9	Foster	031	6		0000	
	017	000	2	999	9	Golden Valley	033	6		0000	
	018	111	1			Grand Forks	035	4		2985	
				004	5	Grand Forks					32060
				999	9	Balance of county					99999
	019	000	2	999	9	Grant	037	6		0000	
	020	000	2	999	9	Griggs	039	6		0000	
	021	000	2	999	9	Hettinger	041	6		0000	
	022	000	2	999	9	Kidder	043	6		0000	
	023	000	2	999	9	La Moure	045	6		0000	
	024	000	2	999	9	Logan	047	6		0000	
	025	000	2	999	9	McHenry	049	6		0000	
	026	000	2	999	9	McIntosh	051	6		0000	
	027	000	2	999	9	McKenzie	053	6		0000	
	028	000	2	999	9	McLean	055	6		0000	
	029	000	2	999	9	Mercer	057	6		0000	
	030	033	1			Morton	059	6		1010	
				006	6	Mandan					49900
				999	9	Balance of county					99999
	031	000	2	999	9	Mountrail	061	6		0000	
	032	000	2	999	9	Nelson	063	6		0000	
	033	000	2	999	9	Oliver	065	6		0000	
	034	000	2	999	9	Pembina	067	6		0000	
	035	000	2	999	9	Pierce	069	6		0000	
	036	000	2	999	9	Ramsey	071	6		0000	
	037	000	2	999	9	Ransom	073	6		0000	
	038	000	2	999	9	Renville	075	6		0000	
	039	000	2	999	9	Richland	077	6		0000	
	040	000	2	999	9	Rolette	079	6		0000	
	041	000	2	999	9	Sargent	081	6		0000	
	042	000	2	999	9	Sheridan	083	6		0000	
	043	000	2	999	9	Sioux	085	6		0000	
	044	000	2	999	9	Slope	087	6		0000	
	045	000	2			Stark	089	6		0000	
				002	6	Dickinson					19620
				999	9	Balance of county					99999
	046	000	2	999	9	Steele	091	6		0000	
	047	000	2			Stutsman	093	6		0000	
				005	6	Jamestown					40580
				999	9	Balance of county					99999
	048	000	2	999	9	Towner	095	6		0000	
	049	000	2	999	9	Traill	097	6		0000	
	050	000	2	999	9	Walsh	099	6		0000	
	051	000	2			Ward	101	4		0000	
				007	5	Minot					53380
				999	9	Balance of county					99999
	052	000	2	999	9	Wells	103	6		0000	
	053	000	2			Williams	105	6		0000	
				009	6	Williston					86220
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
36						Ohio	39				
	001	000	2	999	9	Adams		001	5	0000	
	002	164	1			Allen		003	3	4320	
				072	5	Lima					43554
				999	9	Balance of county					99999
	003	000	2			Ashland		005	5	0000	
				004	6	Ashland					02568
				999	9	Balance of county					99999
	004	059	1			Ashtabula		007	4	1680	
				005	6	Ashtabula					02638
				035	6	Conneaut					18350
				999	9	Balance of county					99999
	005	000	2			Athens		009	4	0000	
				006	6	Athens					02736
				999	9	Balance of county					99999
	006	164	1			Auglaize		011	5	4320	
	007	300	1			Belmont		013	4	9000	
	008	057	1			Brown		015	5	1640	
	009	120	1			Butler		017	2	3200	
				050	5	Fairfield					25970
				063	4	Hamilton					33012
				088	5	Middletown, part					49840
				102	6	Oxford					59234
				117	6	Sharonville, part					71892
				999	9	Balance of county					99999
	010	045	1			Carroll		019	5	1320	
	011	000	2			Champaign		021	5	0000	
				134	6	Urbana					79072
				999	9	Balance of county					99999
	012	070	1			Clark		023	3	2000	
				122	4	Springfield					74118
				999	9	Balance of county					99999
	013	057	1			Clermont		025	3	1640	
	014	000	2			Clinton		027	5	0000	
				149	6	Wilmington					85792
				999	9	Balance of county					99999
	015	309	1			Columbiana		029	3	9320	
				045	6	East Liverpool					23730
				113	6	Salem					69834
				999	9	Balance of county					99999
	016	000	2			Coshocton		031	5	0000	
				036	6	Coshocton					18868
				999	9	Balance of county					99999
	017	174	1			Crawford		033	5	4800	
				024	6	Bucyrus					10030
				058	6	Galion					29162
				999	9	Balance of county					99999
	018	059	1			Cuyahoga		035	0	1680	
				009	6	Bay Village					04416
				010	6	Beachwood					04500
				012	6	Bedford					04878
				013	6	Bedford Heights					04920
				015	6	Berea					05690
				019	6	Brecksville					08364
				020	6	Broadview Heights					09064
				021	6	Brooklyn					09246
				022	6	Brook Park					09288
				032	1	Cleveland					16000
				033	4	Cleveland Heights					16014
				043	5	East Cleveland					23380
				048	4	Euclid					25704
				051	6	Fairview Park					26446
				059	5	Garfield Heights					29428
				069	4	Lakewood					41664
				075	6	Lyndhurst					45556
				077	5	Maple Heights					47306
				083	6	Mayfield Heights					48482
				087	6	Middleburg Heights					49644
				095	5	North Olmsted					56882
				097	6	North Royalton					57008
				104	4	Parma					61000
				105	6	Parma Heights					61028
				112	6	Rocky River					68056
				115	6	Seven Hills					71416
				116	5	Shaker Heights					71682

Vital Statistics Codes				FIPS Codes			
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	Place
36						Ohio	39
	018					Cuyahoga, con.	035 0 1680
				119	6	Solon	72928
				120	6	South Euclid	73264
				125	5	Strongsville	75098
				132	6	University Heights	78932
				140	6	Warrensville Heights	80990
				144	5	Westlake	83622
				999	9	Balance of county	99999
	019	000	2			Darke	037 4 0000
				061	6	Greenville	32340
				999	9	Balance of county	99999
	020	000	2			Defiance	039 5 0000
				039	6	Defiance	21308
				999	9	Balance of county	99999
	021	064	1			Delaware	041 4 1840
				040	6	Delaware	21434
				042	6	Dublin, part	22694
				143	5	Westerville, part	83342
				999	9	Balance of county	99999
	022	000	2			Erie	043 4 0000
				114	5	Sandusky	70380
				137	6	Vermilion, part	79716
				999	9	Balance of county	99999
	023	064	1			Fairfield	045 3 1840
				034	1	Columbus, part	18000
				070	5	Lancaster	41720
				111	5	Reynoldsburg, part	66390
				999	9	Balance of county	99999
	024	000	2			Fayette	047 5 0000
				141	6	Washington	81214
				999	9	Balance of county	99999
	025	064	1			Franklin	049 1 1840
				016	6	Bexley	06278
				034	1	Columbus, part	18000
				042	6	Dublin, part	22694
				057	5	Gahanna	29106
				062	6	Grove City	32592
				064	6	Hilliard	35476
				111	5	Reynoldsburg, part	66390
				133	5	Upper Arlington	79002
				143	5	Westerville, part	83342
				145	6	Whitehall	84742
				151	6	Worthington	86604
				999	9	Balance of county	99999
	026	282	1			Fulton	051 5 8400
	027	000	2			Gallia	053 5 0000
	028	059	1			Geauga	055 4 1680
	029	070	1			Greene	057 3 2000
				011	5	Beavercreek	04720
				049	5	Fairborn	25914
				152	6	Xenia	86772
				999	9	Balance of county	99999
	030	000	2			Guernsey	059 5 0000
				025	6	Cambridge	10996
				999	9	Balance of county	99999
	031	057	1			Hamilton	061 1 1640
				017	6	Blue Ash	07300
				030	2	Cincinnati	15000
				053	6	Forest Park	27706
				074	6	Loveland	45108
				094	6	North College Hill	56322
				100	6	Norwood	57386
				110	6	Reading	65732
				117	6	Sharonville, part	71892
				121	6	Springdale	74104
				999	9	Balance of county	99999
	032	000	2			Hancock	063 4 0000
				052	5	Findlay	27048
				054	6	Fostoria, part	28014
				999	9	Balance of county	99999
	033	000	2			Hardin	065 5 0000
	034	000	2			Harrison	067 6 0000
	035	000	2			Henry	069 5 0000
	036	000	2			Highland	071 5 0000

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
36						Ohio	39				
	037	000	2	999	9	Hocking		073	5	0000	
	038	000	2	999	9	Holmes		075	5	0000	
	039	000	2			Huron		077	4	0000	
				099	6	Norwalk					57302
				999	9	Balance of county					99999
	040	000	2	999	9	Jackson		079	5	0000	
	041	273	1			Jefferson		081	4	8080	
				123	6	Steubenville					74608
				999	9	Balance of county					99999
	042	000	2			Knox		083	5	0000	
				089	6	Mount Vernon					53102
				999	9	Balance of county					99999
	043	059	1			Lake		085	3	1680	
				044	6	Eastlake					23618
				085	5	Mentor					49056
				103	6	Painesville					59416
				146	6	Wickliffe					85036
				147	6	Willoughby					85484
				148	6	Willowick					85638
				999	9	Balance of county					99999
	044	128	1			Lawrence		087	4	3400	
				066	6	Ironton					37464
				999	9	Balance of county					99999
	045	064	1			Licking		089	3	1840	
				090	5	Newark					54040
				111	5	Reynoldsburg, part					66390
				999	9	Balance of county					99999
	046	000	2			Logan		091	5	0000	
				014	6	Bellefontaine					05130
				999	9	Balance of county					99999
	047	059	1			Lorain		093	2	1680	
				003	6	Amherst					01798
				007	6	Avon Lake					03464
				046	4	Elyria					25256
				073	4	Lorain					44856
				096	6	North Ridgeville					56966
				137	6	Vermilion, part					79716
				999	9	Balance of county					99999
	048	282	1			Lucas		095	2	8400	
				082	6	Maumee					48342
				101	6	Oregon					58730
				127	6	Sylvania					76022
				130	2	Toledo					77000
				999	9	Balance of county					99999
	049	064	1	999	9	Madison		097	5	1840	
	050	309	1			Mahoning		099	2	9320	
				002	6	Alliance, part					01420
				026	6	Campbell					11066
				126	6	Struthers					75126
				153	4	Youngstown, part					88000
				999	9	Balance of county					99999
	051	000	2			Marion		101	4	0000	
				079	5	Marion					47754
				999	9	Balance of county					99999
	052	059	1			Medina		103	3	1680	
				023	5	Brunswick					09680
				084	6	Medina					48790
				138	6	Wadsworth					80304
				999	9	Balance of county					99999
	053	000	2	999	9	Meigs		105	6	0000	
	054	000	2	999	9	Mercer		107	5	0000	
	055	070	1			Miami		109	4	2000	
				065	5	Huber Heights, part					36610
				107	6	Piqua					62848
				131	6	Troy					77588
				999	9	Balance of county					99999
	056	000	2	999	9	Monroe		111	6	0000	
	057	070	1			Montgomery		113	1	2000	
				028	6	Centerville					13190
				038	3	Dayton					21000
				047	6	Englewood					25396
				065	5	Huber Heights, part					36610
				068	4	Kettering					40040
				086	6	Miamisburg					49434

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
36						Ohio	39				
	057					Montgomery, con.		113	1	2000	
				135	6	Vandalia					79492
				142	6	West Carrollton City					83090
				999	9	Balance of county					99999
	058	000	2	999	9	Morgan		115	6	0000	
	059	000	2	999	9	Morrow		117	5	0000	
	060	000	2			Muskingum		119	4	0000	
				154	5	Zanesville					88084
				999	9	Balance of county					99999
	061	000	2	999	9	Noble		121	6	0000	
	062	000	2	999	9	Ottawa		123	5	0000	
	063	000	2	999	9	Paulding		125	6	0000	
	064	000	2	999	9	Perry		127	5	0000	
	065	064	1			Pickaway		129	5	1840	
				031	6	Circleville					15070
				999	9	Balance of county					99999
	066	000	2	999	9	Pike		131	6	0000	
	067	002	1			Portage		133	3	0080	
				067	5	Kent					39872
				109	6	Ravenna					65592
				999	9	Balance of county					99999
	068	000	2	999	9	Preble		135	5	0000	
	069	000	2	999	9	Putnam		137	5	0000	
	070	174	1			Richland		139	3	4800	
				076	4	Mansfield					47138
				999	9	Balance of county					99999
	071	000	2			Ross		141	4	0000	
				029	6	Chillicothe					14184
				999	9	Balance of county					99999
	072	000	2			Sandusky		143	4	0000	
				056	6	Fremont					28826
				999	9	Balance of county					99999
	073	000	2			Scioto		145	4	0000	
				108	6	Portsmouth					64304
				999	9	Balance of county					99999
	074	000	2			Seneca		147	4	0000	
				054	6	Fostoria, part					28014
				129	6	Tiffin					76778
				999	9	Balance of county					99999
	075	000	2			Shelby		149	5	0000	
				118	6	Sidney					72424
				999	9	Balance of county					99999
	076	045	1			Stark		151	2	1320	
				002	6	Alliance, part					01420
				027	4	Canton					12000
				081	5	Massillon					48244
				093	6	North Canton					56294
				999	9	Balance of county					99999
	077	002	1			Summit		153	1	0080	
				001	3	Akron					01000
				008	5	Barberton					03828
				037	5	Cuyahoga Falls					19778
				098	6	Norton, part					57260
				124	5	Stow					74944
				128	6	Tallmadge					76106
				999	9	Balance of county					99999
	078	309	1			Trumbull		155	3	9320	
				060	6	Girard					30198
				092	6	Niles					55916
				139	4	Warren					80892
				153	4	Youngstown, part					88000
				999	9	Balance of county					99999
	079	000	2			Tuscarawas		157	4	0000	
				041	6	Dover					22456
				091	6	New Philadelphia					55216
				999	9	Balance of county					99999
	080	000	2			Union		159	5	0000	
				042	6	Dublin, part					22694
				999	9	Balance of county					99999
	081	000	2			Van Wert		161	5	0000	
				136	6	Van Wert					79562
				999	9	Balance of county					99999
	082	000	2	999	9	Vinton		163	6	0000	
	083	057	1			Warren		165	3	1640	
				055	6	Franklin					28476

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St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
36						Ohio	39				
	083					Warren, con.		165	3	1640	
				071	6	Lebanon					42364
				080	6	Mason					48188
				088	5	Middletown, part					49840
				999	9	Balance of county					99999
	084	211	1			Washington		167	4	6020	
				078	6	Marietta					47628
				999	9	Balance of county					99999
	085	000	2			Wayne		169	3	0000	
				098	6	Norton, part					57260
				150	6	Wooster					86548
				999	9	Balance of county					99999
	086	000	2			Williams		171	5	0000	
	087	282	1			Wood		173	3	8400	
				018	5	Bowling Green					07972
				054	6	Fostoria, part					28014
				106	6	Perrysburg					62148
				999	9	Balance of county					99999
	088	000	2			Wyandot		175	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
37						Oklahoma	40				
	001	000	2	999	9	Adair		001	6	0000	
	002	000	2	999	9	Alfalfa		003	6	0000	
	003	000	2	999	9	Atoka		005	6	0000	
	004	000	2	999	9	Beaver		007	6	0000	
	005	000	2			Beckham		009	6	0000	
				013	6	Elk City					23500
				999	9	Balance of county					99999
	006	000	2	999	9	Blaine		011	6	0000	
	007	000	2			Bryan		013	5	0000	
				011	6	Durant					22050
				999	9	Balance of county					99999
	008	000	2	999	9	Caddo		015	5	0000	
	009	204	1			Canadian		017	4	5880	
				014	6	El Reno					23700
				023	6	Mustang					50100
				025	2	Oklahoma City, part					55000
				038	6	Yukon					82950
				999	9	Balance of county					99999
	010	000	2			Carter		019	5	0000	
				003	6	Ardmore					02600
				999	9	Balance of county					99999
	011	000	2			Cherokee		021	5	0000	
				033	6	Tahlequah					72100
				999	9	Balance of county					99999
	012	000	2	999	9	Choctaw		023	6	0000	
	013	000	2	999	9	Cimarron		025	6	0000	
	014	204	1			Cleveland		027	3	5880	
				021	5	Moore					49200
				024	4	Norman					52500
				025	2	Oklahoma City, part					55000
				999	9	Balance of county					99999
	015	000	2	999	9	Coal		029	6	0000	
	016	161	1			Comanche		031	3	4200	
				017	4	Lawton					41850
				999	9	Balance of county					99999
	017	000	2	999	9	Cotton		033	6	0000	
	018	000	2	999	9	Craig		035	6	0000	
	019	286	1			Creek		037	4	8560	
				030	6	Sapulpa					65400
				999	9	Balance of county					99999
	020	000	2			Custer		039	5	0000	
				036	6	Weatherford					79450
				999	9	Balance of county					99999
	021	000	2	999	9	Delaware		041	5	0000	
	022	000	2	999	9	Dewey		043	6	0000	
	023	000	2	999	9	Ellis		045	6	0000	
	024	086	1			Garfield		047	4	2340	
				015	5	Enid					23950
				999	9	Balance of county					99999
	025	000	2	999	9	Garvin		049	5	0000	
	026	000	2			Grady		051	5	0000	
				007	6	Chickasha					13950
				999	9	Balance of county					99999
	027	000	2	999	9	Grant		053	6	0000	
	028	000	2	999	9	Greer		055	6	0000	
	029	000	2	999	9	Harmon		057	6	0000	
	030	000	2	999	9	Harper		059	6	0000	
	031	000	2	999	9	Haskell		061	6	0000	
	032	000	2	999	9	Hughes		063	6	0000	
	033	000	2			Jackson		065	5	0000	
				002	6	Altus					01700
				999	9	Balance of county					99999
	034	000	2	999	9	Jefferson		067	6	0000	
	035	000	2	999	9	Johnston		069	6	0000	
	036	000	2			Kay		071	5	0000	
				028	5	Ponca City					59850
				999	9	Balance of county					99999
	037	000	2	999	9	Kingfisher		073	6	0000	
	038	000	2	999	9	Kiowa		075	6	0000	
	039	000	2	999	9	Latimer		077	6	0000	
	040	000	2	999	9	Le Flore		079	5	0000	
	041	000	2	999	9	Lincoln		081	5	0000	
	042	204	1			Logan		083	5	5880	
				016	6	Guthrie					31700

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
37						Oklahoma	40				
	042					Logan, con.		083	5	5880	
				999	9	Balance of county					99999
	043	000	2	999	9	Love		085	6	0000	
	044	204	1			McClain		087	6	5880	
				025	2	Oklahoma City, part					55000
				999	9	Balance of county					99999
	045	000	2	999	9	McCurtain		089	5	0000	
	046	000	2	999	9	McIntosh		091	6	0000	
	047	000	2	999	9	Major		093	6	0000	
	048	000	2	999	9	Marshall		095	6	0000	
	049	000	2	999	9	Mayes		097	5	0000	
	050	000	2	999	9	Murray		099	6	0000	
	051	000	2			Muskogee		101	4	0000	
				022	5	Muskogee					50050
				999	9	Balance of county					99999
	052	000	2	999	9	Noble		103	6	0000	
	053	000	2	999	9	Nowata		105	6	0000	
	054	000	2	999	9	Okfuskee		107	6	0000	
	055	204	1			Oklahoma		109	1	5880	
				005	6	Bethany					05700
				009	6	Del City					19900
				012	4	Edmond					23200
				020	4	Midwest City					48350
				025	2	Oklahoma City, part					55000
				034	6	The Village					73250
				999	9	Balance of county					99999
	056	000	2			Okmulgee		111	5	0000	
				026	6	Okmulgee					55150
				999	9	Balance of county					99999
	057	286	1			Osage		113	5	8560	
				004	5	Bartlesville, part					04450
				029	6	Sand Springs, part					65300
				035	2	Tulsa, part					75000
				999	9	Balance of county					99999
	058	000	2			Ottawa		115	5	0000	
				019	6	Miami					48000
				999	9	Balance of county					99999
	059	000	2	999	9	Pawnee		117	6	0000	
	060	000	2			Payne		119	4	0000	
				032	5	Stillwater					70300
				999	9	Balance of county					99999
	061	000	2			Pittsburg		121	5	0000	
				018	6	McAlester					44800
				999	9	Balance of county					99999
	062	000	2			Pontotoc		123	5	0000	
				001	6	Ada					00200
				999	9	Balance of county					99999
	063	204	1			Pottawatomie		125	4	5880	
				025	2	Oklahoma City, part					55000
				031	5	Shawnee					66800
				999	9	Balance of county					99999
	064	000	2	999	9	Pushmataha		127	6	0000	
	065	000	2	999	9	Roger Mills		129	6	0000	
	066	286	1			Rogers		131	4	8560	
				008	6	Claremore					14700
				999	9	Balance of county					99999
	067	000	2	999	9	Seminole		133	5	0000	
	068	100	1	999	9	Sequoyah		135	5	2720	
	069	000	2			Stephens		137	5	0000	
				010	6	Duncan					21900
				999	9	Balance of county					99999
	070	000	2	999	9	Texas		139	6	0000	
	071	000	2	999	9	Tillman		141	6	0000	
	072	286	1			Tulsa		143	1	8560	
				006	4	Broken Arrow, part					09050
				027	6	Owasso					56650
				029	6	Sand Springs, part					65300
				035	2	Tulsa, part					75000
				035	2	Tulsa, part					75000
				999	9	Balance of county					99999
	073	286	1			Wagoner		145	5	8560	
				006	4	Broken Arrow, part					09050
				999	9	Balance of county					99999
	074	000	2			Washington		147	5	0000	
				004	5	Bartlesville, part					04450

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St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
37						Oklahoma	40				
	074					Washington, con.		147	5	0000	
				999	9	Balance of county					99999
	075	000	2	999	9	Washita		149	6	0000	
	076	000	2	999	9	Woods		151	6	0000	
	077	000	2			Woodward		153	6	0000	
				037	6	Woodward					82150
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
38						Oregon	41				
	001	000	2	999	9	Baker		001	6	0000	
	002	000	2			Benton		003	4	0000	
				001	5	Albany, part					01000
				008	5	Corvallis					15800
				999	9	Balance of county					99999
	003	220	1			Clackamas		005	2	6440	
				011	6	Gladstone					29000
				019	5	Lake Oswego, part					40550
				023	6	Milwaukie, part					48650
				025	6	Oregon City					55200
				027	2	Portland, part					59000
				032	6	Tualatin, part					74950
				033	6	West Linn					80150
				999	9	Balance of county					99999
	004	000	2			Clatsop		007	5	0000	
				003	6	Astoria					03150
				999	9	Balance of county					99999
	005	220	1	999	9	Columbia		009	5	6440	
	006	000	2			Coos		011	4	0000	
				007	6	Coos Bay					15250
				999	9	Balance of county					99999
	007	000	2	999	9	Crook		013	6	0000	
	008	000	2	999	9	Curry		015	6	0000	
	009	000	2			Deschutes		017	4	0000	
				005	6	Bend					05800
				999	9	Balance of county					99999
	010	000	2			Douglas		019	4	0000	
				028	6	Roseburg					63650
				999	9	Balance of county					99999
	011	000	2	999	9	Gilliam		021	6	0000	
	012	000	2	999	9	Grant		023	6	0000	
	013	000	2	999	9	Harney		025	6	0000	
	014	000	2	999	9	Hood River		027	6	0000	
	015	176	1			Jackson		029	3	4890	
				002	6	Ashland					03050
				022	5	Medford					47000
				999	9	Balance of county					99999
	016	000	2	999	9	Jefferson		031	6	0000	
	017	000	2			Josephine		033	4	0000	
				012	6	Grants Pass					30550
				999	9	Balance of county					99999
	018	000	2			Klamath		035	4	0000	
				017	6	Klamath Falls					39700
				999	9	Balance of county					99999
	019	000	2	999	9	Lake		037	6	0000	
	020	088	1			Lane		039	2	2400	
				009	3	Eugene					23850
				030	5	Springfield					69600
				999	9	Balance of county					99999
	021	000	2	999	9	Lincoln		041	5	0000	
	022	000	2			Linn		043	4	0000	
				001	5	Albany, part					01000
				020	6	Lebanon					41650
				999	9	Balance of county					99999
	023	000	2	999	9	Malheur		045	5	0000	
	024	244	1			Marion		047	3	7080	
				016	6	Keizer					38500
				029	3	Salem, part					64900
				034	6	Woodburn					83750
				999	9	Balance of county					99999
	025	000	2	999	9	Morrow		049	6	0000	
	026	220	1			Multnomah		051	1	6440	
				013	4	Gresham					31250
				019	5	Lake Oswego, part					40550
				023	6	Milwaukie, part					48650
				027	2	Portland, part					59000
				999	9	Balance of county					99999
	027	244	1			Polk		053	5	7080	
				029	3	Salem, part					64900
				999	9	Balance of county					99999
	028	000	2	999	9	Sherman		055	6	0000	
	029	000	2	999	9	Tillamook		057	6	0000	
	030	000	2			Umatilla		059	4	0000	
				014	6	Hermiston					33700

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
38						Oregon	41				
	030					Umatilla, con.		059	4	0000	
				026	6	Pendleton					57150
				999	9	Balance of county					99999
	031	000	2			Union		061	6	0000	
				018	6	La Grande					40350
				999	9	Balance of county					99999
	032	000	2			Wallowa		063	6	0000	
	033	000	2			Wasco		065	6	0000	
				006	6	City of the Dalles					13425
				999	9	Balance of county					99999
	034	220	1			Washington		067	2	6440	
				004	4	Beaverton					05350
				010	6	Forest Grove					26200
				015	5	Hillsboro					34100
				019	5	Lake Oswego, part					40550
				027	2	Portland, part					59000
				031	5	Tigard					73650
				032	6	Tualatin, part					74950
				999	9	Balance of county					99999
	035	000	2			Wheeler		069	6	0000	
	036	220	1			Yamhill		071	4	6440	
				021	6	McMinnville					45000
				024	6	Newberg					52100
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
39						Pennsylvania	42				
	001	000	2	999	9	Adams		001	4	0000	
	002	217	1			Allegheny		003	0	6280	
				006	6	Baldwin borough					03928
				010	5	Bethel Park borough					06064
				014	6	Brentwood borough					08416
				036	6	Franklin Park borough					27552
				041	6	Harrison Township					32868
				065	5	McCandless Township					45904
				066	5	McKeesport					46256
				074	5	Mount Lebanon					51704
				076	6	Munhall borough					52320
				077	5	Municipality of Monroeville borough					52330
				088	6	North Versailles					55496
				091	4	Penn Hills					59040
				094	2	Pittsburgh					61000
				095	5	Plum borough					61536
				102	5	Ross Township					66356
				105	5	Shaler Township					69596
				107	6	South Park Township					72403
				118	6	Swissvale borough					75816
				129	6	Upper St. Clair					79312
				137	6	West Mifflin borough					83512
				139	6	Whitehall borough					84512
				144	6	Wilkesburg borough					85188
				999	9	Balance of county					99999
	003	000	2	999	9	Armstrong		005	4	0000	
	004	217	1			Beaver		007	3	6280	
				002	6	Aliquippa					00820
				007	6	Beaver Falls					04792
				999	9	Balance of county					99999
	005	000	2	999	9	Bedford		009	5	0000	
	006	228	1			Berks		011	2	6680	
				075	6	Muhlenberg township					52200
				100	4	Reading					63624
				113	6	Spring township					72824
				999	9	Balance of county					99999
	007	008	1			Blair		013	3	0280	
				004	4	Altoona					02184
				999	9	Balance of county					99999
	008	000	2	999	9	Bradford		015	4	0000	
	009	214	1			Bucks		017	1	6160	
				008	4	Bensalem township					05616
				015	6	Bristol borough					08760
				016	4	Bristol township					08768
				035	5	Falls township					25112
				059	5	Lower Makefield township					44968
				064	6	Lower Southampton township					45112
				071	5	Middletown township					49120
				084	6	Newtown township					54192
				086	5	Northampton township					54688
				130	6	Upper Southampton township					79296
				132	5	Warminster township					80952
				999	9	Balance of county					99999
	010	217	1			Butler		019	3	6280	
				017	6	Butler					10464
				999	9	Balance of county					99999
	011	141	1			Cambria		021	3	3680	
				050	5	Johnstown					38288
				999	9	Balance of county					99999
	012	000	2	999	9	Cameron		023	6	0000	
	013	007	1	999	9	Carbon		025	4	0240	
	014	272	1			Centre		027	3	8050	
				114	5	State College borough					73808
				999	9	Balance of county					99999
	015	214	1			Chester		029	2	6160	
				018	6	Caln township					10824
				024	6	Coatesville					14712
				028	6	East Goshen township					21192
				093	6	Phoenixville borough					60120
				120	5	Tredyffrin township					77344
				131	6	Uwchlan township					79480
				135	6	West Chester borough					82704
				136	6	West Goshen township					83080
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
39						Pennsylvania	42				
	016	000	2	999	9	Clarion		031	5	0000	
	017	000	2	999	9	Clearfield		033	4	0000	
	018	000	2	999	9	Clinton		035	5	0000	
	019	259	1			Columbia		037	4	7560	
				009	6	Berwick borough					05888
				013	6	Bloomsburg					07128
				999	9	Balance of county					99999
	020	000	2			Crawford		039	4	0000	
				069	6	Meadville					48360
				999	9	Balance of county					99999
	021	121	1			Cumberland		041	3	3240	
				020	6	Carlisle borough					11272
				031	6	East Pennsboro township					21680
				038	6	Hampden township					32296
				057	6	Lower Allen township					44832
				122	6	Upper Allen township					78736
				999	9	Balance of county					99999
	022	121	1			Dauphin		043	3	3240	
				040	4	Harrisburg					32800
				062	5	Lower Paxton township					45056
				116	6	Susquehanna township					75528
				117	6	Swatara township					75672
				999	9	Balance of county					99999
	023	214	1			Delaware		045	1	6160	
				005	6	Aston township					03336
				023	5	Chester					13208
				026	6	Darby borough					18152
				043	5	Haverford township					33144
				055	6	Lansdowne borough					41440
				068	6	Marple township					47616
				070	6	Middletown township					49136
				080	6	Nether Providence Township					53112
				083	6	Newtown township					54224
				099	5	Radnor Township					63268
				101	5	Ridley township					64800
				110	6	Springfield					73040
				123	6	Upper Chichester township					78776
				124	4	Upper Darby township					79000
				146	6	Yeadon borough					86968
				999	9	Balance of county					99999
	024	000	2			Elk		047	5	0000	
	025	087	1			Erie		049	2	2360	
				034	3	Erie					24000
				072	5	Millcreek township					49600
				999	9	Balance of county					99999
	026	217	1			Fayette		051	3	6280	
				121	6	Uniontown					78528
				999	9	Balance of county					99999
	027	000	2			Forest		053	6	0000	
	028	000	2			Franklin		055	3	0000	
				021	6	Chambersburg borough					12536
				999	9	Balance of county					99999
	029	000	2			Fulton		057	6	0000	
	030	000	2			Greene		059	5	0000	
	031	000	2			Huntingdon		061	5	0000	
	032	000	2			Indiana		063	4	0000	
				048	6	Indiana borough					36816
				999	9	Balance of county					99999
	033	000	2			Jefferson		065	5	0000	
	034	000	2			Juniata		067	6	0000	
	035	259	1			Lackawanna		069	3	7560	
				019	6	Carbondale					11232
				027	6	Dunmore borough					20352
				104	4	Scranton					69000
				999	9	Balance of county					99999
	036	155	1			Lancaster		071	2	4000	
				025	6	Columbia borough					15384
				033	6	Ephrata borough					23832
				052	4	Lancaster					41216
				053	6	Lancaster township					41224
				067	5	Manheim township					46896
				999	9	Balance of county					99999
	037	000	2			Lawrence		073	4	0000	
				081	5	New Castle					53368

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
39						Pennsylvania	42				
	037					Lawrence, con.		073	4	0000	
				999	9	Balance of county					99999
	038	121	1			Lebanon		075	3	3240	
				056	6	Lebanon					42168
				999	9	Balance of county					99999
	039	007	1			Lehigh		077	2	0240	
				003	3	Allentown					02000
				011	4	Bethlehem, part					06088
				032	6	Emmaus borough					23584
				103	6	Salisbury township					67576
				108	6	South Whitehall township					72632
				140	6	Whitehall township					84528
				999	9	Balance of county					99999
	040	259	1			Luzerne		079	2	7560	
				044	6	Hazleton					33408
				051	6	Kingston borough					39784
				079	6	Nanticoke					52584
				143	5	Wilkes-Barre					85152
				999	9	Balance of county					99999
	041	303	1			Lycoming		081	3	9140	
				145	5	Williamsport					85312
				999	9	Balance of county					99999
	042	000	2			McKean		083	5	0000	
	043	261	1			Mercer		085	3	7610	
				046	6	Hermitage					34064
				106	6	Sharon					69720
				999	9	Balance of county					99999
	044	000	2			Mifflin		087	5	0000	
	045	000	2			Monroe		089	4	0000	
	046	214	1			Montgomery		091	1	6160	
				001	4	Abington township					00156
				022	5	Cheltenham township					12968
				029	6	East Norriton					21608
				042	6	Hatfield township					33120
				047	6	Horsham township					35808
				054	6	Lansdale borough					41432
				060	4	Lower Merion township					44976
				061	6	Lower Moreland township					45008
				063	6	Lower Providence township					45080
				073	6	Montgomery township					50640
				085	5	Norristown borough					54656
				096	6	Plymouth township					61664
				097	6	Pottstown borough					62416
				111	6	Springfield township					73088
				119	6	Towamencin township					77152
				125	6	Upper Dublin township					79008
				126	6	Upper Gwynedd township					79056
				127	5	Upper Merion township					79136
				128	5	Upper Moreland township					79176
				138	6	West Norriton					83704
				141	6	Whitemarsh township					84624
				142	6	Whitpain township					84888
				999	9	Balance of county					99999
	047	000	2			Montour		093	6	0000	
	048	007	1			Northampton		095	3	0240	
				011	4	Bethlehem, part					06088
				012	6	Bethlehem township					06096
				030	5	Easton					21648
				090	6	Palmer township					57672
				999	9	Balance of county					99999
	049	000	2			Northumberland		097	4	0000	
				115	6	Sunbury					75304
				999	9	Balance of county					99999
	050	121	1			Perry		099	5	3240	
	051	214	1		0	Philadelphia, coext. with Philadelphia c		101	0	6160	60000
	052	199	1		9	Pike		103	5	5660	
	053	000	2		9	Potter		105	6	0000	
	054	000	2			Schuylkill		107	3	0000	
				098	6	Pottsville					62432
				999	9	Balance of county					99999
	055	000	2		9	Snyder		109	5	0000	
	056	141	1		9	Somerset		111	4	3680	
	057	000	2		9	Sullivan		113	6	0000	
	058	000	2		9	Susquehanna		115	5	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
39						Pennsylvania	42				
	059	000	2	999	9	Tioga		117	5	0000	
	060	000	2	999	9	Union		119	5	0000	
	061	000	2			Venango		121	4	0000	
				089	6	Oil City					56456
				999	9	Balance of county					99999
	062	000	2			Warren		123	5	0000	
				133	6	Warren					81000
				999	9	Balance of county					99999
	063	217	1			Washington		125	3	6280	
				134	6	Washington					81328
				999	9	Balance of county					99999
	064	000	2	999	9	Wayne		127	5	0000	
	065	217	1			Westmoreland		129	2	6280	
				037	6	Greensburg					31200
				045	5	Hempfield township					33792
				049	6	Jeannette					37784
				058	6	Lower Burrell					44864
				078	6	Municipality of Murrysville borough					52332
				082	6	New Kensington					53736
				087	5	North Huntingdon township					55128
				999	9	Balance of county					99999
	066	259	1	999	9	Wyoming		131	5	7560	
	067	308	1			York		133	2	9280	
				039	6	Hanover borough					32448
				109	6	Springettsbury township					72992
				112	6	Spring Garden township					73168
				147	5	York					87048
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
40						Rhode Island	44				
	001	221	1			Bristol		001	5	6483	
				001	6	Barrington					04960
				002	6	Bristol					09460
				015	6	Warren town					73760
				999	9	Balance of county					99999
	002	221	1			Kent		003	3	6483	
				004	5	Coventry town					18640
				016	4	Warwick					74300
				999	9	Balance of county					99999
	003	000	2			Newport		005	4	0000	
				009	6	Middletown town					45460
				011	5	Newport					49960
				999	9	Balance of county					99999
	004	221	1			Providence		007	1	6483	
				003	6	Central Falls					14140
				005	4	Cranston					19180
				006	5	Cumberland town					20080
				007	4	East Providence					22960
				008	5	Johnston town					37720
				012	5	North Providence					51940
				013	4	Pawtucket					54640
				014	3	Providence					59000
				017	5	Woonsocket					80780
				999	9	Balance of county					99999
	005	221	1			Washington		009	3	6483	
				010	6	Narragansett town					48340
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
41						South Carolina	45				
	001	000	2	999	9	Abbeville		001	6	0000	
	002	018	1			Aiken		003	3	0600	
				001	6	Aiken					00550
				022	6	North Augusta, part					50695
				999	9	Balance of county					99999
	003	000	2	999	9	Allendale		005	6	0000	
	004	118	1			Anderson		007	3	3160	
				002	5	Anderson					01360
				006	6	Clemson, part					14950
				999	9	Balance of county					99999
	005	000	2	999	9	Bamberg		009	6	0000	
	006	000	2	999	9	Barnwell		011	6	0000	
	007	000	2			Beaufort		013	4	0000	
				016	6	Hilton Head Island					34045
				999	9	Balance of county					99999
	008	049	1			Berkeley		015	3	1440	
				011	6	Goose Creek					29815
				015	6	Hanahan					32065
				023	4	North Charleston, part					50875
				028	6	Summerville, part					70270
				999	9	Balance of county					99999
	009	000	2	999	9	Calhoun		017	6	0000	
	010	049	1			Charleston		019	2	1440	
				005	4	Charleston					13330
				019	5	Mount Pleasant					48535
				023	4	North Charleston, part					50875
				028	6	Summerville, part					70270
				999	9	Balance of county					99999
	011	118	1			Cherokee		021	5	3160	
				010	6	Gaffney					28060
				999	9	Balance of county					99999
	012	000	2	999	9	Chester		023	5	0000	
	013	000	2	999	9	Chesterfield		025	5	0000	
	014	000	2	999	9	Clarendon		027	5	0000	
	015	000	2	999	9	Colleton		029	5	0000	
	016	000	2	999	9	Darlington		031	4	0000	
	017	000	2	999	9	Dillon		033	5	0000	
	018	049	1			Dorchester		035	4	1440	
				023	4	North Charleston, part					50875
				028	6	Summerville, part					70270
				999	9	Balance of county					99999
	019	018	1			Edgefield		037	6	0600	
				022	6	North Augusta, part					50695
				999	9	Balance of county					99999
	020	000	2	999	9	Fairfield		039	6	0000	
	021	095	1			Florence		041	3	2655	
				009	5	Florence					25810
				999	9	Balance of county					99999
	022	000	2	999	9	Georgetown		043	5	0000	
	023	118	1			Greenville		045	2	3160	
				012	4	Greenville					30850
				014	6	Greer, part					30985
				018	6	Mauldin					45115
				026	6	Simpsonville					66580
				999	9	Balance of county					99999
	024	000	2			Greenwood		047	4	0000	
				013	6	Greenwood					30895
				999	9	Balance of county					99999
	025	000	2	999	9	Hampton		049	6	0000	
	026	190	1			Horry		051	3	5330	
				020	6	Myrtle Beach					49075
				999	9	Balance of county					99999
	027	000	2	999	9	Jasper		053	6	0000	
	028	000	2	999	9	Kershaw		055	5	0000	
	029	000	2	999	9	Lancaster		057	4	0000	
	030	000	2	999	9	Laurens		059	4	0000	
	031	000	2	999	9	Lee		061	6	0000	
	032	062	1			Lexington		063	3	1760	
				004	6	Cayce					12655
				017	6	Irmo, part					35890
				030	6	West Columbia					75850
				999	9	Balance of county					99999
	033	000	2	999	9	McCormick		065	6	0000	
	034	000	2	999	9	Marion		067	5	0000	

Vital Statistics Geographic Code Outline For The United States
Effective With 1998 Data.

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
41						South Carolina	45				
	035	000	2			Marlboro		069	5	0000	
				003	6	Bennettsville					05680
				999	9	Balance of county					99999
	036	000	2			Newberry		071	5	0000	
				021	6	Newberry					49570
				999	9	Balance of county					99999
	037	000	2			Oconee		073	4	0000	
	038	000	2			Orangeburg		075	4	0000	
				024	6	Orangeburg					53080
				999	9	Balance of county					99999
	039	118	1			Pickens		077	4	3160	
				006	6	Clemson, part					14950
				008	6	Easley					21985
				999	9	Balance of county					99999
	040	062	1			Richland		079	2	1760	
				007	4	Columbia					16000
				017	6	Irmo, part					35890
				999	9	Balance of county					99999
	041	000	2			Saluda		081	6	0000	
	042	118	1			Spartanburg		083	3	3160	
				014	6	Greer, part					30985
				027	5	Spartanburg					68290
				999	9	Balance of county					99999
	043	275	1			Sumter		085	3	8140	
				029	5	Sumter					70405
				999	9	Balance of county					99999
	044	000	2			Union		087	5	0000	
	045	000	2			Williamsburg		089	5	0000	
	046	051	1			York		091	3	1520	
				025	5	Rock Hill					61405
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
42						South Dakota	46				
	001	000	2	999	9	Aurora		003	6	0000	
	002	000	2			Beadle		005	6	0000	
				003	6	Huron					31060
				999	9	Balance of county					99999
	003	000	2	999	9	Bennett		007	6	0000	
	004	000	2	999	9	Bon Homme		009	6	0000	
	005	000	2			Brookings		011	5	0000	
				002	6	Brookings					07580
				999	9	Balance of county					99999
	006	000	2			Brown		013	5	0000	
				001	6	Aberdeen					00100
				999	9	Balance of county					99999
	007	000	2	999	9	Brule		015	6	0000	
	008	000	2	999	9	Buffalo		017	6	0000	
	009	000	2	999	9	Butte		019	6	0000	
	010	000	2	999	9	Campbell		021	6	0000	
	011	000	2	999	9	Charles Mix		023	6	0000	
	012	000	2	999	9	Clark		025	6	0000	
	013	000	2			Clay		027	6	0000	
				008	6	Vermillion					66700
				999	9	Balance of county					99999
	014	000	2			Codington		029	6	0000	
				009	6	Watertown					69300
				999	9	Balance of county					99999
	015	000	2	999	9	Corson		031	6	0000	
	016	000	2	999	9	Custer		033	6	0000	
	017	000	2			Davison		035	6	0000	
				004	6	Mitchell					43100
				999	9	Balance of county					99999
	018	000	2	999	9	Day		037	6	0000	
	019	000	2	999	9	Deuel		039	6	0000	
	020	000	2	999	9	Dewey		041	6	0000	
	021	000	2	999	9	Douglas		043	6	0000	
	022	000	2	999	9	Edmunds		045	6	0000	
	023	000	2	999	9	Fall River		047	6	0000	
	024	000	2	999	9	Faulk		049	6	0000	
	025	000	2	999	9	Grant		051	6	0000	
	026	000	2	999	9	Gregory		053	6	0000	
	027	000	2	999	9	Haakon		055	6	0000	
	028	000	2	999	9	Hamlin		057	6	0000	
	029	000	2	999	9	Hand		059	6	0000	
	030	000	2	999	9	Hanson		061	6	0000	
	031	000	2	999	9	Harding		063	6	0000	
	032	000	2			Hughes		065	6	0000	
				005	6	Pierre					49600
				999	9	Balance of county					99999
	033	000	2	999	9	Hutchinson		067	6	0000	
	034	000	2	999	9	Hyde		069	6	0000	
	035	000	2	999	9	Jackson		071	6	0000	
	036	000	2	999	9	Jerauld		073	6	0000	
	037	000	2	999	9	Jones		075	6	0000	
	038	000	2	999	9	Kingsbury		077	6	0000	
	039	000	2	999	9	Lake		079	6	0000	
	040	000	2	999	9	Lawrence		081	6	0000	
	041	266	1			Lincoln		083	6	7760	
				007	3	Sioux Falls, part					59020
				999	9	Balance of county					99999
	042	000	2	999	9	Lyman		085	6	0000	
	043	000	2	999	9	McCook		087	6	0000	
	044	000	2	999	9	McPherson		089	6	0000	
	045	000	2	999	9	Marshall		091	6	0000	
	046	000	2	999	9	Meade		093	6	0000	
	047	000	2	999	9	Mellette		095	6	0000	
	048	000	2	999	9	Miner		097	6	0000	
	049	266	1			Minnehaha		099	3	7760	
				007	3	Sioux Falls, part					59020
				999	9	Balance of county					99999
	050	000	2	999	9	Moody		101	6	0000	
	051	227	1			Pennington		103	4	6660	
				006	4	Rapid City					52980
				999	9	Balance of county					99999
	052	000	2	999	9	Perkins		105	6	0000	
	053	000	2	999	9	Potter		107	6	0000	
	054	000	2	999	9	Roberts		109	6	0000	

Vital Statistics Geographic Code Outline For The United States
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Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
42						South Dakota	46				
	055	000	2	999	9	Sanborn		111	6	0000	
	056	000	2	999	9	Shannon		113	6	0000	
	057	000	2	999	9	Spink		115	6	0000	
	058	000	2	999	9	Stanley		117	6	0000	
	059	000	2	999	9	Sully		119	6	0000	
	060	000	2	999	9	Todd		121	6	0000	
	061	000	2	999	9	Tripp		123	6	0000	
	062	000	2	999	9	Turner		125	6	0000	
	063	000	2	999	9	Union		127	6	0000	
	064	000	2	999	9	Walworth		129	6	0000	
	065	000	2			Yankton		135	6	0000	
				010	6	Yankton					73060
				999	9	Balance of county					99999
	066	000	2	999	9	Ziebach		137	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
43						Tennessee	47				
	001	148	1			Anderson		001	4	3840	
				035	5	Oak Ridge, part					55120
				999	9	Balance of county					99999
	002	000	2			Bedford		003	5	0000	
				037	6	Shelbyville					67760
				999	9	Balance of county					99999
	003	000	2			Benton		005	6	0000	
	004	000	2			Bledsoe		007	6	0000	
	005	148	1			Blount		009	4	3840	
				029	6	Maryville					46380
				999	9	Balance of county					99999
	006	000	2			Bradley		011	4	0000	
				008	5	Cleveland					15400
				999	9	Balance of county					99999
	007	000	2			Campbell		013	5	0000	
	008	000	2			Cannon		015	6	0000	
	009	000	2			Carroll		017	5	0000	
	010	140	1			Carter		019	4	3660	
				014	6	Elizabethton					23500
				023	5	Johnson City, part					38320
				999	9	Balance of county					99999
	011	192	1			Cheatham		021	5	5360	
	012	000	2			Chester		023	6	0000	
	013	000	2			Claiborne		025	5	0000	
	014	000	2			Clay		027	6	0000	
	015	000	2			Cocke		029	5	0000	
	016	000	2			Coffee		031	5	0000	
				040	6	Tullahoma, part					75320
				999	9	Balance of county					99999
	017	000	2			Crockett		033	6	0000	
	018	000	2			Cumberland		035	5	0000	
	019	192	1			Davidson		037	1	5360	
				019	6	Goodlettsville, part					29920
				034	2	Nashville-Davidson					52010
				999	9	Balance of county					99999
	020	000	2			Decatur		039	6	0000	
	021	000	2			De Kalb		041	6	0000	
	022	192	1			Dickson		043	5	5360	
	023	000	2			Dyer		045	5	0000	
				012	6	Dyersburg					22200
				999	9	Balance of county					99999
	024	178	1			Fayette		047	5	4920	
	025	000	2			Fentress		049	6	0000	
	026	000	2			Franklin		051	5	0000	
				040	6	Tullahoma, part					75320
				999	9	Balance of county					99999
	027	000	2			Gibson		053	5	0000	
	028	000	2			Giles		055	5	0000	
	029	000	2			Grainger		057	6	0000	
	030	000	2			Greene		059	4	0000	
				020	6	Greeneville					30980
				999	9	Balance of county					99999
	031	000	2			Grundy		061	6	0000	
	032	000	2			Hamblen		063	4	0000	
				032	6	Morristown					50280
				999	9	Balance of county					99999
	033	053	1			Hamilton		065	2	1560	
				006	3	Chattanooga					14000
				013	6	East Ridge					22720
				036	6	Red Bank					61960
				999	9	Balance of county					99999
	034	000	2			Hancock		067	6	0000	
	035	000	2			Hardeman		069	6	0000	
	036	000	2			Hardin		071	6	0000	
	037	140	1			Hawkins		073	5	3660	
				024	5	Kingsport, part					39560
				999	9	Balance of county					99999
	038	000	2			Haywood		075	6	0000	
				005	6	Brownsville					08920
				999	9	Balance of county					99999
	039	000	2			Henderson		077	6	0000	
	040	000	2			Henry		079	5	0000	
	041	000	2			Hickman		081	6	0000	
	042	000	2			Houston		083	6	0000	

Vital Statistics Geographic Code Outline For The United States
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Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
43						Tennessee	47				
	043	000	2	999	9	Humphreys		085	6	0000	
	044	000	2	999	9	Jackson		087	6	0000	
	045	000	2	999	9	Jefferson		089	5	0000	
	046	000	2	999	9	Johnson		091	6	0000	
	047	148	1			Knox		093	2	3840	
				015	6	Farragut, part					25760
				025	3	Knoxville					40000
				999	9	Balance of county					99999
	048	000	2	999	9	Lake		095	6	0000	
	049	000	2	999	9	Lauderdale		097	6	0000	
	050	000	2			Lawrence		099	5	0000	
				026	6	Lawrenceburg					41340
				999	9	Balance of county					99999
	051	000	2	999	9	Lewis		101	6	0000	
	052	000	2	999	9	Lincoln		103	5	0000	
	053	148	1			Loudon		105	5	3840	
				015	6	Farragut, part					25760
				999	9	Balance of county					99999
	054	000	2			McMinn		107	5	0000	
				001	6	Athens					02320
				999	9	Balance of county					99999
	055	000	2	999	9	McNairy		109	6	0000	
	056	000	2	999	9	Macon		111	6	0000	
	057	134	1			Madison		113	4	3580	
				022	5	Jackson					37640
				999	9	Balance of county					99999
	058	053	1	999	9	Marion		115	6	1560	
	059	000	2	999	9	Marshall		117	6	0000	
	060	000	2			Maury		119	4	0000	
				010	5	Columbia					16540
				999	9	Balance of county					99999
	061	000	2	999	9	Meigs		121	6	0000	
	062	000	2	999	9	Monroe		123	5	0000	
	063	058	1			Montgomery		125	3	1660	
				007	4	Clarksville					15160
				999	9	Balance of county					99999
	064	000	2	999	9	Moore		127	6	0000	
	065	000	2	999	9	Morgan		129	6	0000	
	066	000	2			Obion		131	5	0000	
				041	6	Union City					75940
				999	9	Balance of county					99999
	067	000	2	999	9	Overton		133	6	0000	
	068	000	2	999	9	Perry		135	6	0000	
	069	000	2	999	9	Pickett		137	6	0000	
	070	000	2	999	9	Polk		139	6	0000	
	071	000	2			Putnam		141	4	0000	
				011	6	Cookeville					16920
				999	9	Balance of county					99999
	072	000	2	999	9	Rhea		143	6	0000	
	073	000	2			Roane		145	5	0000	
				035	5	Oak Ridge, part					55120
				999	9	Balance of county					99999
	074	192	1			Robertson		147	5	5360	
				039	6	Springfield					70500
				999	9	Balance of county					99999
	075	192	1			Rutherford		149	3	5360	
				033	5	Murfreesboro					51560
				038	6	Smyrna					69420
				999	9	Balance of county					99999
	076	000	2	999	9	Scott		151	6	0000	
	077	000	2	999	9	Sequatchie		153	6	0000	
	078	148	1	999	9	Sevier		155	4	3840	
	079	178	1			Shelby		157	1	4920	
				002	5	Bartlett					03440
				009	6	Collierville					16420
				018	5	Germantown					28960
				030	1	Memphis					48000
				031	6	Millington					49060
				999	9	Balance of county					99999
	080	000	2	999	9	Smith		159	6	0000	
	081	000	2	999	9	Stewart		161	6	0000	
	082	140	1			Sullivan		163	3	3660	
				004	6	Bristol					08540
				023	5	Johnson City, part					38320

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
43						Tennessee	47				
	082					Sullivan, con.		163	3	3660	
				024	5	Kingsport, part					39560
				999	9	Balance of county					99999
	083	192	1			Sumner		165	3	5360	
				017	6	Gallatin					28540
				019	6	Goodlettsville, part					29920
				021	5	Hendersonville					33280
				999	9	Balance of county					99999
	084	178	1			Tipton		167	5	4920	
	085	000	2			Trousdale		169	6	0000	
	086	140	1			Unicoi		171	6	3660	
	087	148	1			Union		173	6	3840	
	088	000	2			Van Buren		175	6	0000	
	089	000	2			Warren		177	5	0000	
				028	6	McMinnville					45100
				999	9	Balance of county					99999
	090	140	1			Washington		179	4	3660	
				023	5	Johnson City, part					38320
				999	9	Balance of county					99999
	091	000	2			Wayne		181	6	0000	
	092	000	2			Weakley		183	5	0000	
	093	000	2			White		185	6	0000	
	094	192	1			Williamson		187	4	5360	
				003	6	Brentwood					08280
				016	6	Franklin					27740
				999	9	Balance of county					99999
	095	192	1			Wilson		189	4	5360	
				027	6	Lebanon					41520
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	001	000	2			Anderson		001	5	0000	
				116	6	Palestine					54708
				999	9	Balance of county					99999
	002	000	2			Andrews		003	6	0000	
				006	6	Andrews					03216
				999	9	Balance of county					99999
	003	000	2			Angelina		005	4	0000	
				098	5	Lufkin					45072
				999	9	Balance of county					99999
	004	000	2			Aransas		007	6	0000	
	005	302	1			Archer		009	6	9080	
				171	4	Wichita Falls, part					79000
				999	9	Balance of county					99999
	006	000	2			Armstrong		011	6	0000	
	007	000	2			Atascosa		013	5	0000	
	008	000	2			Austin		015	6	0000	
	009	000	2			Bailey		017	6	0000	
	010	000	2			Bandera		019	6	0000	
	011	019	1			Bastrop		021	5	0640	
	012	000	2			Baylor		023	6	0000	
	013	000	2			Bee		025	5	0000	
				016	6	Beeville					07192
				999	9	Balance of county					99999
	014	147	1			Bell		027	3	3810	
				018	6	Belton					07492
				071	6	Harker Heights					32312
				084	4	Killeen					39148
				152	5	Temple					72176
				999	9	Balance of county					99999
	015	248	1			Bexar		029	0	7240	
				095	6	Live Oak					43096
				137	1	San Antonio					65000
				141	6	Schertz, part					66128
				158	6	Universal City					74408
				999	9	Balance of county					99999
	016	000	2			Blanco		031	6	0000	
	017	000	2			Borden		033	6	0000	
	018	000	2			Bosque		035	6	0000	
	019	281	1			Bowie		037	4	8360	
				154	5	Texarkana					72368
				999	9	Balance of county					99999
	020	039	1			Brazoria		039	3	1145	
				004	6	Alvin					02272
				007	6	Angleton					03264
				058	6	Freeport					27420
				086	6	Lake Jackson					40588
				120	6	Pearland, part					56348
				999	9	Balance of county					99999
	021	042	1			Brazos		041	3	1260	
				025	4	Bryan					10912
				032	4	College Station					15976
				999	9	Balance of county					99999
	022	000	2			Brewster		043	6	0000	
	023	000	2			Briscoe		045	6	0000	
	024	000	2			Brooks		047	6	0000	
	025	000	2			Brown		049	5	0000	
				024	6	Brownwood					10780
				999	9	Balance of county					99999
	026	000	2			Burleson		051	6	0000	
	027	000	2			Burnet		053	6	0000	
	028	019	1			Caldwell		055	5	0640	
				140	5	San Marcos, part					65600
				999	9	Balance of county					99999
	029	000	2			Calhoun		057	6	0000	
				127	6	Port Lavaca					58916
				999	9	Balance of county					99999
	030	000	2			Callahan		059	6	0000	
	031	041	1			Cameron		061	2	1240	
				023	4	Brownsville					10768
				072	5	Harlingen					32372
				138	6	San Benito					65036
				999	9	Balance of county					99999
	032	000	2			Camp		063	6	0000	
	033	000	2			Carson		065	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	034	000	2	999	9	Cass		067	5	0000	
	035	000	2	999	9	Castro		069	6	0000	
	036	127	1			Chambers		071	6	3360	
				013	4	Baytown, part					06128
				999	9	Balance of county					99999
	037	000	2			Cherokee		073	5	0000	
				080	6	Jacksonville					37216
				999	9	Balance of county					99999
	038	000	2	999	9	Childress		075	6	0000	
	039	000	2	999	9	Clay		077	6	0000	
	040	000	2	999	9	Cochran		079	6	0000	
	041	000	2	999	9	Coke		081	6	0000	
	042	000	2	999	9	Coleman		083	6	0000	
	043	067	1			Collin		085	2	1920	
				003	6	Allen					01924
				029	4	Carrollton, part					13024
				039	0	Dallas, part					19000
				063	3	Garland, part					29000
				100	6	McKinney					45744
				124	3	Plano, part					58016
				129	4	Richardson, part					61796
				999	9	Balance of county					99999
	044	000	2	999	9	Collingsworth		087	6	0000	
	045	000	2	999	9	Colorado		089	6	0000	
	046	248	1			Comal		091	4	7240	
				112	5	New Braunfels, part					50820
				141	6	Schertz, part					66128
				999	9	Balance of county					99999
	047	000	2	999	9	Comanche		093	6	0000	
	048	000	2	999	9	Concho		095	6	0000	
	049	000	2			Cooke		097	5	0000	
				060	6	Gainesville					27984
				999	9	Balance of county					99999
	050	147	1			Coryell		099	4	3810	
				036	6	Copperas Cove, part					16624
				064	6	Gatesville					29168
				999	9	Balance of county					99999
	051	000	2	999	9	Cottle		101	6	0000	
	052	000	2	999	9	Crane		103	6	0000	
	053	000	2	999	9	Crockett		105	6	0000	
	054	000	2	999	9	Crosby		107	6	0000	
	055	000	2	999	9	Culberson		109	6	0000	
	056	000	2	999	9	Dallam		111	6	0000	
	057	067	1			Dallas		113	0	1920	
				011	6	Balch Springs					05372
				029	4	Carrollton, part					13024
				030	6	Cedar Hill, part					13492
				035	6	Coppell, part					16612
				039	0	Dallas, part					19000
				044	5	DeSoto					20092
				047	5	Duncanville					21628
				054	6	Farmers Branch					25452
				063	3	Garland, part					29000
				066	4	Grand Prairie, part					30464
				067	5	Grapevine, part					30644
				079	3	Irving					37000
				089	6	Lancaster					41212
				094	5	Lewisville, part					42508
				104	3	Mesquite					47892
				129	4	Richardson, part					61796
				135	6	Rowlett, part					63572
				159	6	University Park					74492
				999	9	Balance of county					99999
	058	000	2			Dawson		115	6	0000	
				088	6	Lamesa					41164
				999	9	Balance of county					99999
	059	000	2			Deaf Smith		117	6	0000	
				074	6	Hereford					33320
				999	9	Balance of county					99999
	060	000	2	999	9	Delta		119	6	0000	
	061	067	1			Denton		121	2	1920	
				029	4	Carrollton, part					13024
				035	6	Coppell, part					16612
				039	0	Dallas, part					19000

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	061					Denton, con.		121	2	1920	
				043	4	Denton					19972
				055	6	Flower Mound, part					26232
				057	2	Fort Worth, part					27000
				067	5	Grapevine, part					30644
				094	5	Lewisville, part					42508
				124	3	Plano, part					58016
				156	6	The Colony					72530
				999	9	Balance of county					99999
	062	000	2	999	9	De Witt		123	6	0000	
	063	000	2	999	9	Dickens		125	6	0000	
	064	000	2	999	9	Dimmit		127	6	0000	
	065	000	2	999	9	Donley		129	6	0000	
	066	000	2	999	9	Duval		131	6	0000	
	067	000	2	999	9	Eastland		133	6	0000	
	068	203	1			Ector		135	3	5800	
				114	4	Odessa, part					53388
				999	9	Balance of county					99999
	069	000	2	999	9	Edwards		137	6	0000	
	070	067	1			Ellis		139	4	1920	
				030	6	Cedar Hill, part					13492
				052	6	Ennis					24348
				066	4	Grand Prairie, part					30464
				101	6	Mansfield, part					46452
				166	6	Waxahachie					76816
				999	9	Balance of county					99999
	071	083	1			El Paso		141	1	2320	
				051	1	El Paso					24000
				145	6	Socorro					68636
				999	9	Balance of county					99999
	072	000	2			Erath		143	5	0000	
				147	6	Stephenville					70208
				999	9	Balance of county					99999
	073	000	2	999	9	Falls		145	6	0000	
	074	000	2	999	9	Fannin		147	6	0000	
	075	000	2	999	9	Fayette		149	6	0000	
	076	000	2	999	9	Fisher		151	6	0000	
	077	000	2	999	9	Floyd		153	6	0000	
	078	000	2	999	9	Foard		155	6	0000	
	079	127	1			Fort Bend		157	3	3360	
				075	0	Houston, part					35000
				108	5	Missouri City, part					48804
				130	6	Richmond					61892
				133	6	Rosenberg					63284
				148	6	Sugar Land					70808
				999	9	Balance of county					99999
	080	000	2	999	9	Franklin		159	6	0000	
	081	000	2	999	9	Freestone		161	6	0000	
	082	000	2	999	9	Frio		163	6	0000	
	083	000	2	999	9	Gaines		165	6	0000	
	084	107	1			Galveston		167	3	2920	
				059	6	Friendswood, part					27648
				062	4	Galveston					28068
				087	6	La Marque					41116
				092	5	League City, part					41980
				155	5	Texas City					72392
				999	9	Balance of county					99999
	085	000	2	999	9	Garza		169	6	0000	
	086	000	2	999	9	Gillespie		171	6	0000	
	087	000	2	999	9	Glasscock		173	6	0000	
	088	000	2	999	9	Goliad		175	6	0000	
	089	000	2	999	9	Gonzales		177	6	0000	
	090	000	2			Gray		179	6	0000	
				117	6	Pampa					54912
				999	9	Balance of county					99999
	091	263	1			Grayson		181	4	7640	
				042	6	Denison					19900
				143	5	Sherman					67496
				999	9	Balance of county					99999
	092	167	1			Gregg		183	3	4420	
				083	6	Kilgore, part					39124
				096	4	Longview, part					43888
				999	9	Balance of county					99999
	093	000	2	999	9	Grimes		185	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	094	248	1			Guadalupe		187	4	7240	
				112	5	New Braunfels, part					50820
				141	6	Schertz, part					66128
				142	6	Seguin					66644
				999	9	Balance of county					99999
	095	000	2			Hale		189	5	0000	
				123	6	Plainview					57980
				999	9	Balance of county					99999
	096	000	2			Hall		191	6	0000	
	097	000	2			Hall		193	6	0000	
	098	000	2			Hansford		195	6	0000	
	099	000	2			Hardeman		197	6	0000	
	100	025	1			Hardin		199	5	0840	
	101	127	1			Harris		201	0	3360	
				013	4	Baytown, part					06128
				017	6	Bellaire					07300
				040	5	Deer Park					19624
				059	6	Friendswood, part					27648
				061	6	Galena Park					27996
				075	0	Houston, part					35000
				076	6	Humble					35348
				090	5	La Porte					41440
				092	5	League City, part					41980
				108	5	Missouri City, part					48804
				119	3	Pasadena					56000
				120	6	Pearland, part					56348
				146	6	South Houston					69020
				169	6	West University Place					77956
				999	9	Balance of county					99999
	102	167	1			Harrison		203	4	4420	
				096	4	Longview, part					43888
				102	6	Marshall					46776
				999	9	Balance of county					99999
	103	000	2			Hartley		205	6	0000	
	104	000	2			Haskell		207	6	0000	
	105	019	1			Hays		209	4	0640	
				140	5	San Marcos, part					65600
				999	9	Balance of county					99999
	106	000	2			Hemphill		211	6	0000	
	107	067	1			Henderson		213	4	1920	
				009	6	Athens					04504
				999	9	Balance of county					99999
	108	175	1			Hidalgo		215	2	4880	
				045	6	Donna					20884
				049	5	Edinburg					22660
				099	4	McAllen					45384
				103	6	Mercedes					47700
				107	5	Mission					48768
				122	5	Pharr					57200
				139	6	San Juan					65516
				168	6	Weslaco					77272
				999	9	Balance of county					99999
	109	000	2			Hill		217	5	0000	
	110	000	2			Hockley		219	6	0000	
				093	6	Levelland					42448
				999	9	Balance of county					99999
	111	103	1			Hood		221	5	2800	
	112	000	2			Hopkins		223	5	0000	
				149	6	Sulphur Springs					70904
				999	9	Balance of county					99999
	113	000	2			Houston		225	6	0000	
	114	000	2			Howard		227	5	0000	
				020	6	Big Spring					08236
				999	9	Balance of county					99999
	115	000	2			Hudspeth		229	6	0000	
	116	067	1			Hunt		231	4	1920	
				068	6	Greenville					30920
				999	9	Balance of county					99999
	117	000	2			Hutchinson		233	5	0000	
				021	6	Borger					09556
				999	9	Balance of county					99999
	118	000	2			Irion		235	6	0000	
	119	000	2			Jack		237	6	0000	
	120	000	2			Jackson		239	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	121	000	2	999	9	Jasper		241	5	0000	
	122	000	2	999	9	Jeff Davis		243	6	0000	
	123	025	1			Jefferson		245	3	0840	
				014	3	Beaumont					07000
				069	6	Groves					31328
				111	6	Nederland					50580
				125	4	Port Arthur					58820
				128	6	Port Neches					58940
				999	9	Balance of county					99999
	124	000	2	999	9	Jim Hogg		247	6	0000	
	125	000	2			Jim Wells		249	5	0000	
				002	6	Alice					01852
				999	9	Balance of county					99999
	126	103	1			Johnson		251	4	2800	
				027	6	Burleson, part					11428
				031	6	Cleburne					15364
				101	6	Mansfield, part					46452
				999	9	Balance of county					99999
	127	000	2			Jones		253	6	0000	
				001	3	Abilene, part					01000
				999	9	Balance of county					99999
	128	000	2	999	9	Karnes		255	6	0000	
	129	067	1			Kaufman		257	4	1920	
				039	0	Dallas, part					19000
				153	6	Terrell					72284
				999	9	Balance of county					99999
	130	000	2	999	9	Kendall		259	6	0000	
	131	000	2	999	9	Kenedy		261	6	0000	
	132	000	2	999	9	Kent		263	6	0000	
	133	000	2			Kerr		265	5	0000	
				082	6	Kerrville					39040
				999	9	Balance of county					99999
	134	000	2	999	9	Kimble		267	6	0000	
	135	000	2	999	9	King		269	6	0000	
	136	000	2	999	9	Kinney		271	6	0000	
	137	000	2			Kleberg		273	5	0000	
				037	2	Corpus Christi, part					17000
				085	5	Kingsville					39352
				999	9	Balance of county					99999
	138	000	2	999	9	Knox		275	6	0000	
	139	000	2			Lamar		277	5	0000	
				118	6	Paris					55080
				999	9	Balance of county					99999
	140	000	2	999	9	Lamb		279	6	0000	
	141	000	2			Lampasas		281	6	0000	
				036	6	Copperas Cove, part					16624
				999	9	Balance of county					99999
	142	000	2	999	9	La Salle		283	6	0000	
	143	000	2	999	9	Lavaca		285	6	0000	
	144	000	2	999	9	Lee		287	6	0000	
	145	000	2	999	9	Leon		289	6	0000	
	146	127	1	999	9	Liberty		291	4	3360	
	147	000	2	999	9	Limestone		293	6	0000	
	148	000	2	999	9	Lipscomb		295	6	0000	
	149	000	2	999	9	Live Oak		297	6	0000	
	150	000	2	999	9	Llano		299	6	0000	
	151	000	2	999	9	Loving		301	6	0000	
	152	170	1			Lubbock		303	3	4600	
				097	3	Lubbock					45000
				999	9	Balance of county					99999
	153	000	2	999	9	Lynn		305	6	0000	
	154	000	2	999	9	McCulloch		307	6	0000	
	155	295	1			McLennan		309	3	8800	
				164	3	Waco					76000
				999	9	Balance of county					99999
	156	000	2	999	9	McMullen		311	6	0000	
	157	000	2	999	9	Madison		313	6	0000	
	158	000	2	999	9	Marion		315	6	0000	
	159	000	2			Martin		317	6	0000	
				105	4	Midland, part					48072
				999	9	Balance of county					99999
	160	000	2	999	9	Mason		319	6	0000	
	161	000	2			Matagorda		321	5	0000	
				012	6	Bay City					05984

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	161					Matagorda, con.		321	5	0000	
				999	9	Balance of county					99999
	162	000	2			Maverick		323	5	0000	
				048	6	Eagle Pass					21892
				999	9	Balance of county					99999
	163	000	2			Medina		325	5	0000	
	164	000	2			Menard		327	6	0000	
	165	203	1			Midland		329	3	5800	
				105	4	Midland, part					48072
				114	4	Odessa, part					53388
				999	9	Balance of county					99999
	166	000	2			Milam		331	6	0000	
	167	000	2			Mills		333	6	0000	
	168	000	2			Mitchell		335	6	0000	
	169	000	2			Montague		337	6	0000	
	170	127	1			Montgomery		339	3	3360	
				034	5	Conroe					16432
				075	0	Houston, part					35000
				999	9	Balance of county					99999
	171	000	2			Moore		341	6	0000	
				046	6	Dumas					21556
				999	9	Balance of county					99999
	172	000	2			Morris		343	6	0000	
	173	000	2			Motley		345	6	0000	
	174	000	2			Nacogdoches		347	4	0000	
				110	5	Nacogdoches					50256
				999	9	Balance of county					99999
	175	000	2			Navarro		349	5	0000	
				038	6	Corsicana					17060
				999	9	Balance of county					99999
	176	000	2			Newton		351	6	0000	
	177	000	2			Nolan		353	6	0000	
				150	6	Sweetwater					71540
				999	9	Balance of county					99999
	178	065	1			Nueces		355	2	1880	
				037	2	Corpus Christi, part					17000
				126	6	Portland, part					58904
				131	6	Robstown					62600
				999	9	Balance of county					99999
	179	000	2			Ochiltree		357	6	0000	
	180	000	2			Oldham		359	6	0000	
	181	025	1			Orange		361	4	0840	
				115	6	Orange					54132
				163	6	Vidor					75476
				999	9	Balance of county					99999
	182	000	2			Palo Pinto		363	5	0000	
				106	6	Mineral Wells, part					48684
				999	9	Balance of county					99999
	183	000	2			Panola		365	6	0000	
	184	103	1			Parker		367	4	2800	
				106	6	Mineral Wells, part					48684
				167	6	Weatherford					76864
				999	9	Balance of county					99999
	185	000	2			Parmer		369	6	0000	
	186	000	2			Pecos		371	6	0000	
	187	000	2			Polk		373	5	0000	
	188	009	1			Potter		375	4	0320	
				005	3	Amarillo, part					03000
				999	9	Balance of county					99999
	189	000	2			Presidio		377	6	0000	
	190	000	2			Rains		379	6	0000	
	191	009	1			Randall		381	4	0320	
				005	3	Amarillo, part					03000
				028	6	Canyon					12532
				999	9	Balance of county					99999
	192	000	2			Reagan		383	6	0000	
	193	000	2			Real		385	6	0000	
	194	000	2			Red River		387	6	0000	
	195	000	2			Reeves		389	6	0000	
				121	6	Pecos					56516
				999	9	Balance of county					99999
	196	000	2			Refugio		391	6	0000	
	197	000	2			Roberts		393	6	0000	
	198	000	2			Robertson		395	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	199	067	1			Rockwall		397	5	1920	
				039	0	Dallas, part					19000
				063	3	Garland, part					29000
				132	6	Rockwall					62828
				135	6	Rowlett, part					63572
				999	9	Balance of county					99999
	200	000	2	999	9	Runnels		399	6	0000	
	201	000	2			Rusk		401	5	0000	
				073	6	Henderson					33212
				083	6	Kilgore, part					39124
				999	9	Balance of county					99999
	202	000	2	999	9	Sabine		403	6	0000	
	203	000	2	999	9	San Augustine		405	6	0000	
	204	000	2	999	9	San Jacinto		407	6	0000	
	205	065	1			San Patricio		409	4	1880	
				037	2	Corpus Christi, part					17000
				126	6	Portland, part					58904
				999	9	Balance of county					99999
	206	000	2	999	9	San Saba		411	6	0000	
	207	000	2	999	9	Schleicher		413	6	0000	
	208	000	2			Scurry		415	6	0000	
				144	6	Snyder					68624
				999	9	Balance of county					99999
	209	000	2	999	9	Shackelford		417	6	0000	
	210	000	2	999	9	Shelby		419	6	0000	
	211	000	2	999	9	Sherman		421	6	0000	
	212	288	1			Smith		423	3	8640	
				157	4	Tyler					74144
				999	9	Balance of county					99999
	213	000	2	999	9	Somervell		425	6	0000	
	214	000	2	999	9	Starr		427	5	0000	
	215	000	2	999	9	Stephens		429	6	0000	
	216	000	2	999	9	Sterling		431	6	0000	
	217	000	2	999	9	Stonewall		433	6	0000	
	218	000	2	999	9	Sutton		435	6	0000	
	219	000	2	999	9	Swisher		437	6	0000	
	220	103	1			Tarrant		439	0	2800	
				008	2	Arlington					04000
				015	5	Bedford					07132
				019	6	Benbrook					07552
				027	6	Burleson, part					11428
				033	6	Colleyville					15988
				053	5	Eules					24768
				055	6	Flower Mound, part					26232
				056	6	Forest Hill					26544
				057	2	Fort Worth, part					27000
				066	4	Grand Prairie, part					30464
				067	5	Grapevine, part					30644
				070	5	Haltom City					31928
				078	5	Hurst					35576
				081	6	Keller					38632
				101	6	Mansfield, part					46452
				113	5	North Richland Hills					52356
				165	6	Watauga					76672
				170	6	White Settlement					78544
				999	9	Balance of county					99999
	221	001	1			Taylor		441	3	0040	
				001	3	Abilene, part					01000
				999	9	Balance of county					99999
	222	000	2	999	9	Terrell		443	6	0000	
	223	000	2	999	9	Terry		445	6	0000	
	224	000	2	999	9	Throckmorton		447	6	0000	
	225	000	2			Titus		449	6	0000	
				109	6	Mount Pleasant					49800
				999	9	Balance of county					99999
	226	247	1			Tom Green		451	4	7200	
				136	4	San Angelo					64472
				999	9	Balance of county					99999
	227	019	1			Travis		453	1	0640	
				010	2	Austin, part					05000
				134	5	Round Rock, part					63500
				999	9	Balance of county					99999
	228	000	2	999	9	Trinity		455	6	0000	
	229	000	2	999	9	Tyler		457	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
44						Texas	48				
	230	167	1	999	9	Upshur		459	5	4420	
	231	000	2	999	9	Upton		461	6	0000	
	232	000	2			Uvalde		463	6	0000	
				160	6	Uvalde					74588
				999	9	Balance of county					99999
	233	000	2			Val Verde		465	5	0000	
				041	5	Del Rio					19792
				999	9	Balance of county					99999
	234	000	2	999	9	Van Zandt		467	5	0000	
	235	292	1			Victoria		469	4	8750	
				162	4	Victoria					75428
				999	9	Balance of county					99999
	236	000	2			Walker		471	4	0000	
				077	5	Huntsville					35528
				999	9	Balance of county					99999
	237	127	1	999	9	Waller		473	6	3360	
	238	000	2	999	9	Ward		475	6	0000	
	239	000	2			Washington		477	5	0000	
				022	6	Brenham					10156
				999	9	Balance of county					99999
	240	157	1			Webb		479	3	4080	
				091	3	Laredo					41464
				999	9	Balance of county					99999
	241	000	2			Wharton		481	5	0000	
				050	6	El Campo					22864
				999	9	Balance of county					99999
	242	000	2	999	9	Wheeler		483	6	0000	
	243	302	1			Wichita		485	3	9080	
				026	6	Burkburnett					11368
				171	4	Wichita Falls, part					79000
				999	9	Balance of county					99999
	244	000	2			Wilbarger		487	6	0000	
				161	6	Vernon					75308
				999	9	Balance of county					99999
	245	000	2	999	9	Willacy		489	6	0000	
	246	019	1			Williamson		491	3	0640	
				010	2	Austin, part					05000
				065	6	Georgetown					29336
				134	5	Round Rock, part					63500
				151	6	Taylor					71948
				999	9	Balance of county					99999
	247	248	1	999	9	Wilson		493	6	7240	
	248	000	2	999	9	Winkler		495	6	0000	
	249	000	2	999	9	Wise		497	5	0000	
	250	000	2	999	9	Wood		499	5	0000	
	251	000	2	999	9	Yoakum		501	6	0000	
	252	000	2	999	9	Young		503	6	0000	
	253	000	2	999	9	Zapata		505	6	0000	
	254	000	2	999	9	Zavala		507	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
45						Utah	49				
	001	000	2	999	9	Beaver		001	6	0000	
	002	000	2			Box Elder		003	5	0000	
				003	6	Brigham City					08460
				999	9	Balance of county					99999
	003	000	2			Cache		005	4	0000	
				009	5	Logan					45860
				999	9	Balance of county					99999
	004	000	2	999	9	Carbon		007	6	0000	
	005	000	2	999	9	Daggett		009	6	0000	
	006	246	1			Davis		011	3	7160	
				002	5	Bountiful					07690
				005	6	Centerville					11980
				006	6	Clearfield					13850
				007	6	Kaysville					40360
				008	5	Layton					43660
				999	9	Balance of county					99999
	007	000	2	999	9	Duchesne		013	6	0000	
	008	000	2	999	9	Emery		015	6	0000	
	009	000	2	999	9	Garfield		017	6	0000	
	010	000	2	999	9	Grand		019	6	0000	
	011	000	2			Iron		021	6	0000	
				004	6	Cedar City					11320
				999	9	Balance of county					99999
	012	000	2	999	9	Juab		023	6	0000	
	013	000	2	999	9	Kane		025	6	0000	
	014	000	2	999	9	Millard		027	6	0000	
	015	000	2	999	9	Morgan		029	6	0000	
	016	000	2	999	9	Piute		031	6	0000	
	017	000	2	999	9	Rich		033	6	0000	
	018	246	1			Salt Lake		035	1	7160	
				010	6	Midvale					49710
				011	5	Murray					53230
				017	6	Riverton					64340
				020	3	Salt Lake City					67000
				021	4	Sandy					67550
				022	6	South Jordan					70850
				024	6	South Salt Lake					71070
				028	5	West Jordan					82950
				029	4	West Valley City					83445
				999	9	Balance of county					99999
	019	000	2	999	9	San Juan		037	6	0000	
	020	000	2	999	9	Sanpete		039	6	0000	
	021	000	2	999	9	Sevier		041	6	0000	
	022	000	2	999	9	Summit		043	6	0000	
	023	000	2			Tooele		045	5	0000	
				027	6	Tooele					76680
				999	9	Balance of county					99999
	024	000	2	999	9	Uintah		047	6	0000	
	025	222	1			Utah		049	2	6520	
				001	6	American Fork					01310
				014	4	Orem					57300
				015	6	Pleasant Grove					60930
				016	4	Provo					62470
				025	6	Spanish Fork					71290
				026	6	Springville					72280
				999	9	Balance of county					99999
	026	000	2	999	9	Wasatch		051	6	0000	
	027	000	2			Washington		053	5	0000	
				019	5	St. George					65330
				999	9	Balance of county					99999
	028	000	2	999	9	Wayne		055	6	0000	
	029	246	1			Weber		057	3	7160	
				012	6	North Ogden					55100
				013	4	Ogden					55980
				018	6	Roy					65110
				023	6	South Ogden					70960
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
46						Vermont	50				
	001	000	2	999	9	Addison	001	5		0000	
	002	000	2	999	9	Bennington	003	5		0000	
	003	000	2	999	9	Caledonia	005	5		0000	
	004	044	1			Chittenden	007	3		1303	
				001	5	Burlington					10675
				003	6	South Burlington					66175
				999	9	Balance of county					99999
	005	000	2	999	9	Essex	009	6		0000	
	006	044	1	999	9	Franklin	011	5		1303	
	007	044	1	999	9	Grand Isle	013	6		1303	
	008	000	2	999	9	Lamoille	015	6		0000	
	009	000	2	999	9	Orange	017	5		0000	
	010	000	2	999	9	Orleans	019	6		0000	
	011	000	2			Rutland	021	4		0000	
				002	6	Rutland					61225
				999	9	Balance of county					99999
	012	000	2	999	9	Washington	023	4		0000	
	013	000	2	999	9	Windham	025	5		0000	
	014	000	2	999	9	Windsor	027	4		0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
47						Virginia	51				
	001	000	2	999	9	Accomack		001	5	0000	
	002	052	1	999	9	Albemarle		003	4	1540	
	003	296	1	001	3	Alexandria city		510	3	8840	01000
	004	000	2	999	9	Alleghany		005	6	0000	
	005	000	2	999	9	Amelia		007	6	0000	
	006	171	1	999	9	Amherst		009	5	4640	
	007	000	2	999	9	Appomattox		011	6	0000	
	008	296	1	002	3	Arlington		013	3	8840	03000
	009	000	2	999	9	Augusta		015	4	0000	
	010	000	2	999	9	Bath		017	6	0000	
	011	171	1	999	9	Bedford		019	5	4640	
	012	171	1	999	9	Bedford city		515	6	4640	99999
	013	000	2	999	9	Bland		021	6	0000	
	014	234	1	999	9	Botetourt		023	6	6800	
	015	140	1	004	6	Bristol city		520	6	3660	09816
	016	000	2	999	9	Brunswick		025	6	0000	
	017	000	2	999	9	Buchanan		027	5	0000	
	018	000	2	999	9	Buckingham		029	6	0000	
	019	000	2	999	9	Buena Vista city		530	6	0000	99999
	020	171	1	999	9	Campbell		031	5	4640	
	021	000	2	999	9	Caroline		033	6	0000	
	022	000	2	999	9	Carroll		035	5	0000	
	023	232	1	999	9	Charles City		036	6	6760	
	024	000	2	999	9	Charlotte		037	6	0000	
	025	052	1	005	5	Charlottesville city		540	5	1540	14968
	026	200	1	006	3	Chesapeake city		550	3	5720	16000
	027	232	1	999	9	Chesterfield		041	3	6760	
	028	296	1	999	9	Clarke		043	6	8840	
	029	000	2	999	9	Clifton Forge city		560	6	0000	99999
	030	232	1	008	6	Colonial Heights city		570	6	6760	18448
	031	000	2	999	9	Covington city		580	6	0000	99999
	032	000	2	999	9	Craig		045	6	0000	
	033	296	1	999	9	Culpeper		047	5	8840	
	034	000	2	999	9	Cumberland		049	6	0000	
	035	068	1	009	4	Danville city		590	4	1950	21344
	036	000	2	999	9	Dickenson		051	6	0000	
	037	232	1	999	9	Dinwiddie		053	6	6760	
	038	000	2	999	9	Emporia city		595	6	0000	99999
	039	000	2	999	9	Essex		057	6	0000	
	040	296	1			Fairfax		059	1	8840	
				015	6	Herndon					36648
				032	6	Vienna					81072
				999	9	Balance of county					99999
	041	296	1	010	6	Fairfax city		600	6	8840	26496
	042	296	1	999	9	Falls Church city		610	6	8840	99999
	043	296	1	999	9	Fauquier		061	5	8840	
	044	000	2	999	9	Floyd		063	6	0000	
	045	052	1	999	9	Fluvanna		065	6	1540	
	046	000	2	999	9	Franklin		067	5	0000	
	047	000	2	999	9	Franklin city		620	6	0000	99999
	048	000	2	999	9	Frederick		069	5	0000	
	049	296	1	011	6	Fredericksburg city		630	6	8840	29744
	050	000	2	999	9	Galax city		640	6	0000	99999
	051	000	2	999	9	Giles		071	6	0000	
	052	200	1	999	9	Gloucester		073	5	5720	
	053	232	1	999	9	Goochland		075	6	6760	
	054	000	2	999	9	Grayson		077	6	0000	
	055	052	1	999	9	Greene		079	6	1540	
	056	000	2	999	9	Greensville		081	6	0000	
	057	000	2	999	9	Halifax		083	5	0000	
	057	000	2	999	9	South Boston city		083	5	0000	99999
	058	200	1	013	3	Hampton city		650	3	5720	35000
	059	232	1	999	9	Hanover		085	4	6760	
	060	000	2	014	5	Harrisonburg city		660	5	0000	35624
	061	232	1	999	9	Henrico		087	3	6760	
	062	000	2	999	9	Henry		089	4	0000	
	063	000	2	999	9	Highland		091	6	0000	
	064	232	1	016	6	Hopewell city		670	6	6760	38424
	065	200	1	999	9	Isle of Wight		093	5	5720	
	066	200	1	999	9	James City		095	5	5720	
	067	000	2	999	9	King and Queen		097	6	0000	
	068	296	1	999	9	King George		099	6	8840	
	069	000	2	999	9	King William		101	6	0000	
	070	000	2	999	9	Lancaster		103	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
47						Virginia	51				
	071	000	2	999	9	Lee		105	6	0000	
	072	000	2	999	9	Lexington city		678	6	0000	99999
	073	296	1			Loudoun		107	4	8840	
				017	6	Leesburg					44984
				999	9	Balance of county					99999
	074	000	2	999	9	Louisa		109	6	0000	
	075	000	2	999	9	Lunenburg		111	6	0000	
	076	171	1	018	4	Lynchburg city		680	4	4640	47672
	077	000	2	999	9	Madison		113	6	0000	
	078	296	1	019	5	Manassas city		683	5	8840	48952
	079	296	1	999	9	Manassas Park city		685	6	8840	99999
	080	000	2	020	6	Martinsville city		690	6	0000	49784
	081	200	1	999	9	Mathews		115	6	5720	
	082	000	2	999	9	Mecklenburg		117	5	0000	
	083	000	2	999	9	Middlesex		119	6	0000	
	084	000	2			Montgomery		121	4	0000	
				003	5	Blacksburg					07784
				007	6	Christiansburg					16608
				999	9	Balance of county					99999
	085	000	2	999	9	Nelson		125	6	0000	
	086	232	1	999	9	New Kent		127	6	6760	
	087	200	1	021	3	Newport News city		700	3	5720	56000
	088	200	1	022	2	Norfolk city		710	2	5720	57000
	089	000	2	999	9	Northampton		131	6	0000	
	090	000	2	999	9	Northumberland		133	6	0000	
	091	000	2	999	9	Norton city		720	6	0000	99999
	092	000	2	999	9	Nottoway		135	6	0000	
	093	000	2	999	9	Orange		137	6	0000	
	094	000	2	999	9	Page		139	6	0000	
	095	000	2	999	9	Patrick		141	6	0000	
	096	232	1	023	5	Petersburg city		730	5	6760	61832
	097	068	1	999	9	Pittsylvania		143	4	1950	
	098	200	1	024	6	Poquoson city		735	6	5720	63768
	099	200	1	025	3	Portsmouth city		740	3	5720	64000
	100	232	1	999	9	Powhatan		145	6	6760	
	101	000	2	999	9	Prince Edward		147	6	0000	
	102	232	1	999	9	Prince George		149	5	6760	
	103	296	1	999	9	Prince William		153	3	8840	
	104	000	2	999	9	Pulaski		155	5	0000	
	105	000	2	026	6	Radford city		750	6	0000	65392
	106	000	2	999	9	Rappahannock		157	6	0000	
	107	000	2	999	9	Richmond		159	6	0000	
	108	232	1	027	3	Richmond city		760	3	6760	67000
	109	234	1	999	9	Roanoke		161	4	6800	
	110	234	1	028	4	Roanoke city		770	4	6800	68000
	111	000	2	999	9	Rockbridge		163	6	0000	
	112	000	2	999	9	Rockingham		165	4	0000	
	113	000	2	999	9	Russell		167	5	0000	
	114	234	1	029	6	Salem city		775	6	6800	70000
	115	140	1	999	9	Scott		169	6	3660	
	116	000	2	999	9	Shenandoah		171	5	0000	
	117	000	2	999	9	Smyth		173	5	0000	
	118	000	2	999	9	Southampton		175	6	0000	
	120	296	1	999	9	Spotsylvania		177	4	8840	
	121	296	1	999	9	Stafford		179	4	8840	
	122	000	2	030	6	Staunton city		790	6	0000	75216
	123	200	1	031	4	Suffolk city		800	4	5720	76432
	124	000	2	999	9	Surry		181	6	0000	
	125	000	2	999	9	Sussex		183	6	0000	
	126	000	2	999	9	Tazewell		185	5	0000	
	127	200	1	033	2	Virginia Beach city		810	2	5720	82000
	128	296	1			Warren		187	5	8840	
				012	6	Front Royal					29968
				999	9	Balance of county					99999
	129	140	1	999	9	Washington		191	5	3660	
	130	000	2	034	6	Waynesboro city		820	6	0000	83680
	131	000	2	999	9	Westmoreland		193	6	0000	
	132	200	1	035	6	Williamsburg city		830	6	5720	86160
	133	000	2	036	6	Winchester city		840	6	0000	86720
	134	000	2	999	9	Wise		195	5	0000	
	135	000	2	999	9	Wythe		197	5	0000	
	136	200	1	999	9	York		199	5	5720	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
48						Washington	53				
	001	000	2	999	9	Adams		001	6	0000	
	002	000	2	999	9	Asotin		003	6	0000	
	003	231	1			Benton		005	3	6740	
				014	5	Kennewick					35275
				033	5	Richland					58235
				999	9	Balance of county					99999
	004	000	2			Chelan		007	4	0000	
				041	6	Wenatchee					77105
				999	9	Balance of county					99999
	005	000	2			Clallam		009	4	0000	
				028	6	Port Angeles					55365
				999	9	Balance of county					99999
	006	220	1			Clark		011	3	6440	
				039	5	Vancouver					74060
				999	9	Balance of county					99999
	007	000	2	999	9	Columbia		013	6	0000	
	008	000	2			Cowlitz		015	4	0000	
				013	6	Kelso					35065
				018	5	Longview					40245
				999	9	Balance of county					99999
	009	000	2	999	9	Douglas		017	5	0000	
	010	000	2	999	9	Ferry		019	6	0000	
	011	231	1			Franklin		021	5	6740	
				027	6	Pasco					53545
				999	9	Balance of county					99999
	012	000	2	999	9	Garfield		023	6	0000	
	013	000	2			Grant		025	4	0000	
				022	6	Moses Lake					47245
				999	9	Balance of county					99999
	014	000	2			Grays Harbor		027	4	0000	
				001	6	Aberdeen					00100
				999	9	Balance of county					99999
	015	260	1			Island		029	4	7600	
				025	6	Oak Harbor					50360
				999	9	Balance of county					99999
	016	000	2	999	9	Jefferson		031	6	0000	
	017	260	1			King		033	0	7600	
				003	5	Auburn					03180
				004	4	Bellevue					05210
				006	6	Bothell, part					07380
				009	6	Des Moines					17635
				015	5	Kent					35415
				016	5	Kirkland					35940
				021	6	Mercer Island					45005
				031	5	Redmond					57535
				032	5	Renton					57745
				034	1	Seattle					63000
				038	6	Tukwila					72625
				999	9	Balance of county					99999
	018	040	1			Kitsap		035	3	1150	
				007	5	Bremerton					07695
				999	9	Balance of county					99999
	019	000	2			Kittitas		037	5	0000	
				011	6	Ellensburg					21240
				999	9	Balance of county					99999
	020	000	2	999	9	Klickitat		039	6	0000	
	021	000	2			Lewis		041	4	0000	
				008	6	Centralia					11160
				999	9	Balance of county					99999
	022	000	2	999	9	Lincoln		043	6	0000	
	023	000	2	999	9	Mason		045	5	0000	
	024	000	2	999	9	Okanogan		047	5	0000	
	025	000	2	999	9	Pacific		049	6	0000	
	026	000	2	999	9	Pend Oreille		051	6	0000	
	027	277	1			Pierce		053	1	8200	
				030	6	Puyallup					56695
				037	3	Tacoma					70000
				999	9	Balance of county					99999
	028	000	2	999	9	San Juan		055	6	0000	
	029	000	2			Skagit		057	4	0000	
				002	6	Anacortes					01990
				024	6	Mount Vernon					47560
				999	9	Balance of county					99999
	030	000	2	999	9	Skamania		059	6	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
48						Washington	53				
	031	260	1			Snohomish		061	2	7600	
				006	6	Bothell, part					07380
				010	5	Edmonds					20750
				012	4	Everett					22640
				019	5	Lynnwood					40840
				020	6	Marysville					43955
				023	6	Mountlake Terrace					47490
				999	9	Balance of county					99999
	032	268	1			Spokane		063	2	7840	
				035	3	Spokane					67000
				999	9	Balance of county					99999
	033	000	2			Stevens		065	5	0000	
	034	205	1			Thurston		067	3	5910	
				017	6	Lacey					36745
				026	5	Olympia					51300
				999	9	Balance of county					99999
	035	000	2			Wahkiakum		069	6	0000	
	036	000	2			Walla Walla		071	5	0000	
				040	5	Walla Walla					75775
				999	9	Balance of county					99999
	037	026	1			Whatcom		073	3	0860	
				005	4	Bellingham					05280
				999	9	Balance of county					99999
	038	000	2			Whitman		075	5	0000	
				029	6	Pullman					56625
				999	9	Balance of county					99999
	039	306	1			Yakima		077	3	9260	
				036	6	Sunnyside					68750
				042	4	Yakima					80010
				999	9	Balance of county					99999

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
49						West Virginia	54				
	001	000	2	999	9	Barbour	001	6		0000	
	002	296	1			Berkeley	003	4		8840	
				007	6	Martinsburg					52060
				999	9	Balance of county					99999
	003	000	2	999	9	Boone	005	5		0000	
	004	000	2	999	9	Braxton	007	6		0000	
	005	273	1			Brooke	009	5		8080	
				014	6	Weirton, part					85156
				999	9	Balance of county					99999
	006	128	1			Cabell	011	4		3400	
				006	4	Huntington, part					39460
				999	9	Balance of county					99999
	007	000	2	999	9	Calhoun	013	6		0000	
	008	000	2	999	9	Clay	015	6		0000	
	009	000	2	999	9	Doddridge	017	6		0000	
	010	000	2	999	9	Fayette	019	5		0000	
	011	000	2	999	9	Gilmer	021	6		0000	
	012	000	2	999	9	Grant	023	6		0000	
	013	000	2	999	9	Greenbrier	025	5		0000	
	014	000	2	999	9	Hampshire	027	6		0000	
	015	273	1			Hancock	029	5		8080	
				014	6	Weirton, part					85156
				999	9	Balance of county					99999
	016	000	2	999	9	Hardy	031	6		0000	
	017	000	2			Harrison	033	4		0000	
				004	6	Clarksburg					15628
				999	9	Balance of county					99999
	018	000	2	999	9	Jackson	035	5		0000	
	019	296	1	999	9	Jefferson	037	5		8840	
	020	050	1			Kanawha	039	3		1480	
				003	4	Charleston					14600
				011	6	St. Albans					71212
				012	6	South Charleston					75292
				999	9	Balance of county					99999
	021	000	2	999	9	Lewis	041	6		0000	
	022	000	2	999	9	Lincoln	043	6		0000	
	023	000	2	999	9	Logan	045	5		0000	
	024	000	2	999	9	McDowell	047	5		0000	
	025	000	2			Marion	049	4		0000	
				005	6	Fairmont					26452
				999	9	Balance of county					99999
	026	300	1			Marshall	051	5		9000	
				009	6	Moundsville					56020
				015	5	Wheeling, part					86452
				999	9	Balance of county					99999
	027	000	2	999	9	Mason	053	5		0000	
	028	000	2			Mercer	055	4		0000	
				002	6	Bluefield					08524
				999	9	Balance of county					99999
	029	066	1	999	9	Mineral	057	5		1900	
	030	000	2	999	9	Mingo	059	5		0000	
	031	000	2			Monongalia	061	4		0000	
				008	5	Morgantown					55756
				999	9	Balance of county					99999
	032	000	2	999	9	Monroe	063	6		0000	
	033	000	2	999	9	Morgan	065	6		0000	
	034	000	2	999	9	Nicholas	067	5		0000	
	035	300	1			Ohio	069	4		9000	
				015	5	Wheeling, part					86452
				999	9	Balance of county					99999
	036	000	2	999	9	Pendleton	071	6		0000	
	037	000	2	999	9	Pleasants	073	6		0000	
	038	000	2	999	9	Pocahontas	075	6		0000	
	039	000	2	999	9	Preston	077	5		0000	
	040	050	1	999	9	Putnam	079	5		1480	
	041	000	2			Raleigh	081	4		0000	
				001	6	Beckley					05332
				999	9	Balance of county					99999
	042	000	2	999	9	Randolph	083	5		0000	
	043	000	2	999	9	Ritchie	085	6		0000	
	044	000	2	999	9	Roane	087	6		0000	
	045	000	2	999	9	Summers	089	6		0000	
	046	000	2	999	9	Taylor	091	6		0000	
	047	000	2	999	9	Tucker	093	6		0000	

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Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
49						West Virginia	54				
	048	000	2	999	9	Tyler		095	6	0000	
	049	000	2	999	9	Upshur		097	6	0000	
	050	128	1			Wayne		099	5	3400	
				006	4	Huntington, part					39460
				999	9	Balance of county					99999
	051	000	2	999	9	Webster		101	6	0000	
	052	000	2	999	9	Wetzel		103	6	0000	
	053	000	2	999	9	Wirt		105	6	0000	
	054	211	1			Wood		107	4	6020	
				010	5	Parkersburg					62140
				013	6	Vienna					83500
				999	9	Balance of county					99999
	055	000	2	999	9	Wyoming		109	5	0000	

Vital Statistics Codes						FIPS Codes					
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
50						Wisconsin	55				
	001	000	2	999	9	Adams	001	6		0000	
	002	000	2	999	9	Ashland	003	6		0000	
	003	000	2	999	9	Barron	005	5		0000	
	004	000	2	999	9	Bayfield	007	6		0000	
	005	115	1			Brown	009	3		3080	
				001	6	Allouez village					01175
				003	6	Ashwaubenon village					03425
				011	6	De Pere					19775
				019	4	Green Bay					31000
				999	9	Balance of county					99999
	006	000	2	999	9	Buffalo	011	6		0000	
	007	000	2	999	9	Burnett	013	6		0000	
	008	013	1			Calumet	015	5		0460	
				002	4	Appleton, part					02375
				030	6	Menasha, part					50825
				999	9	Balance of county					99999
	009	082	1			Chippewa	017	4		2290	
				009	6	Chippewa Falls					14575
				012	4	Eau Claire, part					22300
				999	9	Balance of county					99999
	010	000	2	999	9	Clark	019	5		0000	
	011	000	2	999	9	Columbia	021	5		0000	
	012	000	2	999	9	Crawford	023	6		0000	
	013	173	1			Dane	025	2		4720	
				013	6	Fitchburg					25950
				026	3	Madison					48000
				034	6	Middleton					51575
				051	6	Sun Prairie					78600
				999	9	Balance of county					99999
	014	000	2			Dodge	027	4		0000	
				004	6	Beaver Dam					05900
				054	6	Watertown, part					83975
				999	9	Balance of county					99999
	015	000	2	999	9	Door	029	5		0000	
	016	080	1			Douglas	031	5		2240	
				052	5	Superior					78700
				999	9	Balance of county					99999
	017	000	2			Dunn	033	5		0000	
				032	6	Menomonie					51025
				999	9	Balance of county					99999
	018	082	1			Eau Claire	035	4		2290	
				012	4	Eau Claire, part					22300
				999	9	Balance of county					99999
	019	000	2	999	9	Florence	037	6		0000	
	020	000	2			Fond du Lac	039	4		0000	
				014	5	Fond du Lac					26275
				999	9	Balance of county					99999
	021	000	2	999	9	Forest	041	6		0000	
	022	000	2	999	9	Grant	043	5		0000	
	023	000	2			Green	045	5		0000	
				036	6	Monroe					53750
				999	9	Balance of county					99999
	024	000	2	999	9	Green Lake	047	6		0000	
	025	000	2	999	9	Iowa	049	6		0000	
	026	000	2	999	9	Iron	051	6		0000	
	027	000	2	999	9	Jackson	053	6		0000	
	028	000	2			Jefferson	055	4		0000	
				015	6	Fort Atkinson					26675
				054	6	Watertown, part					83975
				061	6	Whitewater, part					86925
				999	9	Balance of county					99999
	029	000	2	999	9	Juneau	057	6		0000	
	030	146	1			Kenosha	059	3		3800	
				024	4	Kenosha					39225
				044	6	Pleasant Prairie village					63300
				999	9	Balance of county					99999
	031	000	2	999	9	Kewaunee	061	6		0000	
	032	150	1			La Crosse	063	4		3870	
				025	4	La Crosse					40775
				042	6	Onalaska					59925
				999	9	Balance of county					99999
	033	000	2	999	9	Lafayette	065	6		0000	
	034	000	2	999	9	Langlade	067	6		0000	
	035	000	2	999	9	Lincoln	069	5		0000	

Vital Statistics Codes				FIPS Codes				Place		
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St		Cnty	P/S	P/MSA
50						Wisconsin	55			
	036	000	2			Manitowoc		071	4	0000
				027	5	Manitowoc				48500
				053	6	Two Rivers				81325
				999	9	Balance of county				99999
	037	298	1			Marathon		073	3	8940
				029	6	Marshfield, part				49675
				056	5	Wausau				84475
				999	9	Balance of county				99999
	038	000	2			Marinette		075	5	0000
				028	6	Marinette				49300
				999	9	Balance of county				99999
	039	000	2			Marquette		077	6	0000
	040	000	2			Menominee		078	6	0000
	041	182	1			Milwaukee		079	1	5080
				007	6	Brown Deer village				10375
				010	6	Cudahy				17975
				016	6	Franklin				27300
				018	6	Glendale				29400
				020	6	Greendale village				31125
				021	5	Greenfield				31175
				035	1	Milwaukee, part				53000
				040	6	Oak Creek				58800
				048	6	Shorewood village				73725
				049	6	South Milwaukee				75125
				057	5	Wauwatosa				84675
				058	4	West Allis				85300
				060	6	Whitefish Bay village				86700
				999	9	Balance of county				99999
	042	000	2			Monroe		081	5	0000
	043	000	2			Oconto		083	5	0000
	044	000	2			Oneida		085	5	0000
	045	013	1			Outagamie		087	3	0460
				002	4	Appleton, part				02375
				023	6	Kaukauna				38800
				999	9	Balance of county				99999
	046	182	1			Ozaukee		089	4	5080
				008	6	Cedarburg				13375
				033	6	Meguon				51150
				999	9	Balance of county				99999
	047	000	2			Pepin		091	6	0000
	048	183	1			Pierce		093	5	5120
				046	6	River Falls, part				68275
				999	9	Balance of county				99999
	049	000	2			Polk		095	5	0000
	050	000	2			Portage		097	4	0000
				050	6	Stevens Point				77200
				999	9	Balance of county				99999
	051	000	2			Price		099	6	0000
	052	225	1			Racine		101	3	6600
				045	4	Racine				66000
				999	9	Balance of county				99999
	053	000	2			Richland		103	6	0000
	054	138	1			Rock		105	3	3620
				005	5	Beloit				06500
				022	4	Janesville				37825
				999	9	Balance of county				99999
	055	000	2			Rusk		107	6	0000
	056	183	1			St. Croix		109	4	5120
				046	6	River Falls, part				68275
				999	9	Balance of county				99999
	057	000	2			Sauk		111	5	0000
	058	000	2			Sawyer		113	6	0000
	059	000	2			Shawano		115	5	0000
	060	262	1			Sheboygan		117	3	7620
				047	5	Sheboygan				72975
				999	9	Balance of county				99999
	061	000	2			Taylor		119	6	0000
	062	000	2			Trempealeau		121	5	0000
	063	000	2			Vernon		123	5	0000
	064	000	2			Vilas		125	6	0000
	065	000	2			Walworth		127	4	0000
				061	6	Whitewater, part				86925
				999	9	Balance of county				99999
	066	000	2			Washburn		129	6	0000

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
50						Wisconsin	55				
	067	182	1			Washington		131	4	5080	
				017	6	Germantown village					28875
				035	1	Milwaukee, part					53000
				059	6	West Bend					85350
				999	9	Balance of county					99999
	068	182	1			Waukesha		133	2	5080	
				006	5	Brookfield					10025
				031	5	Menomonee Falls village					51000
				035	1	Milwaukee, part					53000
				037	6	Muskego					55275
				039	5	New Berlin					56375
				041	6	Oconomowoc					59250
				055	4	Waukesha					84250
				999	9	Balance of county					99999
	069	000	2			Waupaca		135	5	0000	
	070	000	2			Waushara		137	6	0000	
	071	013	1			Winnebago		139	3	0460	
				002	4	Appleton, part					02375
				030	6	Menasha, part					50825
				038	6	Neenah					55750
				043	4	Oshkosh					60500
				999	9	Balance of county					99999
	072	000	2			Wood		141	4	0000	
				029	6	Marshfield, part					49675
				062	6	Wisconsin Rapids					88200
				999	9	Balance of county					99999

Vital Statistics Codes					FIPS Codes						
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
51						Wyoming	56				
	001	000	2			Albany		001	5	0000	
				006	5	Laramie					45050
				999	9	Balance of county					99999
	002	000	2			Big Horn		003	6	0000	
	003	000	2			Campbell		005	5	0000	
				004	6	Gillette					31855
				999	9	Balance of county					99999
	004	000	2			Carbon		007	6	0000	
	005	000	2			Converse		009	6	0000	
	006	000	2			Crook		011	6	0000	
	007	000	2			Fremont		013	5	0000	
	008	000	2			Goshen		015	6	0000	
	009	000	2			Hot Springs		017	6	0000	
	010	000	2			Johnson		019	6	0000	
	011	054	1			Laramie		021	4	1580	
				002	4	Cheyenne					13900
				999	9	Balance of county					99999
	012	000	2			Lincoln		023	6	0000	
	013	046	1			Natrona		025	4	1350	
				001	5	Casper					13150
				999	9	Balance of county					99999
	014	000	2			Niobrara		027	6	0000	
	015	000	2			Park		029	6	0000	
	016	000	2			Platte		031	6	0000	
	017	000	2			Sheridan		033	6	0000	
				008	6	Sheridan					69845
				999	9	Balance of county					99999
	018	000	2			Sublette		035	6	0000	
	019	000	2			Sweetwater		037	5	0000	
				005	6	Green River					33740
				007	6	Rock Springs					67235
				999	9	Balance of county					99999
	020	000	2			Teton		039	6	0000	
	021	000	2			Uinta		041	6	0000	
				003	6	Evanston					25620
				999	9	Balance of county					99999
	022	000	2			Washakie		043	6	0000	
	023	000	2			Weston		045	6	0000	

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Vital Statistics Codes							FIPS Codes				
St	Cnty	P/MSA	M/NM	City	P/S	Area Names	St	Cnty	P/S	P/MSA	Place
52	ZZZ	ZZZ	Z	ZZZ	Z	Puerto Rico	00	000	Z	0000	
53	ZZZ	ZZZ	Z	ZZZ	Z	Virgin Islands	00	000	Z	0000	
54	ZZZ	ZZZ	Z	ZZZ	Z	Guam	00	000	Z	0000	
55	ZZZ	ZZZ	Z	ZZZ	Z	Canada	00	000	Z	0000	
56	ZZZ	ZZZ	Z	ZZZ	Z	Cuba	00	000	Z	0000	
57	ZZZ	ZZZ	Z	ZZZ	Z	Mexico	00	000	Z	0000	
59	ZZZ	ZZZ	Z	ZZZ	Z	Remainder of World	00	000	Z	0000	
61	ZZZ	ZZZ	Z	ZZZ	Z	American Samoa	00	000	Z	0000	
62	ZZZ	ZZZ	Z	ZZZ	Z	Northern Marianas	00	000	Z	0000	

Vital Statistics Geographic Code Outline For Puerto Rico,
 Virgin Islands, Guam, American Samoa and Northern Marianas
 Effective with 1998 Data

Vital Statistics Codes					Area Names	FIPS Codes			
St	Cnty	P/MSA	M/NM	City		St	Cnty	P/MSA	Place
01	000	999	9	000	Alabama	01	000	0000	00000
02	000	999	9	000	Alaska	02	000	0000	00000
03	000	999	9	000	Arizona	04	000	0000	00000
04	000	999	9	000	Arkansas	05	000	0000	00000
05	000	999	9	000	California	06	000	0000	00000
06	000	999	9	000	Colorado	08	000	0000	00000
07	000	999	9	000	Connecticut	09	000	0000	00000
08	000	999	9	000	Delaware	10	000	0000	00000
09	000	999	9	000	District of Columbia	11	000	0000	00000
10	000	999	9	000	Florida	12	000	0000	00000
11	000	999	9	000	Georgia	13	000	0000	00000
12	000	999	9	000	Hawaii	15	000	0000	00000
13	000	999	9	000	Idaho	16	000	0000	00000
14	000	999	9	000	Illinois	17	000	0000	00000
15	000	999	9	000	Indiana	18	000	0000	00000
16	000	999	9	000	Iowa	19	000	0000	00000
17	000	999	9	000	Kansas	20	000	0000	00000
18	000	999	9	000	Kentucky	21	000	0000	00000
19	000	999	9	000	Louisiana	22	000	0000	00000
20	000	999	9	000	Maine	23	000	0000	00000
21	000	999	9	000	Maryland	24	000	0000	00000
22	000	999	9	000	Massachusetts	25	000	0000	00000
23	000	999	9	000	Michigan	26	000	0000	00000
24	000	999	9	000	Minnesota	27	000	0000	00000
25	000	999	9	000	Mississippi	28	000	0000	00000
26	000	999	9	000	Missouri	29	000	0000	00000
27	000	999	9	000	Montana	30	000	0000	00000
28	000	999	9	000	Nebraska	31	000	0000	00000
29	000	999	9	000	Nevada	32	000	0000	00000
30	000	999	9	000	New Hampshire	33	000	0000	00000
31	000	999	9	000	New Jersey	34	000	0000	00000
32	000	999	9	000	New Mexico	35	000	0000	00000
33	000	999	9	000	New York	36	000	0000	00000
34	000	999	9	000	North Carolina	37	000	0000	00000
35	000	999	9	000	North Dakota	38	000	0000	00000
36	000	999	9	000	Ohio	39	000	0000	00000

Vital Statistics Codes					Area Names	FIPS Codes			
St	Cnty	P/MSA	M/NM	City		St	Cnty	P/MSA	Place
37	000	999	9	000	Oklahoma	40	000	0000	00000
38	000	999	9	000	Oregon	41	000	0000	00000
39	000	999	9	000	Pennsylvania	42	000	0000	00000
40	000	999	9	000	Rhode Island	44	000	0000	00000
41	000	999	9	000	South Carolina	45	000	0000	00000
42	000	999	9	000	South Dakota	46	000	0000	00000
43	000	999	9	000	Tennessee	47	000	0000	00000
44	000	999	9	000	Texas	48	000	0000	00000
45	000	999	9	000	Utah	49	000	0000	00000
46	000	999	9	000	Vermont	50	000	0000	00000
47	000	999	9	000	Virginia	51	000	0000	00000
48	000	999	9	000	Washington	53	000	0000	00000
49	000	999	9	000	West Virginia	54	000	0000	00000
50	000	999	9	000	Wisconsin	55	000	0000	00000
51	000	999	9	000	Wyoming	56	000	0000	00000

Vital Statistics Codes				Area Names	FIPS Codes				
St	Cnty	P/MSA	M/NM		City	St	Cnty	P/MSA	Place
52					Puerto Rico	72			
	001	000	2	999	Adjuntas		001	0000	
	002	001	1	999	Aguada		003	0060	
	003	001	1	999	Aguadilla		005	0060	
	004	006	1	999	Aguas Buenas		007	7440	
	005	000	2	999	Aibonito		009	0000	
	006	004	1	999	Anasco		011	4840	
	007	002	1	999	Arecibo		013	0470	
	008	000	2	999	Arroyo		015	0000	
	009	006	1	999	Barceloneta		017	7440	
	010	000	2	999	Barranquitas		019	0000	
	011	006	1	999	Bayamon		021	7440	
	012	004	1	999	Cabo Rojo		023	4840	
	013	003	1	999	Caguas		025	1310	
	014	002	1	999	Camuy		027	0470	
	015	006	1	999	Canovanas		029	7440	
	016	006	1	999	Carolina		031	7440	
	017	006	1	999	Catano		033	7440	
	018	003	1	999	Cayey		035	1310	
	019	006	1	999	Ceiba		037	7440	
	020	000	2	999	Ciales		039	0000	
	021	003	1	999	Cidra		041	1310	
	022	000	2	999	Coamo		043	0000	
	023	006	1	999	Comerio		045	7440	
	024	006	1	999	Corozal		047	7440	
	025	000	2	999	Culebra		049	0000	
	026	006	1	999	Dorado		051	7440	
	027	006	1	999	Fajardo		053	7440	
	028	006	1	999	Florida		054	7440	
	029	000	2	999	Guanica		055	0000	
	030	000	2	999	Guayama		057	0000	
	031	005	1	999	Guayanilla		059	6360	
	032	006	1	999	Guaynabo		061	7440	
	033	003	1	999	Gurabo		063	1310	
	034	002	1	999	Hatillo		065	0470	
	035	004	1	999	Hormigueros		067	4840	
	036	006	1	999	Humacao		069	7440	
	037	000	2	999	Isabela		071	0000	
	038	000	2	999	Jayuya		073	0000	
	039	005	1	999	Juana Diaz		075	6360	
	040	006	1	999	Juncos		077	7440	
	041	000	2	999	Lajas		079	0000	
	042	000	2	999	Lares		081	0000	
	043	000	2	999	Las Marias		083	0000	
	044	006	1	999	Las Piedras		085	7440	
	045	006	1	999	Loiza		087	7440	
	046	006	1	999	Luquillo		089	7440	
	047	006	1	999	Manati		091	7440	
	048	000	2	999	Maricao		093	0000	
	049	000	2	999	Maunabo		095	0000	
	050	004	1	999	Mayaguez		097	4840	
	051	001	1	999	Moca		099	0060	
	052	006	1	999	Morovis		101	7440	
	053	006	1	999	Naguabo		103	7440	
	054	006	1	999	Naranjito		105	7440	
	055	000	2	999	Orocovis		107	0000	
	056	000	2	999	Patillas		109	0000	
	057	005	1	999	Penuelas		111	6360	
	058	005	1	999	Ponce		113	6360	
	059	000	2	999	Quebradillas		115	0000	
	060	000	2	999	Rincon		117	0000	
	061	006	1	999	Rio Grande		119	7440	
	062	004	1	999	Sabana Grande		121	4840	
	063	000	2	999	Salinas		123	0000	
	064	004	1	999	San German		125	4840	
	065	006	1	999	San Juan		127	7440	
	066	003	1	999	San Lorenzo		129	1310	
	067	000	2	999	San Sebastian		131	0000	
	068	000	2	999	Santa Isabel		133	0000	
	069	006	1	999	Toa Alta		135	7440	
	070	006	1	999	Toa Baja		137	7440	
	071	006	1	999	Trujillo Alto		139	7440	
	072	000	2	999	Utuado		141	0000	
	073	006	1	999	Vega Alta		143	7440	
	074	006	1	999	Vega Baja		145	7440	

Vital Statistics Geographic Code Outline For Puerto Rico,
 Virgin Islands, Guam, American Samoa and Northern Marianas
 Effective With 1998 Data

Vital Statistics Codes					Area Names	FIPS Codes			
St	Cnty	P/MSA	M/NM	City		St	Cnty	P/MSA	Place
52					Puerto Rico	72			
	075	000	2	999	Vieques		147	0000	
	076	005	1	999	Villalba		149	6360	
	077	006	1	999	Yabucoa		151	7440	
	078	005	1	999	Yauco		153	6360	
53					Virgin Islands	78			
	001	000	2	999	St. Croix		010	0000	
	002	000	2	999	St. John		020	0000	
	003	000	2		St. Thomas		030	0000	
				001	Charlotte Amalie				99999
				999	Balance of area				99999
54					Guam	66			
	000	000	2		Guam		010	0000	
				000	Guam				99999
55	ZZZ	ZZZ	Z	ZZZ	Canada	00	000	0000	00000
56	ZZZ	ZZZ	Z	ZZZ	Cuba	00	000	0000	00000
57	ZZZ	ZZZ	Z	ZZZ	Mexico	00	000	0000	00000
59	ZZZ	ZZZ	Z	ZZZ	Remainder of World	00	000	0000	00000
61					American Samoa	60			
	000	000	2		American Samoa		000	0000	
				000	American Samoa				99999
62					Northern Marianas	69			
	000	000	2		Northern Marianas		000	0000	
				000	Northern Marianas				99999

List of Primary Metropolitan Statistical Areas
and their Component Counties
For the United States and Puerto Rico

Primary and Metropolitan Statistical Areas Established in 1990 Page 2
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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
001	44		Abilene, TX, MSA	0040	
		221	Texas		48
			Taylor		441
002	36		Akron, OH, PMSA	0080	
		067	Ohio		39
		077	Portage		133
			Summit		153
003	11		Albany, GA, MSA	0120	
		047	Georgia		13
		088	Dougherty		095
			Lee		177
004	33		Albany-Schenectady-Troy, NY, MSA	0160	
			New York		36
		001	Albany		001
		027	Montgomery		057
		039	Rensselaer		083
		042	Saratoga		091
		043	Schenectady		093
		044	Schoharie		095
005	32		Albuquerque, NM, MSA	0200	
			New Mexico		35
		001	Bernalillo		001
		024	Sandoval		043
		033	Valencia		061
006	19		Alexandria, LA, MSA	0220	
			Louisiana		22
		040	Rapides		079
007	39		Allentown-Bethlehem-Easton, PA, MSA	0240	
			Pennsylvania		42
		013	Carbon		025
		039	Lehigh		077
		048	Northampton		095
008	39		Altoona, PA, MSA	0280	
			Pennsylvania		42
		007	Blair		013
009	44		Amarillo, TX, MSA	0320	
			Texas		48
		188	Potter		375
		191	Randall		381
010	02		Anchorage, AK, MSA	0380	
			Alaska		02
		003	Anchorage		020
011	23		Ann Arbor, MI, PMSA	0440	
			Michigan		26
		046	Lenawee		091
		047	Livingston		093
		081	Washtenaw		161
012	01		Anniston, AL, MSA	0450	
			Alabama		01
		008	Calhoun		015
013	50		Appleton-Oshkosh-Neenah, WI, MSA	0460	
			Wisconsin		55
		008	Calumet		015
		045	Outagamie		087
		071	Winnebago		139
014	34		Asheville, NC, MSA	0480	
			North Carolina		37
		011	Buncombe		021
		058	Madison		115

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
015	11		Athens, GA, MSA	0500	
		029	Georgia		13
		097	Clarke		059
		108	Madison		195
			Oconee		219
016	11		Atlanta, GA, MSA	0520	
		007	Georgia		13
		008	Barrow		013
		022	Bartow		015
		028	Carroll		045
		031	Cherokee		057
		033	Clayton		063
		038	Cobb		067
		044	Coweta		077
		048	De Kalb		089
		056	Douglas		097
		058	Fayette		113
		060	Forsyth		117
		067	Fulton		121
		075	Gwinnett		135
		107	Henry		151
		110	Newton		217
		112	Paulding		223
		122	Pickens		227
		126	Rockdale		247
		147	Spalding		255
			Walton		297
017	31		Atlantic-Cape May, NJ, PMSA	0560	
		001	New Jersey		34
		005	Atlantic		001
			Cape May		009
018	11		Augusta-Aiken, GA-SC, MSA	0600	
		036	Georgia		13
		094	Columbia		073
		121	McDuffie		189
			Richmond		245
	41		South Carolina		45
		002	Aiken		003
		019	Edgefield		037
019	44		Austin-San Marcos, TX, MSA	0640	
		011	Texas		48
		028	Bastrop		021
		105	Caldwell		055
		227	Hays		209
		246	Travis		453
			Williamson		491
020	05		Bakersfield, CA, MSA	0680	
		015	California		06
			Kern		029
021	21		Baltimore, MD, PMSA	0720	
		002	Maryland		24
		003	Anne Arundel		003
		004	Baltimore		005
		007	Baltimore city		510
		013	Carroll		013
		014	Harford		025
		018	Howard		027
			Queen Anne's		035
022	20		Bangor, ME, NECMA	0733	
		010	Maine		23
			Penobscot		019
023	22		Barnstable-Yarmouth, MA, NECMA	0743	
		001	Massachusetts		25
			Barnstable		001

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
024	19		Baton Rouge, LA, MSA	0760		
			Louisiana		22	
		003	Ascension			005
		017	East Baton Rouge			033
		032	Livingston			063
		061	West Baton Rouge			121
025	44		Beaumont-Port Arthur, TX, MSA	0840		
			Texas		48	
		100	Hardin			199
		123	Jefferson			245
		181	Orange			361
026	48		Bellingham, WA, MSA	0860		
			Washington		53	
		037	Whatcom			073
027	23		Benton Harbor, MI, MSA	0870		
			Michigan		26	
		011	Berrien			021
028	31		Bergen-Passaic, NJ, PMSA	0875		
			New Jersey		34	
		002	Bergen			003
		016	Passaic			031
029	27		Billings, MT, MSA	0880		
			Montana		30	
		056	Yellowstone			111
030	25		Biloxi-Gulfport-Pascagoula, MS, MSA	0920		
			Mississippi		28	
		023	Hancock			045
		024	Harrison			047
		030	Jackson			059
031	33		Binghamton, NY, MSA	0960		
			New York		36	
		003	Broome			007
		050	Tioga			107
032	01		Birmingham, AL, MSA	1000		
			Alabama		01	
		005	Blount			009
		037	Jefferson			073
		058	St. Clair			115
		059	Shelby			117
033	35		Bismarck, ND, MSA	1010		
			North Dakota		38	
		008	Burleigh			015
		030	Morton			059
034	15		Bloomington, IN, MSA	1020		
			Indiana		18	
		053	Monroe			105
035	14		Bloomington-Normal, IL, MSA	1040		
			Illinois		17	
		057	McLean			113
036	13		Boise City, ID, MSA	1080		
			Idaho		16	
		001	Ada			001
		014	Canyon			027

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Vital Statistics Codes			P/MSA Name and County Components	FIPS	Codes	
P/MSA	State	County		P/MSA	State	Cnty
037	22		Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH Massachusetts	1123	25	
		003	Bristol			005
		005	Essex			009
		009	Middlesex			017
		011	Norfolk			021
		012	Plymouth			023
		013	Suffolk			025
		014	Worcester			027
	30		New Hampshire		33	
		006	Hillsborough			011
		008	Rockingham			015
		009	Strafford			017
038	06		Boulder-Longmont, CO, PMSA Colorado	1125	08	
		007	Boulder			013
039	44		Brazoria, TX, PMSA Texas	1145	48	
		020	Brazoria			039
040	48		Bremerton, WA, PMSA Washington	1150	53	
		018	Kitsap			035
041	44		Brownsville-Harlingen-San Benito, TX, MSA Texas	1240	48	
		031	Cameron			061
042	44		Bryan-College Station, TX, MSA Texas	1260	48	
		021	Brazos			041
043	33		Buffalo-Niagara Falls, NY, MSA New York	1280	36	
		014	Erie			029
		030	Niagara			063
044	46		Burlington, VT, NECMA Vermont	1303	50	
		004	Chittenden			007
		006	Franklin			011
		007	Grand Isle			013
045	36		Canton-Massillon, OH, MSA Ohio	1320	39	
		010	Carrroll			019
		076	Stark			151
046	51		Casper, WY, MSA Wyoming	1350	56	
		013	Natrona			025
047	16		Cedar Rapids, IA, MSA Iowa	1360	19	
		057	Linn			113
048	14		Champaign-Urbana, IL, MSA Illinois	1400	17	
		010	Champaign			019
049	41		Charleston-North Charleston, SC, MSA South Carolina	1440	45	
		008	Berkeley			015
		010	Charleston			019
		018	Dorchester			035
050	49		Charleston, WV, MSA West Virginia	1480	54	
		020	Kanawha			039
		040	Putnam			079

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
051	34		Charlotte-Gastonia-Rock Hill, NC-SC, MSA	1520	
			North Carolina		37
		013	Cabarrus		025
		036	Gaston		071
		055	Lincoln		109
		060	Mecklenburg		119
		080	Rowan		159
		090	Union		179
	41		South Carolina		45
		046	York		091
052			Charlottesville, VA, MSA	1540	
	47		Virginia		51
		002	Albemarle		003
		025	Charlottesville city		540
		045	Fluvanna		065
		055	Greene		079
053			Chattanooga, TN-GA, MSA	1560	
	11		Georgia		13
		023	Catoosa		047
		041	Dade		083
		146	Walker		295
	43		Tennessee		47
		033	Hamilton		065
		058	Marion		115
054			Cheyenne, WY, MSA	1580	
	51		Wyoming		56
		011	Laramie		021
055			Chicago, IL, PMSA	1600	
	14		Illinois		17
		016	Cook		031
		019	De Kalb		037
		022	Du Page		043
		032	Grundy		063
		045	Kane		089
		047	Kendall		093
		049	Lake		097
		056	McHenry		111
		099	Will		197
056			Chico-Paradise, CA, MSA	1620	
	05		California		06
		004	Butte		007
057			Cincinnati, OH-KY-IN, PMSA	1640	
	15		Indiana		18
		015	Dearborn		029
		058	Ohio		115
	18		Kentucky		21
		008	Boone		015
		019	Campbell		037
		039	Gallatin		077
		041	Grant		081
		059	Kenton		117
		096	Pendleton		191
	36		Ohio		39
		008	Brown		015
		013	Clermont		025
		031	Hamilton		061
		083	Warren		165
058			Clarksville-Hopkinsville, TN-KY, MSA	1660	
	18		Kentucky		21
		024	Christian		047
	43		Tennessee		47
		063	Montgomery		125

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
059	36		Cleveland-Lorain-Elyria, OH, PMSA	1680	
			Ohio		39
		004	Ashtabula		007
		018	Cuyahoga		035
		028	Geauga		055
		043	Lake		085
		047	Lorain		093
		052	Medina		103
060	06		Colorado Springs, CO, MSA	1720	
			Colorado		08
		021	El Paso		041
061	26		Columbia, MO, MSA	1740	
			Missouri		29
		010	Boone		019
062	41		Columbia, SC, MSA	1760	
			South Carolina		45
		032	Lexington		063
		040	Richland		079
063	01		Columbus, GA-AL, MSA	1800	
			Alabama		01
		057	Russell		113
		11	Georgia		13
		026	Chattahoochee		053
		072	Harris		145
		106	Muscogee		215
064	36		Columbus, OH, MSA	1840	
			Ohio		39
		021	Delaware		041
		023	Fairfield		045
		025	Franklin		049
		045	Licking		089
		049	Madison		097
		065	Pickaway		129
065	44		Corpus Christi, TX, MSA	1880	
			Texas		48
		178	Nueces		355
		205	San Patricio		409
066	21		Cumberland, MD-WV, MSA	1900	
			Maryland		24
		001	Allegany		001
		49	West Virginia		54
		029	Mineral		057
067	44		Dallas, TX, PMSA	1920	
			Texas		48
		043	Collin		085
		057	Dallas		113
		061	Denton		121
		070	Ellis		139
		107	Henderson		213
		116	Hunt		231
		129	Kaufman		257
		199	Rockwall		397
068	47		Danville, VA, MSA	1950	
			Virginia		51
		035	Danville city		590
		097	Pittsylvania		143
069	14		Davenport-Moline-Rock Island, IA-IL, MSA	1960	
			Illinois		17
		037	Henry		073
		081	Rock Island		161
		16	Iowa		19
		082	Scott		163

Primary and Metropolitan Statistical Areas Established in 1990 Page 8
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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
070	36		Dayton-Springfield, OH, MSA	2000	39	
		012	Ohio			
			Clark			023
		029	Greene			057
		055	Miami			109
		057	Montgomery			113
071	10		Daytona Beach, FL, MSA	2020	12	
			Florida			
		018	Flagler			035
		064	Volusia			127
072	01		Decatur, AL, MSA	2030	01	
			Alabama			
		040	Lawrence			079
		052	Morgan			103
073	14		Decatur, IL, MSA	2040	17	
			Illinois			
		058	Macon			115
074	06		Denver, CO, PMSA	2080	08	
			Colorado			
		001	Adams			001
		003	Arapahoe			005
		016	Denver			031
		018	Douglas			035
		030	Jefferson			059
075	16		Des Moines, IA, MSA	2120	19	
			Iowa			
		025	Dallas			049
		077	Polk			153
		091	Warren			181
076	23		Detroit, MI, PMSA	2160	26	
			Michigan			
		044	Lapeer			087
		050	Macomb			099
		058	Monroe			115
		063	Oakland			125
		074	St. Clair			147
		082	Wayne			163
077	01		Dothan, AL, MSA	2180	01	
			Alabama			
		023	Dale			045
		035	Houston			069
078	08		Dover, DE, MSA	2190	10	
			Delaware			
		001	Kent			001
079	16		Dubuque, IA, MSA	2200	19	
			Iowa			
		031	Dubuque			061
080	24		Duluth-Superior, MN-WI, MSA	2240	27	
			Minnesota			
		069	St. Louis			137
			Wisconsin			
		016	Douglas			031
081	33		Dutchess County, NY, PMSA	2281	36	
			New York			
		013	Dutchess			027
082	50		Eau Claire, WI, MSA	2290	55	
			Wisconsin			
		009	Chippewa			017
		018	Eau Claire			035

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
083	44		El Paso, TX, MSA	2320		
		071	Texas El Paso		48	141
084	15		Elkhart-Goshen, IN, MSA	2330		
		020	Indiana Elkhart		18	039
085	33		Elmira, NY, MSA	2335		
		007	New York Chemung		36	015
086	37		Enid, OK, MSA	2340		
		024	Oklahoma Garfield		40	047
087	39		Erie, PA, MSA	2360		
		025	Pennsylvania Erie		42	049
088	38		Eugene-Springfield, OR, MSA	2400		
		020	Oregon Lane		41	039
089	15		Evansville-Henderson, IN-KY, MSA	2440		
		065	Indiana Posey		18	129
		082	Vanderburgh			163
		087	Warrick			173
	18		Kentucky Henderson		21	101
090	24		Fargo-Moorhead, ND-MN, MSA	2520		
		014	Minnesota Clay		27	027
	35		North Dakota Cass		38	017
091	34		Fayetteville, NC, MSA	2560		
		026	North Carolina Cumberland		37	051
092	04		Fayetteville-Springdale-Rogers, AR, MSA	2580		
		004	Arkansas Benton		05	007
		072	Washington			143
093	23		Flint, MI, PMSA	2640		
		025	Michigan Genesee		26	049
094	01		Florence, AL, MSA	2650		
		017	Alabama Colbert		01	033
		039	Lauderdale			077
095	41		Florence, SC, MSA	2655		
		021	South Carolina Florence		45	041
096	06		Fort Collins-Loveland, CO, MSA	2670		
		035	Colorado Larimer		08	069
097	10		Fort Lauderdale, FL, PMSA	2680		
		006	Florida Broward		12	011
098	10		Fort Myers-Cape Coral, FL, MSA	2700		
		036	Florida Lee		12	071

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
099	10		Fort Pierce-Port St. Lucie, FL, MSA	2710	
		043	Florida		12
		056	Martin		085
100			St. Lucie		111
	04		Fort Smith, AR-OK, MSA	2720	
		017	Arkansas		05
		066	Crawford		033
	37		Sebastian		131
		068	Oklahoma		40
101			Sequoyah		135
	10		Fort Walton Beach, FL, MSA	2750	
		046	Florida		12
102			Okaloosa		091
	15		Fort Wayne, IN, MSA	2760	
		001	Indiana		18
		002	Adams		001
		017	Allen		003
		035	De Kalb		033
		090	Huntington		069
		092	Wells		179
103			Whitley		183
	44		Fort Worth-Arlington, TX, PMSA	2800	
		111	Texas		48
		126	Hood		221
		184	Johnson		251
		220	Parker		367
104			Tarrant		439
	05		Fresno, CA, MSA	2840	
		010	California		06
		020	Fresno		019
105			Madera		039
	01		Gadsden, AL, MSA	2880	
		028	Alabama		01
106			Etowah		055
	10		Gainesville, FL, MSA	2900	
		001	Florida		12
107			Alachua		001
	44		Galveston-Texas City, TX, PMSA	2920	
		084	Texas		48
108			Galveston		167
	15		Gary, IN, PMSA	2960	
		045	Indiana		18
		064	Lake		089
109			Porter		127
	33		Glens Falls, NY, MSA	2975	
		053	New York		36
		054	Warren		113
110			Washington		115
	34		Goldsboro, NC, MSA	2980	
		096	North Carolina		37
111			Wayne		191
	24		Grand Forks, ND-MN, MSA	2985	
		060	Minnesota		27
	35		Polk		119
		018	North Dakota		38
			Grand Forks		035

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
112	23		Grand Rapids-Muskegon-Holland, MI, MSA	3000	
			Michigan		26
		003	Allegan		
		041	Kent		005
		061	Muskegon		081
		070	Ottawa		121
					139
113	27		Great Falls, MT, MSA	3040	
			Montana		30
		007	Cascade		013
114	06		Greeley, CO, PMSA	3060	
			Colorado		08
		062	Weld		123
115	50		Green Bay, WI, MSA	3080	
			Wisconsin		55
		005	Brown		009
116	34		Greensboro--Winston-Salem--High Point, NC, MSA	3120	
			North Carolina		37
		001	Alamance		001
		029	Davidson		057
		030	Davie		059
		034	Forsyth		067
		041	Guilford		081
		076	Randolph		151
		085	Stokes		169
		099	Yadkin		197
117	34		Greenville, NC, MSA	3150	
			North Carolina		37
		074	Pitt		147
118	41		Greenville-Spartanburg-Anderson, SC, MSA	3160	
			South Carolina		45
		004	Anderson		007
		011	Cherokee		021
		023	Greenville		045
		039	Pickens		077
		042	Spartanburg		083
119	21		Hagerstown, MD, PMSA	3180	
			Maryland		24
		022	Washington		043
120	36		Hamilton-Middletown, OH, PMSA	3200	
			Ohio		39
		009	Butler		017
121	39		Harrisburg-Lebanon-Carlisle, PA, MSA	3240	
			Pennsylvania		42
		021	Cumberland		041
		022	Dauphin		043
		038	Lebanon		075
		050	Perry		099
122	07		Hartford, CT, NECMA	3283	
			Connecticut		09
		002	Hartford		003
		004	Middlesex		007
		007	Tolland		013
123	25		Hattiesburg, MS, MSA	3285	
			Mississippi		28
		018	Forrest		035
		037	Lamar		073
124	34		Hickory-Morganton, NC, MSA	3290	
			North Carolina		37
		002	Alexander		003
		012	Burke		023
		014	Caldwell		027
		018	Catawba		035

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Vital Statistics Codes			P/MSA Name and County Components	FIPS	Codes	
P/MSA	State	County		P/MSA	State	Cnty
125	12		Honolulu, HI, MSA	3320		
		002	Hawaii Honolulu		15	003
126	19		Houma, LA, MSA	3350		
		029	Louisiana Lafourche		22	057
		055	Terrebonne			109
127	44		Houston, TX, PMSA	3360		
			Texas		48	
		036	Chambers			071
		079	Fort Bend			157
		101	Harris			201
		146	Liberty			291
		170	Montgomery			339
		237	Waller			473
128	18		Huntington-Ashland, WV-KY-OH, MSA	3400		
			Kentucky		21	
		010	Boyd			019
		022	Carter			043
		045	Greenup			089
	36		Ohio		39	
		044	Lawrence			087
	49		West Virginia		54	
		006	Cabell			011
		050	Wayne			099
129	01		Huntsville, AL, MSA	3440		
			Alabama		01	
		042	Limestone			083
		045	Madison			089
130	15		Indianapolis, IN, MSA	3480		
			Indiana		18	
		006	Boone			011
		029	Hamilton			057
		030	Hancock			059
		032	Hendricks			063
		041	Johnson			081
		048	Madison			095
		049	Marion			097
		055	Morgan			109
		073	Shelby			145
131	16		Iowa City, IA, MSA	3500		
			Iowa		19	
		052	Johnson			103
132	23		Jackson, MI, MSA	3520		
			Michigan		26	
		038	Jackson			075
133	25		Jackson, MS, MSA	3560		
			Mississippi		28	
		025	Hinds			049
		045	Madison			089
		061	Rankin			121
134	43		Jackson, TN, MSA	3580		
			Tennessee		47	
		057	Madison			113
135	10		Jacksonville, FL, MSA	3600		
			Florida		12	
		010	Clay			019
		016	Duval			031
		045	Nassau			089
		055	St. Johns			109
136	34		Jacksonville, NC, MSA	3605		
			North Carolina		37	
		067	Onslow			133

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
137	33		Jamestown, NY, MSA	3610		
		006	New York Chautauqua		36	013
138	50		Janesville-Beloit, WI, MSA	3620		
		054	Wisconsin Rock		55	105
139	31		Jersey City, NJ, PMSA	3640		
		009	New Jersey Hudson		34	017
140	43		Johnson City-Kingsport-Bristol, TN-VA, MSA	3660		
		010	Tennessee Carter		47	019
		037	Hawkins			073
		082	Sullivan			163
		086	Unicoi			171
		090	Washington			179
	47		Virginia		51	
		015	Bristol city			520
		115	Scott			169
		129	Washington			191
141	39		Johnstown, PA, MSA	3680		
		011	Pennsylvania Cambria		42	021
		056	Somerset			111
142	26		Joplin, MO, MSA	3710		
		049	Missouri Jasper		29	097
		073	Newton			145
143	23		Kalamazoo-Battle Creek, MI, MSA	3720		
		013	Michigan Calhoun		26	025
		039	Kalamazoo			077
		080	Van Buren			159
144	14		Kankakee, IL, PMSA	3740		
		046	Illinois Kankakee		17	091
145	17		Kansas City, MO-KS, MSA	3760		
		046	Kansas Johnson		20	091
		052	Leavenworth			103
		061	Miami			121
		105	Wyandotte			209
	26		Missouri		29	
		019	Cass			037
		024	Clay			047
		025	Clinton			049
		048	Jackson			095
		054	Lafayette			107
		083	Platte			165
		089	Ray			177
146	50		Kenosha, WI, PMSA	3800		
		030	Wisconsin Kenosha		55	059
147	44		Killeen-Temple, TX, MSA	3810		
		014	Texas Bell		48	027
		050	Coryell			099

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
148	43		Knoxville, TN, MSA	3840	
			Tennessee		47
		001	Anderson		001
		005	Blount		009
		047	Knox		093
		053	Loudon		105
		078	Sevier		155
		087	Union		173
149	15		Kokomo, IN, MSA	3850	
			Indiana		18
		034	Howard		067
		080	Tipton		159
150	24		La Crosse, WI-MN, MSA	3870	
			Minnesota		27
		028	Houston		055
		50	Wisconsin		55
		032	La Crosse		063
151	19		Lafayette, LA, MSA	3880	
			Louisiana		22
		001	Acadia		001
		028	Lafayette		055
		049	St. Landry		097
		050	St. Martin		099
152	15		Lafayette, IN, MSA	3920	
			Indiana		18
		012	Clinton		023
		079	Tippecanoe		157
153	19		Lake Charles, LA, MSA	3960	
			Louisiana		22
		010	Calcasieu		019
154	10		Lakeland-Winter Haven, FL, MSA	3980	
			Florida		12
		053	Polk		105
155	39		Lancaster, PA, MSA	4000	
			Pennsylvania		42
		036	Lancaster		071
156	23		Lansing-East Lansing, MI, MSA	4040	
			Michigan		26
		019	Clinton		037
		023	Eaton		045
		033	Ingham		065
157	44		Laredo, TX, MSA	4080	
			Texas		48
		240	Webb		479
158	32		Las Cruces, NM, MSA	4100	
			New Mexico		35
		008	Dona Ana		013
159	03		Las Vegas, NV-AZ, MSA	4120	
			Arizona		04
		009	Mohave		015
		29	Nevada		32
		003	Clark		003
		013	Nye		023
160	17		Lawrence, KS, MSA	4150	
			Kansas		20
		023	Douglas		045
161	37		Lawton, OK, MSA	4200	
			Oklahoma		40
		016	Comanche		031

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
162	20		Lewiston-Auburn, ME, NECMA	4243		
			Maine		23	
		001	Androscoggin			001
163	18		Lexington, KY, MSA	4280		
			Kentucky		21	
		009	Bourbon			017
		025	Clark			049
		034	Fayette			067
		057	Jessamine			113
		076	Madison			151
		105	Scott			209
		120	Woodford			239
164	36		Lima, OH, MSA	4320		
			Ohio		39	
		002	Allen			003
		006	Auglaize			011
165	28		Lincoln, NE, MSA	4360		
			Nebraska		31	
		055	Lancaster			109
166	04		Little Rock-North Little Rock, AR, MSA	4400		
			Arkansas		05	
		023	Faulkner			045
		043	Lonoke			085
		060	Pulaski			119
		063	Saline			125
167	44		Longview-Marshall, TX, MSA	4420		
			Texas		48	
		092	Gregg			183
		102	Harrison			203
		230	Upshur			459
168	05		Los Angeles-Long Beach, CA, PMSA	4480		
			California		06	
		019	Los Angeles			037
169	15		Louisville, KY-IN, MSA	4520		
			Indiana		18	
		010	Clark			019
		022	Floyd			043
		031	Harrison			061
		072	Scott			143
			Kentucky		21	
		015	Bullitt			029
		056	Jefferson			111
		093	Oldham			185
170	44		Lubbock, TX, MSA	4600		
			Texas		48	
		152	Lubbock			303
171	47		Lynchburg, VA, MSA	4640		
			Virginia		51	
		006	Amherst			009
		011	Bedford			019
		012	Bedford city			515
		020	Campbell			031
		076	Lynchburg city			680
172	11		Macon, GA, MSA	4680		
			Georgia		13	
		011	Bibb			021
		076	Houston			153
		084	Jones			169
		111	Peach			225
		143	Twiggs			289
173	50		Madison, WI, MSA	4720		
			Wisconsin		55	
		013	Dane			025

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
174	36		Mansfield, OH, MSA	4800		
			Ohio		39	
		017	Crawford			033
		070	Richland			139
175	44		McAllen-Edinburg-Mission, TX, MSA	4880		
			Texas		48	
		108	Hidalgo			215
176	38		Medford-Ashland, OR, MSA	4890		
			Oregon		41	
		015	Jackson			029
177	10		Melbourne-Titusville-Palm Bay, FL, MSA	4900		
			Florida		12	
		005	Brevard			009
178	04		Memphis, TN-AR-MS, MSA	4920		
			Arkansas		05	
		018	Crittenden			035
		25	Mississippi		28	
		017	De Soto			033
		43	Tennessee		47	
		024	Fayette			047
		079	Shelby			157
		084	Tipton			167
179	05		Merced, CA, MSA	4940		
			California		06	
		024	Merced			047
180	10		Miami, FL, PMSA	5000		
			Florida		12	
		013	Dade			025
181	31		Middlesex-Somerset-Hunterdon, NJ, PMSA	5015		
			New Jersey		34	
		010	Hunterdon			019
		012	Middlesex			023
		018	Somerset			035
182	50		Milwaukee-Waukesha, WI, PMSA	5080		
			Wisconsin		55	
		041	Milwaukee			079
		046	Ozaukee			089
		067	Washington			131
		068	Waukesha			133
183	24		Minneapolis-St. Paul, MN-WI, MSA	5120		
			Minnesota		27	
		002	Anoka			003
		010	Carver			019
		013	Chisago			025
		019	Dakota			037
		027	Hennepin			053
		030	Isanti			059
		062	Ramsey			123
		070	Scott			139
		071	Sherburne			141
		082	Washington			163
		086	Wright			171
			Wisconsin		55	
		048	Pierce			093
		056	St. Croix			109
184	01		Mobile, AL, MSA	5160		
			Alabama		01	
		002	Baldwin			003
		049	Mobile			097
185	05		Modesto, CA, MSA	5170		
			California		06	
		050	Stanislaus			099

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
186	31		Monmouth-Ocean, NJ, PMSA	5190		
			New Jersey		34	
		013	Monmouth			025
		015	Ocean			029
187	19		Monroe, LA, MSA	5200		
			Louisiana		22	
		037	Ouachita			073
188	01		Montgomery, AL, MSA	5240		
			Alabama		01	
		001	Autauga			001
		026	Elmore			051
		051	Montgomery			101
189	15		Muncie, IN, MSA	5280		
			Indiana		18	
		018	Delaware			035
190	41		Myrtle Beach, SC, MSA	5330		
			South Carolina		45	
		026	Horry			051
191	10		Naples, FL, MSA	5345		
			Florida		12	
		011	Collier			021
192	43		Nashville, TN, MSA	5360		
			Tennessee		47	
		011	Cheatham			021
		019	Davidson			037
		022	Dickson			043
		074	Robertson			147
		075	Rutherford			149
		083	Sumner			165
		094	Williamson			187
		095	Wilson			189
193	33		Nassau-Suffolk, NY, PMSA	5380		
			New York		36	
		028	Nassau			059
		048	Suffolk			103
194	07		New Haven-Bridgeport-Stamford-Danbury-Waterbury, CT, NECMA	5483		
			Connecticut		09	
		001	Fairfield			001
		005	New Haven			009
195	07		New London-Norwich, CT, NECMA	5523		
			Connecticut		09	
		006	New London			011
196	19		New Orleans, LA, MSA	5560		
			Louisiana		22	
		026	Jefferson			051
		036	Orleans			071
		038	Plaquemines			075
		044	St. Bernard			087
		045	St. Charles			089
		047	St. James			093
		048	St. John the Baptist			095
		052	St. Tammany			103
197	33		New York, NY, PMSA	5600		
			New York		36	
		029	New York city			005
		038	Putnam			079
		040	Rockland			087
		056	Westchester			119

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
198	31		Newark, NJ, PMSA	5640	
			New Jersey		34
		007	Essex		013
		014	Morris		027
		019	Sussex		037
		020	Union		039
		021	Warren		041
199			Newburgh, NY-PA, PMSA	5660	
	33		New York		36
		034	Orange		071
	39		Pennsylvania		42
		052	Pike		103
200			Norfolk-Virginia Beach-Newport News, VA-NC, MSA	5720	
	34		North Carolina		37
		027	Currituck		053
	47		Virginia		51
		026	Chesapeake city		550
		052	Gloucester		073
		058	Hampton city		650
		065	Isle of Wight		093
		066	James City		095
		081	Mathews		115
		087	Newport News city		700
		088	Norfolk city		710
		098	Poquoson city		735
		099	Portsmouth city		740
		123	Suffolk city		800
		127	Virginia Beach city		810
		132	Williamsburg city		830
		136	York		199
201			Oakland, CA, PMSA	5775	
	05		California		06
		001	Alameda		001
		007	Contra Costa		013
202			Ocala, FL, MSA	5790	
	10		Florida		12
		042	Marion		083
203			Odessa-Midland, TX, MSA	5800	
	44		Texas		48
		068	Ector		135
		165	Midland		329
204			Oklahoma City, OK, MSA	5880	
	37		Oklahoma		40
		009	Canadian		017
		014	Cleveland		027
		042	Logan		083
		044	McClain		087
		055	Oklahoma		109
		063	Pottawatomie		125
205			Olympia, WA, PMSA	5910	
	48		Washington		53
		034	Thurston		067
206			Omaha, NE-IA, MSA	5920	
	16		Iowa		19
		078	Pottawattamie		155
	28		Nebraska		31
		013	Cass		025
		028	Douglas		055
		077	Sarpy		153
		089	Washington		177
207			Orange County, CA, PMSA	5945	
	05		California		06
		030	Orange		059

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
208	10		Orlando, FL, MSA	5960		
			Florida		12	
		035	Lake			069
		048	Orange			095
		049	Osceola			097
		059	Seminole			117
209	18		Owensboro, KY, MSA	5990		
			Kentucky		21	
		030	Daviess			059
210	10		Panama City, FL, MSA	6015		
			Florida		12	
		003	Bay			005
211	36		Parkersburg-Marietta, WV-OH, MSA	6020		
			Ohio		39	
		084	Washington			167
		49	West Virginia		54	
		054	Wood			107
212	10		Pensacola, FL, MSA	6080		
			Florida		12	
		017	Escambia			033
		057	Santa Rosa			113
213	14		Peoria-Pekin, IL, MSA	6120		
			Illinois		17	
		072	Peoria			143
		090	Tazewell			179
		102	Woodford			203
214	31		Philadelphia, PA-NJ, PMSA	6160		
			New Jersey		34	
		003	Burlington			005
		004	Camden			007
		008	Gloucester			015
		017	Salem			033
			Pennsylvania		42	
		009	Bucks			017
		015	Chester			029
		023	Delaware			045
		046	Montgomery			091
		051	Philadelphia			101
215	03		Phoenix-Mesa, AZ, MSA	6200		
			Arizona		04	
		008	Maricopa			013
		012	Pinal			021
216	04		Pine Bluff, AR, MSA	6240		
			Arkansas		05	
		035	Jefferson			069
217	39		Pittsburgh, PA, MSA	6280		
			Pennsylvania		42	
		002	Allegheny			003
		004	Beaver			007
		010	Butler			019
		026	Fayette			051
		063	Washington			125
		065	Westmoreland			129
218	22		Pittsfield, MA, NECMA	6323		
			Massachusetts		25	
		002	Berkshire			003
219	20		Portland, ME, NECMA	6403		
			Maine		23	
		003	Cumberland			005

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
220	38		Portland-Vancouver, OR-WA, PMSA	6440	
			Oregon		41
		003	Clackamas		005
		005	Columbia		009
		026	Multnomah		051
		034	Washington		067
		036	Yamhill		071
	48		Washington		53
		006	Clark		011
221	40		Providence-Warwick-Pawtucket, RI, NECMA	6483	
			Rhode Island		44
		001	Bristol		001
		002	Kent		003
		004	Providence		007
		005	Washington		009
222	45		Provo-Orem, UT, MSA	6520	
			Utah		49
		025	Utah		049
223	06		Pueblo, CO, MSA	6560	
			Colorado		08
		051	Pueblo		101
224	10		Punta Gorda, FL, MSA	6580	
			Florida		12
		008	Charlotte		015
225	50		Racine, WI, PMSA	6600	
			Wisconsin		55
		052	Racine		101
226	34		Raleigh-Durham-Chapel Hill, NC, MSA	6640	
			North Carolina		37
		019	Chatham		037
		032	Durham		063
		035	Franklin		069
		051	Johnston		101
		068	Orange		135
		092	Wake		183
227	42		Rapid City, SD, MSA	6660	
			South Dakota		46
		051	Pennington		103
228	39		Reading, PA, MSA	6680	
			Pennsylvania		42
		006	Berks		011
229	05		Redding, CA, MSA	6690	
			California		06
		045	Shasta		089
230	29		Reno, NV, MSA	6720	
			Nevada		32
		016	Washoe		031
231	48		Richland-Kennewick-Pasco, WA, MSA	6740	
			Washington		53
		003	Benton		005
		011	Franklin		021

Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
232	47		Richmond-Petersburg, VA, MSA	6760	
			Virginia		51
		023	Charles City		036
		027	Chesterfield		041
		030	Colonial Heights city		570
		037	Dinwiddie		053
		053	Goochland		075
		059	Hanover		085
		061	Henrico		087
		064	Hopewell city		670
		086	New Kent		127
		096	Petersburg city		730
		100	Powhatan		145
		102	Prince George		149
		108	Richmond city		760
233	05		Riverside-San Bernardino, CA, PMSA	6780	
			California		06
		033	Riverside		065
		036	San Bernardino		071
234	47		Roanoke, VA, MSA	6800	
			Virginia		51
		014	Botetourt		023
		109	Roanoke		161
		110	Roanoke city		770
		114	Salem city		775
235	24		Rochester, MN, MSA	6820	
			Minnesota		27
		055	Olmsted		109
236	33		Rochester, NY, MSA	6840	
			New York		36
		018	Genesee		037
		024	Livingston		051
		026	Monroe		055
		033	Ontario		069
		035	Orleans		073
		055	Wayne		117
237	14		Rockford, IL, MSA	6880	
			Illinois		17
		004	Boone		007
		071	Ogle		141
		101	Winnebago		201
238	34		Rocky Mount, NC, MSA	6895	
			North Carolina		37
		033	Edgecombe		065
		064	Nash		127
239	05		Sacramento, CA, PMSA	6920	
			California		06
		009	El Dorado		017
		031	Placer		061
		034	Sacramento		067
240	23		Saginaw-Bay City-Midland, MI, MSA	6960	
			Michigan		26
		009	Bay		017
		056	Midland		111
		073	Saginaw		145
241	24		St. Cloud, MN, MSA	6980	
			Minnesota		27
		005	Benton		009
		073	Stearns		145
242	26		St. Joseph, MO, MSA	7000	
			Missouri		29
		002	Andrew		003
		011	Buchanan		021

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
243	14		St. Louis, MO-IL, MSA	7040	
			Illinois		17
		014	Clinton		027
		042	Jersey		083
		060	Madison		119
		067	Monroe		133
		082	St. Clair		163
	26		Missouri		29
		036	Franklin		071
		050	Jefferson		099
		057	Lincoln		113
		092	St. Charles		183
		095	St. Louis		189
		096	St. Louis city		510
		110	Warren		219
244	38		Salem, OR, PMSA	7080	
			Oregon		41
		024	Marion		047
		027	Polk		053
245	05		Salinas, CA, MSA	7120	
			California		06
		027	Monterey		053
246	45		Salt Lake City-Ogden, UT, MSA	7160	
			Utah		49
		006	Davis		011
		018	Salt Lake		035
		029	Weber		057
247	44		San Angelo, TX, MSA	7200	
			Texas		48
		226	Tom Green		451
248	44		San Antonio, TX, MSA	7240	
			Texas		48
		015	Bexar		029
		046	Comal		091
		094	Guadalupe		187
		247	Wilson		493
249	05		San Diego, CA, MSA	7320	
			California		06
		037	San Diego		073
250	05		San Francisco, CA, PMSA	7360	
			California		06
		021	Marin		041
		038	San Francisco		075
		041	San Mateo		081
251	05		San Jose, CA, PMSA	7400	
			California		06
		043	Santa Clara		085
252	05		San Luis Obispo-Atascadero-Paso Robles, CA, MSA	7460	
			California		06
		040	San Luis Obispo		079
253	05		Santa Barbara-Santa Maria-Lompoc, CA, MSA	7480	
			California		06
		042	Santa Barbara		083
254	05		Santa Cruz-Watsonville, CA, PMSA	7485	
			California		06
		044	Santa Cruz		087
255	32		Santa Fe, NM, MSA	7490	
			New Mexico		35
		016	Los Alamos		028
		027	Santa Fe		049

Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
256	05		Santa Rosa, CA, PMSA	7500	
		049	California		06
			Sonoma		097
257	10		Sarasota-Bradenton, FL, MSA	7510	
		041	Florida		12
			Manatee		081
		058	Sarasota		115
258	11		Savannah, GA, MSA	7520	
			Georgia		13
		015	Bryan		029
		025	Chatham		051
		051	Effingham		103
259	39		Scranton--Wilkes-Barre--Hazleton, PA, MSA	7560	
			Pennsylvania		42
		019	Columbia		037
		035	Lackawanna		069
		040	Luzerne		079
		066	Wyoming		131
260	48		Seattle-Bellevue-Everett, WA, PMSA	7600	
			Washington		53
		015	Island		029
		017	King		033
		031	Snohomish		061
261	39		Sharon, PA, MSA	7610	
			Pennsylvania		42
262		043	Mercer		085
262	50		Sheboygan, WI, MSA	7620	
			Wisconsin		55
263		060	Sheboygan		117
263	44		Sherman-Denison, TX, MSA	7640	
			Texas		48
		091	Grayson		181
264	19		Shreveport-Bossier City, LA, MSA	7680	
			Louisiana		22
		008	Bossier		015
		009	Caddo		017
		060	Webster		119
265	16		Sioux City, IA-NE, MSA	7720	
			Iowa		19
		097	Woodbury		193
		28	Nebraska		31
		022	Dakota		043
266	42		Sioux Falls, SD, MSA	7760	
			South Dakota		46
		041	Lincoln		083
		049	Minnehaha		099
267	15		South Bend, IN, MSA	7800	
			Indiana		18
		071	St. Joseph		141
268	48		Spokane, WA, MSA	7840	
			Washington		53
		032	Spokane		063
269	14		Springfield, IL, MSA	7880	
			Illinois		17
		065	Menard		129
		084	Sangamon		167

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
270	26		Springfield, MO, MSA	7920		
			Missouri		29	
		022	Christian			043
		039	Greene			077
		113	Webster			225
271	22		Springfield, MA, NECMA	8003		
			Massachusetts		25	
		007	Hampden			013
		008	Hampshire			015
272	39		State College, PA, MSA	8050		
			Pennsylvania		42	
		014	Centre			027
273	36		Steubenville-Weirton, OH-WV, MSA	8080		
			Ohio		39	
		041	Jefferson			081
		49	West Virginia		54	
		005	Brooke			009
		015	Hancock			029
274	05		Stockton-Lodi, CA, MSA	8120		
			California		06	
		039	San Joaquin			077
275	41		Sumter, SC, MSA	8140		
			South Carolina		45	
		043	Sumter			085
276	33		Syracuse, NY, MSA	8160		
			New York		36	
		005	Cayuga			011
		025	Madison			053
		032	Onondaga			067
		036	Oswego			075
277	48		Tacoma, WA, PMSA	8200		
			Washington		53	
		027	Pierce			053
278	10		Tallahassee, FL, MSA	8240		
			Florida		12	
		020	Gadsden			039
		037	Leon			073
279	10		Tampa-St. Petersburg-Clearwater, FL, MSA	8280		
			Florida		12	
		027	Hernando			053
		029	Hillsborough			057
		051	Pasco			101
		052	Pinellas			103
280	15		Terre Haute, IN, MSA	8320		
			Indiana		18	
		011	Clay			021
		083	Vermillion			165
		084	Vigo			167
281	04		Texarkana, TX-Texarkana, AR, MSA	8360		
			Arkansas		05	
		046	Miller			091
		44	Texas		48	
		019	Bowie			037
282	36		Toledo, OH, MSA	8400		
			Ohio		39	
		026	Fulton			051
		048	Lucas			095
		087	Wood			173
283	17		Topeka, KS, MSA	8440		
			Kansas		20	
		089	Shawnee			177

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
284	31		Trenton, NJ, PMSA	8480		
		011	New Jersey Mercer		34	021
285	03		Tucson, AZ, MSA	8520		
		011	Arizona Pima		04	019
286	37		Tulsa, OK, MSA	8560		
		019	Oklahoma Creek		40	037
		057	Osage			113
		066	Rogers			131
		072	Tulsa			143
		073	Wagoner			145
287	01		Tuscaloosa, AL, MSA	8600		
		063	Alabama Tuscaloosa		01	125
288	44		Tyler, TX, MSA	8640		
		212	Texas Smith		48	423
289	33		Utica-Rome, NY, MSA	8680		
		021	New York Herkimer		36	043
		031	Oneida			065
290	05		Vallejo-Fairfield-Napa, CA, PMSA	8720		
		028	California Napa		06	055
		048	Solano			095
291	05		Ventura, CA, PMSA	8735		
		056	California Ventura		06	111
292	44		Victoria, TX, MSA	8750		
		235	Texas Victoria		48	469
293	31		Vineland-Millville-Bridgeton, NJ, PMSA	8760		
		006	New Jersey Cumberland		34	011
294	05		Visalia-Tulare-Porterville, CA, MSA	8780		
		054	California Tulare		06	107
295	44		Waco, TX, MSA	8800		
		155	Texas McLennan		48	309

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Vital Statistics Codes	Codes		P/MSA Name and County Components	FIPS	Codes	
P/MSA	State	County		P/MSA	State	Cnty
296	09		Washington, DC-MD-VA-WV, PMSA	8840	11	
	21	001	Dist. of Columbia			001
			District of Columbia			
		005	Maryland		24	009
		009	Calvert			017
		011	Charles			021
		016	Frederick			031
		017	Montgomery			033
	47		Prince George's			
			Virginia		51	
		003	Alexandria city			510
		008	Arlington			013
		028	Clarke			043
		033	Culpeper			047
		040	Fairfax			059
		041	Fairfax city			600
		042	Falls Church city			610
		043	Fauquier			061
		049	Fredericksburg city			630
		068	King George			099
		073	Loudoun			107
		078	Manassas city			683
		079	Manassas Park city			685
		103	Prince William			153
		120	Spotsylvania			177
		121	Stafford			179
		128	Warren			187
	49		West Virginia		54	
		002	Berkeley			003
		019	Jefferson			037
297			Waterloo-Cedar Falls, IA, MSA	8920		
	16		Iowa		19	
		007	Black Hawk			013
298			Wausau, WI, MSA	8940		
	50		Wisconsin		55	
		037	Marathon			073
299			West Palm Beach-Boca Raton, FL, MSA	8960		
	10		Florida		12	
		050	Palm Beach			099
300			Wheeling, WV-OH, MSA	9000		
	36		Ohio		39	
		007	Belmont			013
	49		West Virginia		54	
		026	Marshall			051
		035	Ohio			069
301			Wichita, KS, MSA	9040		
	17		Kansas		20	
		008	Butler			015
		040	Harvey			079
		087	Sedgwick			173
302			Wichita Falls, TX, MSA	9080		
	44		Texas		48	
		005	Archer			009
		243	Wichita			485
303			Williamsport, PA, MSA	9140		
	39		Pennsylvania		42	
		041	Lycoming			081
304			Wilmington-Newark, DE-MD, PMSA	9160		
	08		Delaware		10	
		002	New Castle			003
	21		Maryland		24	
		008	Cecil			015

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes		
P/MSA	State	County		P/MSA	State	Cnty
305	34		Wilmington, NC, MSA	9200	37	
		010	North Carolina			019
		065	Brunswick			129
306	48		New Hanover	9260	53	
			Yakima, WA, MSA			
		039	Washington			077
307	05		Yakima	9270	06	
			Yolo, CA, PMSA			
		057	California			113
308	39		Yolo	9280	42	
			York, PA, MSA			
		067	Pennsylvania			133
309	36		York	9320	39	
			Youngstown-Warren, OH, MSA			
		015	Ohio			029
		050	Columbiana			099
		078	Mahoning			155
310	05		Trumbull	9340	06	
			Yuba City, CA, MSA			
		051	California			101
		058	Sutter			115
311	03		Yuba	9360	04	
			Yuma, AZ, MSA			
		015	Arizona			027
			Yuma			

List of Primary Metropolitan Statistical Areas
and their Component Counties
For the United States and Puerto Rico

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Vital Statistics Codes			P/MSA Name and County Components	FIPS Codes	
P/MSA	State	County		P/MSA	State Cnty
001	52		Aguadilla, PR, MSA	0060	
			Puerto Rico		72
		002	Aguada		003
		003	Aguadilla		005
		051	Moca		099
002	52		Arecibo, PR, PMSA	0470	
			Puerto Rico		72
		007	Arecibo		013
		014	Camuy		027
		034	Hatillo		065
003	52		Caguas, PR, PMSA	1310	
			Puerto Rico		72
		013	Caguas		025
		018	Cayey		035
		021	Cidra		041
		033	Gurabo		063
		066	San Lorenzo		129
004	52		Mauaguez, PR, MSA	4840	
			Puerto Rico		72
		006	Anasco		011
		012	Cabo Rojo		023
		035	Hormigueros		067
		050	Mayaguez		097
		062	Sabana Grande		121
		064	San German		125
005	52		Ponce, PR, MSA	6360	
			Puerto Rico		72
		031	Guayanilla		059
		039	Juana Diaz		075
		057	Penuelas		111
		058	Ponce		113
		076	Villalba		149
		078	Yauco		153
006	52		San Juan-Bayamon, PR, PMSA	7440	
			Puerto Rico		72
		004	Aguas Buenas		007
		009	Barceloneta		017
		011	Bayamon		021
		015	Canovanas		029
		016	Carolina		031
		017	Catano		033
		019	Ceiba		037
		023	Comerio		045
		024	Corozal		047
		026	Dorado		051
		027	Fajardo		053
		028	Florida		054
		032	Guaynabo		061
		036	Humacao		069
		040	Juncos		077
		044	Las Piedras		085
		045	Loiza		087
		046	Luquillo		089
		047	Manati		091
		052	Morovis		101
		053	Naguabo		103
		054	Naranjito		105
		061	Rio Grande		119
		065	San Juan		127
		069	Toa Alta		135
		070	Toa Baja		137
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		073	Vega Alta		143
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TECHNICAL APPENDIX FROM

**VITAL STATISTICS OF THE
UNITED STATES**

1998

NATALITY

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

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

Hyattsville, Maryland: March 2000

VITAL STATISTICS OF THE UNITED STATES: NATALITY, 1998
TECHNICAL APPENDIX

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A copy of the technical appendix may be obtained by contacting the National Center for Health Statistics, Reproductive Statistics Branch at 301-458-4111.

VITAL STATISTICS OF THE UNITED STATES: NATALITY, 1998
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For a list of reports published by the National Center for Health
Statistics contact:

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6525 Belcrest Road, Room 1064
Hyattsville, MD 20782-2003
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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 (1):

Live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, 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; each product of such a birth is considered liveborn.

This definition distinguishes in precise terms a live birth from a fetal death (see the section on fetal deaths in the Technical Appendix of volume II, *Vital Statistics of the United States*). In the interest of comparable natality statistics, both the Statistical Commission of the United Nations and the National Center for Health Statistics (NCHS) have adopted this definition (2,3).

History of birth-registration area

The national birth-registration area was proposed in 1850 and established in 1915. By 1933 all 48 States and the District of Columbia were participating in the registration system. The organized territories of Hawaii and Alaska were admitted in 1929 and 1950, respectively; data from these areas were prepared separately until they became States--Alaska in 1959 and Hawaii in 1960. Currently the birth-registration system of the United States covers the 50 States, the District of Columbia, the independent registration area of New York City, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. However, in the statistical tabulations, "United States" refers only to the aggregate of the 50 States (including New York City) and the District of Columbia.

The original birth-registration area of 1915 consisted of 10 States and the District of Columbia. The growth of this area is indicated in [table 4-1](#). This table also presents for each year through 1932 the estimated midyear population of the United States and of those States included in the registration system.

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Because of the growth of the area for which data have been collected and tabulated, a national series of geographically comparable data before 1933 can be obtained only by estimation. Annual estimates of births have been prepared by P. K. Whelpton for 1909-34 (4). These estimates include adjustments for underregistration and for States that were not part of the birth-registration area before 1933.

Sources of data

Natality statistics

Since 1985 natality statistics for all States and the District of Columbia have been based on information from the total file of records. The information is received on computer data tapes coded by the States and provided to NCHS through the Vital Statistics Cooperative Program. NCHS receives these tapes from the registration offices of all States, the District of Columbia, and New York City. Information for Puerto Rico is also received on computer tapes through the Vital Statistics Cooperative Program. Information for the Virgin Islands and Guam is obtained from microfilm copies of original birth certificates and is based on the total file of records for all years. Data from American Samoa first became available in 1997. Data from the Commonwealth of the Northern Mariana Islands (referred to as Northern Marianas) first became available in 1998. Similar to data from the Virgin Islands and Guam, the data are obtained from microfilm copies of original birth certificates and are based on the total file of records.

Birth statistics for years prior to 1951 and for 1955 are based on the total file of birth records. Statistics for 1951-54, 1956-66, and 1968-71 are based on 50-percent samples except for data for Guam and the Virgin Islands, which are based on all records filed. During the processing of the 1967 data the sampling rate was reduced from 50 percent to 20 percent. For details of this procedure and its consequences for the 1967 data see pages 3-9 to 3-11 in volume I of *Vital Statistics of the United States, 1967*. From 1972 to 1984 statistics are based on all records filed in the States submitting computer tapes and on a 50-percent sample of records in all other States.

Information for years prior to 1970 for Puerto Rico, the Virgin Islands, and Guam is published in the annual vital statistics reports of the Department of Health of the Commonwealth of Puerto Rico, the Department of Public Health of the Virgin Islands, the Department of Public Health and Social Services of the Government of Guam, and in selected *Vital Statistics of the United States* annual reports.

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 all tabulations by place of residence beginning in 1970 (for further discussion see "Classification by occurrence and residence"). Births occurring to U.S. citizens outside the United States are not included in any tabulations in this report. Similarly the data for Puerto Rico, the Virgin Islands, Guam, and American Samoa are limited to births registered in these areas.

Standard Certificate of Live Birth

The U.S. Standard Certificate of Live Birth, issued by the Public Health Service, has served for many years as the principal means of attaining uniformity in the content of the documents used to collect information on births in the United States. It has been modified in each State to the extent required by the particular State's needs or by special provisions of the State's vital statistics law. However, most State certificates conform closely in content to the standard certificate.

The first standard certificate of birth was developed in 1900. Since then, it has been revised periodically by the national vital statistics agency through consultation with State health officers and registrars; Federal agencies concerned with vital statistics; national, State, and county medical societies; and others working in public health, social welfare, demography, and insurance. This procedure has assured careful evaluation of each item for its current and future usefulness for legal, medical, demographic, and research purposes. New items have been added when necessary, and old

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items have been modified to ensure better reporting or, in some cases, dropped when their usefulness appeared to be limited.

1989 revision--Effective January 1, 1989, a revised [U.S. Standard Certificate of Live Birth \(figure 4-A\)](#) replaced the 1978 revision. This revision provided a wide variety of new information on maternal and infant health characteristics, representing a significant departure from previous versions in both content and format. The most significant format change was the use of check boxes to obtain detailed medical and health information about the mother and child. It has been demonstrated that this format produces higher quality and more complete information than do open-ended items.

The reformatted items included "Medical Risk Factors for This Pregnancy," which combines the former items "Complications of Pregnancy" and "Concurrent Illnesses or Conditions Affecting the Pregnancy." "Complications of Labor and/or Delivery" and "Congenital Anomalies of Child" also have been revised from the open-ended format. For each of these items at least 15 specific conditions have been identified.

Several new items were added to the revised certificate. Included are items to obtain information on tobacco and alcohol use during pregnancy, weight gain during pregnancy, obstetric procedures, method of delivery, and abnormal conditions of the newborn. These items can be used to monitor the health practices of the mother that can affect pregnancy and the use of technology in childbirth, and to identify babies with specific abnormal conditions. When combined with other socioeconomic and health data, these items provide a wealth of information relevant to the etiology of low birth weight and other adverse pregnancy outcomes.

Another modification was the addition of a Hispanic identifier for the mother and father. Although NCHS had recommended that States add items to identify the Hispanic or ethnic origin of the newborn's parents, concurrent with the 1978 revision of the U.S. Standard Certificate of Live Birth and reported data from the cooperating States since that year, the item was new to the U.S. Standard Certificate for 1989.

The 1989 revised certificate also provided more detail than previously requested on the birth attendant and place of birth. This permits a more in-depth analysis of the number and characteristics of births by attendant and type of facility and a comparison of differences in outcome. For further discussion see individual sections for each item.

Classification of data

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. Vital statistics and population statistics, therefore, must be classified according to similarly defined systems and 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, differences between the enumeration method of obtaining population data and the registration method of obtaining vital statistics data may result in significant discrepancies.

The general rules used to classify geographic and personal items for live births are set forth in "Vital Statistics Classification and Coding Instructions for Live Birth Records, 1998," *NCHS Instruction Manual*, Part 3a. The classification of certain important items is discussed in the following pages. See [table A](#) for a listing of items and the percent of records that were not stated for each State, Puerto Rico, Virgin Islands, Guam, American Samoa, and the Northern Marianas.

Classification by occurrence and residence

Births to U.S. residents occurring outside this country are not reallocated to the United States. In tabulations by place of residence, births occurring within the United States to U.S. citizens and to resident aliens are allocated to the usual place of residence of the mother in the United States, as reported on the birth certificate. Beginning in 1970 births to nonresidents of the United States occurring in the United States are excluded from these tabulations. From 1966 to 1969 births occurring in the United States to mothers who were nonresidents of the United States were considered as births to residents of the exact place of occurrence; in 1964 and 1965 all such births were allocated to "balance of county" of

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occurrence even if the birth occurred in a city. The change in coding beginning in 1970 to exclude births to nonresidents of the United States from residence data significantly affects the comparability of data with years before 1970 only for Texas.

For the total United States the tabulations by place of residence and by place of occurrence are not 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 B](#) for the number of births by residence and occurrence for the 50 States and the District of Columbia for 1998.

Residence error--A nationwide test of birth-registration completeness in 1950 provided measures of residence error for natality statistics. According to this test, 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. 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 procedure of using "city" addresses for persons living outside the city limits.

Incomplete residence--Beginning in 1973 where only the State of residence is reported with no city or county specified and the State named is different from the State of occurrence, the birth is allocated to the largest city of the State of residence. Before 1973 such births were allocated to the exact place of occurrence.

Geographic classification

The rules followed in the classification of geographic areas for live births are contained in the instruction manual mentioned previously. The geographic code structure for 1998 is given in another manual, "Vital Records Geographic Classification, 1994," *NCHS Instruction Manual*, Part 8.

United States--In the statistical tabulations, "United States" refers only to the aggregate of the 50 States and the District of Columbia. Alaska has been included in the U.S. tabulations since 1959 and Hawaii since 1960.

Metropolitan statistical areas--The metropolitan statistical areas and primary metropolitan statistical areas (MSA's and PMSA's) used in this report are those established by the U.S. Office of Management and Budget as of April 1, 1990, and used by the U.S. Bureau of the Census (5) except in the New England States.

Except in the New England States, an MSA has either a city with a population of at least 50,000, or a Bureau of the Census urbanized area of at least 50,000 and a total MSA population of at least 100,000. A PMSA consists of a large urbanized county, or cluster of counties, that demonstrates very strong internal economic and social links and has a population over 1 million. When PMSA's are defined, the large area of which they are component parts is designated a Consolidated Metropolitan Statistical Area (CMSA) (6).

In the New England States the U.S. Office of Management and Budget uses towns and cities rather than counties as geographic components of MSA's and PMSA's. NCHS cannot, however, use this classification for these States because its data are not coded to identify all towns. Instead, the New England County Metropolitan Areas (NECMA's) are used. These areas are established by the U.S. Office of Management and Budget (7) and are made up of county units.

Metropolitan and nonmetropolitan counties--Independent cities and counties included in MSA's and PMSA's or NECMA's are included in data for metropolitan counties; all other counties are classified as nonmetropolitan.

Population-size groups--Beginning in 1994 vital statistics data for cities and certain other urban places have been classified according to the population enumerated in the 1990 Census of Population. Data are available for individual cities and other urban places of 100,000 or more population. Data for the remaining areas not separately identified are shown in the tables under the heading "Balance of area" or "Balance of county." Classification of areas for 1982-93 was determined by the population enumerated in the 1980 Census of Population. As a result of changes in the enumerated population between 1980 and 1990, some urban places identified in previous reports are no longer included, and a number of other urban places have been added.

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Urban places other than incorporated cities for which vital statistics data are shown in this report include the following:

- C Each town in New England, New York, and Wisconsin and each township in Michigan, New Jersey, and Pennsylvania that had no incorporated municipality as a subdivision and had either 25,000 inhabitants or more, or a population of 10,000 to 25,000 and a density of 1,000 persons or more per square mile.
- C Each county in States other than those indicated above that had no incorporated municipality within its boundary and had a density of 1,000 persons or more per square mile. (Arlington County, Virginia, is the only county classified as urban under this rule.)
- C Each place in Hawaii with 10,000 or more population. (There are no incorporated cities in Hawaii.)

Race or national origin

Beginning with the 1989 data year birth data are tabulated primarily by race of mother. In 1988 and prior years the race or national origin shown in tabulations was that of the newborn child. However, beginning with the 1992 issue of *Vital Statistics of the United States, Volume I, Natality*, trend data for years beginning with 1980 have been retabulated by race of mother. The race of the child was determined for statistical purposes by an algorithm based on the race of the mother and father as reported on the birth certificate. When the parents were of the same race, the race of the child was the same as the race of the parents. When the parents were of different races and one parent was white, the child was assigned to the race of the other parent. When the parents were of different races and neither parent was white, the child was assigned to the race of the father, with one exception--if either parent was Hawaiian, the child was assigned to Hawaiian. If race was missing for one parent, the child was assigned the race of the parent for whom it was reported. When information on race was missing for both parents, the race of the child was considered not stated and the birth was allocated according to rules discussed on page 4 of the Technical Appendix, volume I, *Vital Statistics of the United States*, 1988. In 1989 the criteria for reporting the race of the parents did not change and continues to reflect the response of the informant (usually the mother).

The most important factor influencing the decision to tabulate births by race of the mother was the decennial revision of the U.S. Standard Certificate of Live Birth in 1989. This revision included many more health questions that are directly associated with the mother, including alcohol and tobacco use, weight gain during pregnancy, medical risk factors, obstetric procedures, complications of labor and/or delivery, and method of delivery. Additionally, many of the other items that have been on the birth certificate for more than two decades also relate directly to the mother, for example, marital status, education level, and receipt of prenatal care. It is more appropriate to use the race of the mother than the race of the child in tabulating these items.

A second factor has been the increasing incidence of interracial parentage. In 1998, 5.3 percent of births were to parents of different races, more than double the percent in 1977 (2.0 percent). More than half of these births were to white mothers and fathers of another race (55 percent in 1998). There have been two major consequences of the increasing interracial parentage. One is the effect on birth rates by race. The number of white births under the former procedures has been arbitrarily limited to infants whose parents were both white (or one parent if the race of only one parent was reported). At the same time, the number of births of other races has been arbitrarily increased to include all births to white mothers and fathers of other races. Thus, prior to 1989, if race of mother had been used, birth rates per 1,000 white women in a given age group would have been higher, while comparable rates for black women and women of other races would have been lower. The other consequence of increasing interracial parentage is the impact on the racial differential in various characteristics of births, particularly in cases where there is generally a large racial disparity, such as the incidence of low birthweight. In this instance, the racial differential is larger when the data are tabulated by race of mother rather than by race of child. The same effect has been noted for characteristics such as nonmarital childbearing, preterm births, late or no prenatal care, and low educational attainment of mother.

The third factor influencing the change is the growing proportion of births with race of father not stated, 14 percent in 1998. Although this proportion has stabilized and declined slightly in the 1990's, it is still higher than in 1978, 11

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percent. The high proportion of records with the father's race not reported reflects the increase in the proportion of births to unmarried women; in many cases no information is reported on the father. These births were already assigned the race of the mother because there is no alternative. Tabulating births by race of mother provides a more uniform approach, rather than a necessarily arbitrary combination of parental races.

The change in the tabulation of births by race presents some problems when analyzing birth data by race, particularly trend data. The problem is likely to be acute for races other than white and black.

The categories for race or national origin are "White," "Black," "American Indian" (including Aleuts and Eskimos), "Chinese," "Japanese," "Hawaiian," "Filipino," and "Other Asian or Pacific Islander" (including Asian Indian). Before 1992 there was also an "other" category, which is now combined with the "Not stated" category. Before 1978 the category "Other Asian or Pacific Islander" was not identified separately but included with "Other" races. The separation of this category from "other" allows identification of the category "Asian or Pacific Islander" by combining the new category "Other Asian or Pacific Islander" with Chinese, Japanese, Hawaiian, and Filipino.

Beginning in 1992, NCHS contracted with seven States with the highest API populations to code births to additional API subgroups. The API subgroups include births to Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and other API women. The seven States included in this reporting area are: California, Hawaii, Illinois, New Jersey, New York, Texas, and Washington. At least two-thirds of the U.S. population of each of these additional API groups lived in the seven-State reporting area(8). The data are available on the detailed natality tapes and CD-ROMs beginning with the 1992 data year. An analytic report based on the 1992 data year is also available upon request(9). In 1996, Minnesota became the eighth State to provide this information and in 1998, Virginia became the ninth State.

The category "White" comprises births reported as white and births where race is reported as Hispanic. Before 1964 all births for which race or national origin was not stated were classified as white. Beginning in 1964 changes in the procedures for allocating race when race or national origin is not stated have changed the composition of this category. (See discussion on "Race or national origin not stated.")

If the race or national origin of an Asian parent is ill-defined or not clearly identifiable with one of the categories used in the classification (for example, if "Oriental" is entered), an attempt is made to determine the specific race or national origin from the entry for place of birth. If the birthplace is China, Japan, or the Philippines, the race of the parent is assigned to that category. When race cannot be determined from birthplace, it is assigned to the category "Other Asian or Pacific Islander."

Race or national origin not stated--If the race of the mother is not defined or not identifiable with one of the categories used in the classification (0.8 percent of births in 1998) and the race of the father is known, the race of the father is assigned to the mother. Where information for both parents is missing, the race of the mother is allocated electronically according to the specific race of the mother on the preceding record with a known race of mother. Data for both parents were missing for only 0.4 percent of birth certificates for 1998. Nearly all statistics by race or national origin for the United States as a whole in 1962 and 1963 are affected by a lack of information for New Jersey, which did not report the race of the parents in those years. Birth rates by race for those years are computed on a population base that excluded New Jersey. For the method of estimating the U.S. population by age, sex, and race excluding New Jersey in 1962 and 1963, see page 4-8 in the Technical Appendix of volume I, *Vital Statistics of the United States*, 1963.

Age of mother

Beginning in 1989 an item on the birth certificate asks for "Date of Birth." In previous years, "Age (at time of this birth)" was requested. Not all States have revised this item for 1989, and therefore the age of mother either is derived from the reported month and year of birth or coded as stated on the certificate. In 1998 the mother's age was reported directly by five States (Kentucky, Nevada, North Dakota, Virginia, and Wyoming) and American Samoa. From 1964 to 1996, the age of mother was edited for 10-49 years. When the age of mother was computed to be under 10 years or 50 years or over, it was considered not stated and was assigned as described below. Beginning in 1997, age of mother is edited for ages 10-54 years. When the age of mother is computed to be under 10 years or 55 years or over, it is considered not stated and was assigned as described below. A review and verification of unedited birth data for 1996 showed that the vast majority

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of births reported as occurring to women aged 50 years and older were to women aged 50-54 years. The numbers of births to women 50-54 years are too small for computing age-specific birth rates. These births have been included with births to women 45-49 for computing birth rates.

Age-specific birth rates are based on populations of women by age, prepared by the U.S. Bureau of the Census. In census years the decennial census counts are used. In intercensal years, estimates of the population of women by age are published by the U.S. Bureau of the Census in *Current Population Reports*.

The 1990 Census of Population derived age in completed years as of April 1, 1990, from the responses to questions on age at last birthday and month and year of birth, with the latter given preference. In the 1960, 1970, and the 1980 Census of Population, age was also derived from month and year of birth. "Age in completed years" was asked in censuses before 1960. This was nearly the equivalent of the former birth certificate question, which the 1950 test of matched birth and census records confirms by showing a high degree of consistency in reporting age in these two sources (10).

Median age of mother--Median age is the value that divides an age distribution into two equal parts, one-half of the values being less and one-half being greater. Median ages of mothers for 1960 to the present have been computed from birth rates for 5-year age groups rather than from birth frequencies. This method eliminates the effects of changes in the age composition of the childbearing population over time. Changes in the median ages from year to year can thus be attributed solely to changes in the age-specific birth rates.

Not stated date of birth of mother-- In 1998 age of mother was not reported on 0.02 percent of the records. Beginning in 1964 birth records with date of birth of mother and/or age of mother not stated have had age imputed 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 "Computer Edits for Natality Data, Effective 1993" NCHS Instruction Manual, Part 12, page 9.) In 1963 birth records with age not stated were allocated according to the age appearing on the record previously processed for a mother of identical race and parity (number of live births). For 1960-62 not stated ages were distributed in proportion to the known ages for each racial group. Before 1960 this was done for age-specific birth rates but not for the birth frequency tables, which showed a separate category for age not stated.

Age of father

Age of father is derived from the reported date of birth or coded as stated on the birth certificate. 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. Information on age of father is often missing on birth certificates of children born to unmarried mothers, greatly inflating the number of "not stated" in all tabulations by age of father. In computing birth rates by age of father, births tabulated as age of father not stated are distributed in the same proportions as births with known age within each 5-year-age classification of the mother. This procedure is followed because, while father's age is missing in 15 percent of the birth certificates in 1998, one third of these were on records where the mother is a teenager. This distribution procedure is done separately by race. The resulting distributions are summed to form a composite frequency distribution that is the basis for computing birth rates by age of father. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded.

Live-birth order and parity

Live-birth order and parity classifications refer to the total number of live births the mother has had including the 1998 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.

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Live-birth order and parity are determined from two items on the birth certificate, "Live births now living" and "Live births now dead."

Not stated birth order--Before 1969 if both of these items were blank, the birth was considered a first birth. Beginning in 1969, births for which the pregnancy history items were not completed have been tabulated as live-birth order not stated. As a result of this revised procedure, 22,686 births in 1969 that would have been assigned to the "First birth order" category under the old rules were assigned to the "Not stated" category.

All births tabulated in the "Not stated birth order" category are excluded from the computation of percents. 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.

Date of last live birth

The date of last live birth was added to the U.S. Standard Certificate of Live Birth in 1968 for the purpose of providing information on child spacing. The interval since the last live birth is the difference between the date of last live birth and the date of present birth. For an interval to be computed, both the month and year of the last live birth must be valid. This interval is computed only for events to mothers who have had at least one previous live birth. Births for which the interval since last live birth is not stated are excluded from the computation of percents and means.

Zero interval--An interval of zero months since the last live birth indicates the second born of a set of twins, the second or third born of a set of triplets, and so forth. Births with an interval of zero months are excluded from the computation of mean intervals.

Beginning in 1995, NCHS ceased to collect information on the date of last live birth and thus the information on interval is only available from birth certificate data from 1968-94.

Educational attainment

Data on the educational attainment of both parents were collected beginning in 1968 and tabulated for publication in 1969 for the first time.

The educational attainment of either parent is defined as "the number of years of school completed." Only those years completed in "regular" schools are counted, that is, a formal educational system of public schools or the equivalent in accredited private or parochial schools. Business or trade schools, such as beauty and barber schools, are not considered "regular" schools for the purposes of this item. No attempt has been made to convert years of school completed in foreign school systems, ungraded school systems, and so forth, to equivalent grades in the American school system. Such entries are included in the category "not stated."

Persons who have completed only a partial year in high school or college are tabulated as having completed the highest preceding grade. For those certificates on which a specific degree is stated, years of school completed is coded to the level at which the degree is most commonly attained; for example, persons reporting B.A., A.B., or B.S. degrees are considered to have completed 16 years of school.

Education not stated--The category "Not stated" includes all records in reporting areas for which there is no information on years of school completed as well as all records for which the information provided is not compatible with coding specifications.

Births tabulated as education not stated are excluded from the computations of percents.

Beginning in 1995, NCHS ceased to collect information on the educational attainment of the father and thus the information is available from birth certificate data only for 1969-94.

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Marital status

National estimates of births to unmarried women are based on two methods of determining marital status. For 1994 through 1996, birth certificates in 45 states and the District of Columbia included a question about the mother's marital status. Beginning in 1997, California added a direct question to their birth certificate; thus **by** 1997, all but four States (Connecticut, Michigan, Nevada, and New York) included a direct question on their birth certificates. Nevada asks for the mother's marital status through the electronic birth registration process but this item is not included on certified or paper copies of the birth certificate. Beginning June 15, 1998, Connecticut discontinued inferring the mother's marital status and added a direct question on mother's marital status to the State's birth certificate.

In the two States (Michigan and New York) which used inferential procedures to compile birth statistics by marital status in 1998, a birth is inferred as nonmarital if either of these factors 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; this is now the key indicator in the nonreporting States. The inferential procedures in effect since 1980 represent a substantial departure from the method used before 1980 to prepare national estimates of births to unmarried women, which assumed that the incidence of births to unmarried women in States with no direct question on marital status was the same as the incidence in reporting States in the same geographic division (12). Inferential procedures in current use, however, are quite different from those in use during the 1980's, when there was heavy reliance on a comparison of the surnames of the parents and the child to infer the mother's marital status. The procedures now in use depend, as noted above, on very reliable indicators, namely a paternity affidavit or missing information on the father.

A review of Connecticut's birth data for 1998 indicates that during the first 6 months of 1998, when the inferential procedures were still in use, the proportion of births to unmarried women was somewhat higher (33 percent) than in the last 6 months when marital status was based on a direct question (29 percent). The inferential procedures in effect in Connecticut relied principally on a comparison of the surnames of the parents and child. It appears that the inferential procedures resulted in some overestimation of the number of births to unmarried women. It is estimated that if the Connecticut reporting procedures had not changed, the number of nonmarital births would have been about 1,000 higher. Because Connecticut accounts for about 1 percent of U.S. births, the reporting changes had no impact on data for the Nation.

The procedures for reporting marital status in California, Nevada, New York City changed beginning January 1, 1997. The methods used to determine marital status and the impact of the procedures on the data were discussed in detail in a previous report (13).

The use of inferential marital status data together with information from a direct question represents an attempt to use related information on the birth certificate to improve the quality of national data as well as to provide data for the individual nonreporting States. An evaluation of this method and its validity for California (the largest nonreporting State until 1997) has been published (14). Because of the continued substantial increases in nonmarital childbearing throughout the 1980's, the data have been intensively evaluated by the Division of Vital Statistics, NCHS. The results of this evaluation show that trends in birth rates for unmarried women for rates computed on the basis of estimated data and on the basis of inferred data are essentially the same.

The mother's marital status was not reported in 1998 on 0.04 percent of the birth records. Marital status was imputed as "married" for these records.

When births to unmarried women are reported as second or higher order births, it is not known whether the mother was married or unmarried when the previous deliveries occurred, because her marital status at the time of these earlier births is not available from the birth record.

Rates for 1940 and 1950 are based on decennial census counts. Rates for 1955-97 are based on a smoothed series of population estimates (12). Because of sampling error, the original U.S. Bureau of the Census population estimates by marital status fluctuate erratically from year to year; therefore, they have been smoothed so that the rates do not show

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similar variations. These rates differ from those published in volumes of *Vital Statistics of the United States* before 1969, which were based on the original estimates provided annually by the U.S. Bureau of the Census. Birth rates by marital status for 1971-79 have been revised and differ from rates published before 1980 in volumes of *Vital Statistics of the United States* (see "Computation of rates and other measures").

Place of delivery and attendant at birth

The 1989 revision of the U.S. Standard Certificate of Live Birth included separate categories for freestanding birthing centers, the mother's residence, and clinic or doctor's office as the place of birth. Prior to 1989, place of birth was classified simply as either "In hospital" or "Not in hospital." Births occurring in hospitals, institutions, clinics, centers, or homes were included in the category "In hospital." In this context the word "homes" does not refer to the mother's residence but to an institution, such as a home for unmarried women. Birthing centers were included in either category, depending on each State's assessment of the facility. Beginning in 1989 births occurring in clinics and in birthing centers not attached to a hospital are classified as "Not in hospital." This change in classification may account in part for the lower proportion of "In hospital" births compared with previous years. (The change in classification of clinics should have minor impact because comparatively few births occur in these facilities, but the effect of any change in classification of freestanding birthing centers is unknown.)

Beginning in 1975 the attendant at birth and place of delivery items were coded independently, primarily to permit the identification of the person in attendance at hospital deliveries. The 1989 certificate includes separate classifications for doctor of medicine (MD), doctor of osteopathy (DO), certified nurse midwife (CNM), other midwife, and other attendants. In earlier certificates births attended by certified nurse midwives were grouped with those attended by lay midwives. The new certificate also facilitates the identification of home births, births in freestanding birthing centers, and births in clinics or physician offices.

Data for the "In hospital" category for 1975-88 include all births in clinics or maternity centers, regardless of the attendant. Data for 1975-77 published before 1980 included clinic and center births in the category "In hospital" only when the attendant was a physician. Data shown for 1975-77 published after 1980 will, therefore, differ from data published before 1980. As a result of this change, for 1975 an additional 12,352 births are now classified as occurring in hospitals, raising the percent of births occurring in hospitals from 98.7 to 99.1. Similarly, for 1976 the number of births occurring in hospitals increased by 14,133 and the percent in hospitals raised from 98.6 to 99.1; for 1977 the increase is 15,937 and the percent in hospitals raised from 98.5 to 99.0. For 1974 and earlier the "In hospital" category includes all births in hospitals or institutions and births in clinics, centers, or maternity homes only when attended by physicians.

The "Not in hospital" category includes births for which no information is reported on place of birth. Before 1975 births for which the stated place of birth was a "doctor's office" and delivery was by a physician were included in the category "In hospital." Beginning in 1975 these births were tabulated as "Not in hospital" and included with births delivered by physicians in this category. Although the actual number of such births is unknown, the effect of the change is minimal. In 1974, 0.3 percent of all births were delivered by physicians outside of hospitals; in 1975 this proportion was 0.4 percent.

Babies born on the way to or on arrival at the hospital are classified as having been born in the hospital. This may account for some of the hospital births not delivered by physicians or midwives.

Beginning in 1993, all in-hospital births occurring in Illinois where the attendant was classified as an "other" midwife were changed to certified nurse-midwife. This was necessary because almost all of these births were delivered by midwives certified by the American College of Nurse Midwives but because Illinois does not certify midwives, many of these births were classified as "other" midwives.

Birthweight

Birthweight is reported in some areas in pounds and ounces rather than in grams. However, the metric system has been used in tabulating and presenting the statistics to facilitate comparison with data published by other groups. The

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categories for birthweight were changed in 1979 to be consistent with the recommendations in the *Ninth Revision of the International Classification of Diseases (ICD-9)*. The categories in gram intervals and their equivalents in pounds and ounces are as follows:

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

The ICD-9 defines low birthweight as less than 2,500 grams. This is a shift of 1 gram from the previous criterion of 2,500 grams or less, which was recommended by the American Academy of Pediatrics in 1935 and adopted in 1948 by the World Health Organization in the *Sixth Revision of the International Lists of Diseases and Causes of Death*.

After data classified by pounds and ounces are converted to grams, median weights are computed and rounded before publication. 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.

Births for which birthweight is not reported are excluded from the computation of percents and medians.

Period of gestation

The period of gestation is defined as beginning with the first day of the last normal menstrual period (LMP) and ending with the day of the birth. The LMP is used as the initial date because it can be more accurately determined than the date of conception, which usually occurs 2 weeks after the LMP.

Births occurring before 37 completed weeks of gestation are considered to be “preterm” or “premature” for purposes of classification. At 37-41 weeks gestation, births are considered to be “term,” and at 42 completed weeks and over, “postterm.” These distinctions are according to the ICD-9 definitions.

The 1989 revision of the U.S. Standard Certificate of Live Birth included a new item, “clinical estimate of gestation,” that is being compared with length of gestation computed from the LMP date when the latter appears to be inconsistent with birthweight. This is done for normal weight births of apparently short gestations and very low birthweight births reported to be full term. The clinical estimate also was used if the date of the LMP was not reported. The period of gestation for 5.1 percent of the births in 1998 was based on the clinical estimate of gestation. For 97 percent of these records the clinical estimate was used because the LMP date was not reported. For the remaining 3 percent the clinical estimate was used because it was compatible with the reported birth weight, whereas the LMP-computed gestation was not. In cases where the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, the LMP-computed gestation was used if it was within 5 weeks of the clinical estimate and birth weight was reclassified as “not stated.” This was necessary for about 350 births, less than 0.01 percent of all birth records in 1998. If the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, gestation and birthweight were classified as “not stated” if the LMP-computed gestation was not within 5 weeks of the clinical estimate. These changes result in only a very small discontinuity in the data. For further information on the use of the clinical estimate of gestation see “Computer Edits for Natality Data, Effective 1993,” *NCHS Instruction Manual*, Part 12, pages 34-36.

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Before 1981 the period of gestation was computed only when there was a valid month, day, and year of LMP. However, length of gestation could not be determined from a substantial number of live-birth certificates each year because the day of LMP was missing. Beginning in 1981 weeks of gestation have been imputed for records with missing day of LMP when there is a valid month and year. Each such record is assigned the gestational period in weeks of the preceding record that has a complete LMP date with the same computed months of gestation and the same 500-gram birthweight interval. The effect of the imputation procedure is to increase slightly the proportion of preterm births and to lower the proportion of births at 39, 40, 41, and 42 weeks of gestation. A more complete discussion of this procedure and its implications is presented in a previous report (15).

Because of postconception bleeding or menstrual irregularities, the presumed date of LMP may be in error. In these instances the computed gestational period may be longer or shorter than the true gestational period, but the extent of such errors is unknown.

Month of pregnancy prenatal care began

For those records in which the name of the month is entered for this item, instead of first, second, third, and so forth, the month of pregnancy in which prenatal care began is determined from the month named and the month last normal menses began. For these births, if the item "Date last normal menses began" is not stated, the month of pregnancy in which prenatal care began is tabulated as not stated.

Number of prenatal visits

Tabulations of the number of prenatal visits were presented for the first time in 1972. Beginning in 1989 these data were collected from the birth certificates of all States. Percent distributions and the median number of prenatal visits exclude births to mothers who had no prenatal care.

Apgar score

The 1- and 5-minute Apgar scores were added to the U.S. Standard Certificate of Live Birth in 1978 to evaluate the condition of the newborn infant at 1 and 5 minutes after birth. The Apgar score is a useful 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 10 is optimum, and a low score raises some doubts about the survival and subsequent health of the infant. Beginning in 1995, NCHS only collected information on the 5-minute Apgar score. In 1998 the reporting area for the 5-minute Apgar score was comprised of 48 States and the District of Columbia, accounting for 78 percent of all births in the United States. California and Texas did not have information on Apgar scores on their birth certificate.

Tobacco and alcohol use during pregnancy

The checkbox format allows for classification of a mother as a smoker or drinker during pregnancy and for reporting the average number of cigarettes smoked per day or drinks consumed per week. When smoking and/or drinking status is not reported or is inconsistent with the quantity of cigarettes or drinks reported, the status is changed to be consistent with the amount reported. For example, if the drinking status is reported as "no" but one or more average drinks a week are reported, the mother is classified as a drinker. If the number of cigarettes smoked per day is reported as one or more, the mother is considered a smoker. When one (or a fraction of one) drink a week is recorded, the mother is classified as a drinker. For records on which the number of drinks or number of cigarettes is reported as a span, for example, 10-15, the

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lower number is used. The number of drinkers and number of drinks reported on birth certificates are believed to underestimate actual alcohol use.

Data on tobacco use were collected by 46 States, the District of Columbia, and New York City in 1998. This reporting area accounted for 81 percent of all births in the U.S. in 1998. Information was not available for California, Indiana, South Dakota, and the remainder of New York State. Information on alcohol use was included on the certificates of 48 States and the District of Columbia, accounting for 87 percent of all U.S. births in 1998. California and South Dakota did not include items on alcohol use on their birth certificates.

Weight gained during pregnancy

Weight gain is reported in pounds. A loss of weight is reported as zero gain. Computations of median weight gain were based on ungrouped data. This item was included on the certificates of 49 States and the District of Columbia; California did not report this information. This reporting area excluding California accounted for 87 percent of all births in the United States in 1998.

Medical risk factors for this pregnancy

In 1998 an item on medical risk factors was included on the birth certificates of all States and the District of Columbia, but 2 States did not report all of the 16 risk factors. Texas did not report genital herpes or uterine bleeding, and Kansas did not report Rh sensitization.

The format allows for the designation of more than one risk factor and includes a choice of "None." Accordingly, if the item is not completed, it is classified as "Not stated."

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the Association for Vital Records and Health Statistics (16).

Definitions of medical terms

Anemia--Hemoglobin level of less than 10.0 g/dL during pregnancy or a hematocrit of less than 30 percent during pregnancy.

Cardiac disease--Disease of the heart.

Acute or chronic lung disease--Disease of the lungs during pregnancy.

Diabetes--Metabolic disorder characterized by excessive discharge of urine and persistent thirst; includes juvenile onset, adult onset, and gestational diabetes during pregnancy.

Genital herpes--Infection of the skin of the genital area by herpes simplex virus.

Hydramnios/oligohydramnios--Any noticeable excess (hydramnios) or lack (oligohydramnios) of amniotic fluid.

Hemoglobinopathy--A blood disorder caused by alteration in the genetically determined molecular structure of hemoglobin (for example, sickle cell anemia).

Hypertension, chronic--Blood pressure persistently greater than 140/90, diagnosed prior to onset of pregnancy or before the 20th week of gestation.

Hypertension, pregnancy-associated--An increase in blood pressure of at least 30 mm Hg systolic or 15 mm Hg diastolic on two measurements taken 6 hours apart after the 20th week of gestation.

Eclampsia--The occurrence of convulsions and/or coma unrelated to other cerebral conditions in women with signs and symptoms of pre-eclampsia.

Incompetent cervix--Characterized by painless dilation of the cervix in the second trimester or early in the third trimester of pregnancy, with prolapse of membranes through the cervix and ballooning of the membranes into the vagina, followed by rupture of membranes and subsequent expulsion of the fetus.

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Previous infant 4,000+ grams--The birthweight of a previous live-born child was over 4,000 grams (8 lbs 13 oz).
Previous preterm or small-for-gestational-age infant--Previous birth of an infant prior to term (before 37 completed weeks of gestation) or of an infant weighing less than the 10th percentile for gestational age using a standard weight-for-age chart.

Renal disease--Kidney disease.

Rh sensitization--The process or state of becoming sensitized to the Rh factor as when an Rh-negative woman is pregnant with an Rh-positive fetus.

Uterine bleeding--Any clinically significant bleeding during the pregnancy, taking into consideration the stage of pregnancy; any second or third trimester bleeding of the uterus prior to the onset of labor.

Obstetric procedures

This item includes six specific obstetric procedures. Birth records with "Obstetric procedures" left blank are considered "not stated." Data on obstetric procedures were reported by all States and the District of Columbia in 1998.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the National Association for Public Health Statistics and Information Systems (NAPHSIS), formerly the Association for Vital Records and Health Statistics (16).

Definitions of medical terms

Amniocentesis--Surgical transabdominal perforation of the uterus to obtain amniotic fluid to be used in the detection of genetic disorders, fetal abnormalities, and fetal lung maturity.

Electronic fetal monitoring--Monitoring with external devices applied to the maternal abdomen or with internal devices with an electrode attached to the fetal scalp and a catheter through the cervix into the uterus, to detect and record fetal heart tones and uterine contractions.

Induction of labor--The initiation of uterine contractions before the spontaneous onset of labor by medical and/or surgical means for the purpose of delivery.

Stimulation of labor--Augmentation of previously established labor by use of oxytocin.

Tocolysis--Use of medications to inhibit preterm uterine contractions to extend the length of pregnancy and therefore avoid a preterm birth.

Ultrasound--Visualization of the fetus and placenta by means of sound waves.

Complications of labor and/or delivery

The checkbox format allows for the selection of 15 specific complications and for the designation of more than 1 complication where appropriate. A choice of "None" is also included. Accordingly, if the item is not completed, it is classified as "not stated."

All States and the District of Columbia included this item on their birth certificates in 1998. However, Texas did not report all of the complications. Texas did not report anesthetic complications or fetal distress.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials (16).

Definitions of medical terms

Febrile--A fever greater than 100 degrees F. or 38 C. occurring during labor and/or delivery.

Meconium, moderate/heavy--Meconium consists of undigested debris from swallowed amniotic fluid, various

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products of secretion, excretion, and shedding by the gastrointestinal tract; moderate to heavy amounts of meconium in the amniotic fluid noted during labor and/or delivery.

Premature rupture of membranes (more than 12 hours)--Rupture of the membranes at any time during pregnancy and more than 12 hours before the onset of labor.

Abruptio placenta--Premature separation of a normally implanted placenta from the uterus.

Placenta previa--Implantation of the placenta over or near the internal opening of the cervix.

Other excessive bleeding--The loss of a significant amount of blood from conditions other than abruptio placenta or placenta previa.

Seizures during labor--Maternal seizures occurring during labor from any cause.

Precipitous labor (less than 3 hours)--Extremely rapid labor and delivery lasting less than 3 hours.

Prolonged labor (more than 20 hours)--Abnormally slow progress of labor lasting more than 20 hours.

Dysfunctional labor--Failure to progress in a normal pattern of labor.

Breech/malpresentation--At birth, the presentation of the fetal buttocks rather than the head, or other malpresentation.

Cephalopelvic disproportion--The relationship of the size, presentation, and position of the fetal head to the maternal pelvis prevents dilation of the cervix and/or descent of the fetal head.

Cord prolapse--Premature expulsion of the umbilical cord in labor before the fetus is delivered.

Anesthetic complications--Any complication during labor and/or delivery brought on by an anesthetic agent or agents.

Fetal distress--Signs indicating fetal hypoxia (deficiency in amount of oxygen reaching fetal tissues).

Abnormal conditions of the newborn

This item provides information on eight specific abnormal conditions. More than one abnormal condition may be reported for a given birth or "None" may be selected. If the item is not completed it is tabulated as "not stated." This item was included on the birth certificates of all States and the District of Columbia in 1998. However, four areas did not include all conditions. Nebraska and Texas did not report birth injury, New York City did not report assisted ventilation less than 30 minutes or assisted ventilation of 30 minutes or more, and Wisconsin did not report fetal alcohol syndrome.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics (16).

Definitions of medical terms

Anemia--Hemoglobin level of less than 13.0 g/dL or a hematocrit of less than 39 percent.

Birth injury--Impairment of the infant's body function or structure due to adverse influences that occurred at birth.

Fetal alcohol syndrome--A syndrome of altered prenatal growth and development occurring in infants born of women who consumed excessive amounts of alcohol during pregnancy.

Hyaline membrane disease/RDS--A disorder primarily of prematurity, manifested clinically by respiratory distress and pathologically by pulmonary hyaline membranes and incomplete expansion of the lungs at birth.

Meconium aspiration syndrome--Aspiration of meconium by the fetus or newborn, affecting the lower respiratory system.

Assisted ventilation (less than 30 minutes)--A mechanical method of assisting respiration for newborns with respiratory failure.

Assisted ventilation (30 minutes or more)--Newborn placed on assisted ventilation for 30 minutes or longer.

Seizures--A seizure of any etiology.

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Congenital anomalies of child

The data provided in this item relate to 21 specific anomalies or anomaly groups. It is well documented that congenital anomalies, except for the most visible and most severe, are incompletely reported on birth certificates. The completeness of reporting specific anomalies depends on how easily they are recognized in the short time between birth and birth-registration. Forty-nine States and the District of Columbia included this item on their birth certificates (New Mexico did not). This reporting area included 99 percent of all births in the United States in 1998. The format allows for the identification of more than one anomaly including a choice of "None" should no anomalies be evident. The category "not stated" includes birth records for which the item is not completed.

The following definitions are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials (16).

Definitions of medical terms

Anencephalus--Absence of the cerebral hemispheres.

Spina bifida/meningocele--Developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude.

Hydrocephalus--Excessive accumulation of cerebrospinal fluid within the ventricles of the brain with consequent enlargement of the cranium.

Microcephalus--A significantly small head.

Other central nervous system anomalies--Other specified anomalies of the brain, spinal cord, and nervous system.

Heart malformations--Congenital anomalies of the heart.

Other circulatory/respiratory anomalies--Other specified anomalies of the circulatory and respiratory systems.

Rectal atresia/stenosis--Congenital absence, closure, or narrowing of the rectum.

Tracheo-esophageal fistula/Esophageal atresia--An abnormal passage between the trachea and the esophagus; esophageal atresia is the congenital absence or closure of the esophagus.

Omphalocele/gastroschisis--An omphalocele is a protrusion of variable amounts of abdominal viscera from a midline defect at the base of the umbilicus. In gastroschisis, the abdominal viscera protrude through an abdominal wall defect, usually on the right side of the umbilical cord insertion.

Other gastrointestinal anomalies--Other specified congenital anomalies of the gastrointestinal system.

Malformed genitalia--Congenital anomalies of the reproductive organs.

Renal agenesis--One or both kidneys are completely absent.

Other urogenital anomalies--Other specified congenital anomalies of the organs concerned in the production and excretion of urine, together with organs of reproduction.

Cleft lip/palate--Cleft lip is a fissure of elongated opening of the lip; cleft palate is a fissure in the roof of the mouth. These are failures of embryonic development.

Polydactyly/syndactyly/adactyly--Polydactyly is the presence of more than five digits on either hands and/or feet; syndactyly is having fused or webbed fingers and/or toes; adactyly is the absence of fingers and/or toes.

Club foot--Deformities of the foot, which is twisted out of shape or position.

Diaphragmatic hernia--Herniation of the abdominal contents through the diaphragm into the thoracic cavity usually resulting in respiratory distress.

Other musculoskeletal/integumental anomalies--Other specified congenital anomalies of the muscles, skeleton, or skin.

Down's syndrome--The most common chromosomal defect with most cases resulting from an extra chromosome (trisomy 21).

Other chromosomal anomalies--All other chromosomal aberrations.

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Method of delivery

The birth certificate contains a checkbox item on method of delivery. The choices include vaginal delivery, with the additional options of forceps, vacuum, and vaginal birth after previous cesarean section (VBAC), as well as a choice of primary or repeat cesarean. When only forceps, vacuum, or VBAC is checked, a vaginal birth is assumed. In 1998 this information was collected from the birth certificates of all States and the District of Columbia.

Several rates are computed for method of delivery. The overall cesarean section rate or total cesarean rate is computed as the proportion of all births that were delivered by cesarean section. The primary cesarean rate is a measure that relates the number of women having a primary cesarean birth to all women giving birth who have never had a cesarean delivery. The denominator for this rate is the sum of women with a vaginal birth excluding VBACs and women with a primary cesarean birth. The rate for vaginal birth after previous cesarean (VBAC) delivery is computed by relating all VBAC deliveries to the sum of VBAC and repeat cesarean deliveries, that is, to women with a previous cesarean section. VBAC rates for first births exist because the rates are computed on the basis of previous pregnancies, not just live births.

Hispanic parentage

The 1989 revision of the U.S. Standard Certificate of Live Births includes items to identify the Hispanic origin of the parents. Concurrent with the 1978 revision of the U.S. Certificate of Live Birth, NCHS recommended that items to identify the Hispanic or ethnic origin of the newborn's parents be included on birth certificates and has tabulated and evaluated these data from the reporting States. All 50 States and the District of Columbia reported Hispanic origin of the parents for 1998. In 1989 Louisiana, New Hampshire, and Oklahoma did not report this information; in 1990 New Hampshire and Oklahoma did not report, and in 1991-92 New Hampshire did not report Hispanic origin.

In computing birth and fertility rates for the Hispanic population, births with origin of mother not stated are included with non-Hispanic births rather than being distributed. Thus, rates for the Hispanic population are underestimates of the true rates to the extent that the births with origin of mother not stated (1.2 percent in 1998) were actually to Hispanic mothers. The population with origin not stated was imputed. The effect on the rates is believed to be small.

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 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

An estimated 99 percent of all births occurring in the United States in 1998 were registered; for white births registration was 99.4 percent complete and for all other births, 98.6 percent complete. These estimates are based on the results of the 1964-68 test of birth-registration completeness according to place of delivery (in or out of hospital) and race and on the 1989 proportions of births in these categories. The primary purpose of the test was to obtain current measures of registration completeness for births in and out of hospital by race on a national basis. Data for States were not available

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as they had been from the previous birth-registration tests in 1940 and 1950. A detailed discussion of the method and results of the 1964-68 birth-registration test is available (17).

The 1964-68 test has provided an opportunity to revise the estimates of birth-registration completeness for the years since the previous test in 1950 to reflect the improvement in registration. This has been done using registration completeness figures from the two tests by place of delivery and race. Estimates of registration completeness for four groups (based on place of delivery and race) for 1951-65 were computed by interpolation between the test results. (It was assumed that the data from the more recent test are for 1966, the midpoint of the test period.) The results of the 1964-68 test are assumed to prevail for 1966 and later years. These estimates were used with the proportions of births registered in these categories to obtain revised numbers of births adjusted for underregistration for each year. The overall percent of birth-registration completeness by race was then computed. Data adjusted for underregistration for 1951-59 have been revised to be consistent with the 1964-68 test results and differ slightly from data shown in annual reports for years before 1969. For these years the published number of births and birth rates for both racial groups have been revised slightly downward because the 1964-68 test indicated that previous adjustments to registered births were slightly inflated. Because registration completeness figures by age of mother and by live-birth order are not available from the 1964-68 test, it must be assumed that the relationships among these variables have not changed since 1950.

*Discontinuation of adjustment for underregistration, 1960--*Adjustment for underregistration of births was discontinued in 1960 when birth registration for the United States was estimated to be 99.1 percent complete. This removed a bias introduced into age-specific rates when adjusted births classified by age were used. Age-specific rates are calculated by dividing the number of births to an age group of mothers by the population of women in that age group. Tests have shown that population figures are likely to be understated through census undercounts; these errors compensate for underregistration of births. Adjustment for underregistration of births, therefore, removes the compensating effect of under enumeration, biasing the age-specific rates more than when uncorrected birth and population data are used. (For further details see page 4-11 in the Technical Appendix of volume I, Vital Statistics of the United States, 1963.)

The age-specific rates used in the cohort fertility tables are an exception to the above statement. These rates are computed from births corrected for underregistration and population estimates adjusted for under enumeration and misstatement of age. Adjusted birth and population estimates are used for the cohort rates because they are an integral part of a series of rates, estimated with a consistent methodology. It was considered desirable to maintain consistency with respect to the cohort rates, even though it means that they will not be precisely comparable with other rates shown for 5-year age groups.

Completeness of reporting

Interpretation of these data must include evaluation of item completeness. The percent "not stated" is one measure of the quality of the data. Completeness of reporting varies among items and States. See [table A](#) for the percent of birth records on which specified items were not stated.

Quality control procedures

States in the Vital Statistics Cooperative Program are required to have an error rate of less than 2.0 percent for each item for 3 consecutive data months during the initial qualifying period. Once a State is qualified, NCHS monitors the quality of data received. This was achieved through independent verification of a sample of records for some States as well as comparing the State data with data from previous years. In addition, there is verification at the State level before NCHS is sent the data.

After the coding is completed, counts of the taped records are balanced against control totals for each shipment of records from a registration area. Impossible codes are eliminated during the editing processes on the computer and corrected on the basis of reference to the source record or adjusted by arbitrary code assignment. All subsequent operations involved in tabulation and table preparation are verified during computer processing or by statistical clerks.

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Random variation and significance testing for natality data

The number of births reported for an area is essentially a complete count, since more than 99% of all births are registered. While this number is not subject to sampling error, it may be affected by nonsampling errors such as mistakes in recording the mother's residence or age during the registration process.

When the number of births is used for analytic purposes the number of events that actually occurred can be thought of as one in a large series of possible results that could have occurred under the same circumstances. When considered in this way, the number of births is subject to random variation. The probable range of values may be estimated from the actual figures according to certain statistical assumptions.

The confidence interval is the range of values for the number of births, birth rates, or percent of births that you could expect in 95 out of 100 cases. The confidence limits are the end points of this range of values (the highest and lowest values). Confidence limits tell you how much the number of events or rates could vary under similar circumstances.

Confidence limits for numbers, rates, and percents can be estimated from the actual number of events. Procedures differ for rates and percents and also differ depending on the number of births on which these statistics are based. Below are detailed procedures and examples for each type of case.

95-percent confidence limits for numbers less than 100

When the number of births is less than 100 and the rate is small, the data are assumed to follow a Poisson probability distribution. Confidence limits are estimated using the following formulas:

$$\text{Lower limit} = B \times L$$

$$\text{Upper limit} = B \times U$$

where:

B = the number of births

L = the value in [Table C](#) that corresponds to the number B

U = the value in [Table C](#) that corresponds to the number B

Example

Suppose the number of first births to American Indian women 40-44 years of age was 47. The confidence limits for this number would be:

$$\begin{aligned} \text{Lower limit} &= B \times L \\ &= 47 \times 0.73476 \\ &= 35 \end{aligned}$$

$$\begin{aligned} \text{Upper limit} &= B \times U \\ &= 47 \times 1.32979 \\ &= 63 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to American Indian women 40-44 years of age would lie between 35 and 63.

95-percent confidence limits for numbers of 100 or more

When the number of events is greater than 100, the data are assumed to be approximately normally distributed. Formulas for 95-percent confidence limits are:

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$$\text{Lower limit} = B - (1.96 \times \sqrt{B})$$

$$\text{Upper limit} = B + (1.96 \times \sqrt{B})$$

where:

B = the number of births

Example

Suppose the number of first births to white women 40-44 years of age was 14,108. The 95-percent confidence limits for this number would be:

$$\begin{aligned} \text{Lower limit} &= 14,108 - [1.96 \times \sqrt{14,108}] \\ &= 14,108 - 233 \\ &= 13,875 \end{aligned}$$

$$\begin{aligned} \text{Upper limit} &= 14,108 + [1.96 \times \sqrt{14,108}] \\ &= 14,108 + 233 \\ &= 14,341 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to white women 40-44 years of age would lie between 13,875 and 14,341.

Computing confidence intervals for rates

The same statistical assumptions can be used to estimate the variability in birth rates. Again, one formula is used for rates based on numbers of events less than 100, and another formula for rates based on numbers of 100 or greater. For our purposes, assume that the denominators of these rates (the population estimates) have no error. While this assumption is technically correct only for denominators based on the census which occurs every 10 years, the error in intercensal population estimates is usually small, difficult to measure, and therefore not considered.

95-percent confidence limits for rates based on less than 100 events

When the number of events in the numerator is less than 20, an asterisk is shown in place of the rate because there were too few births to compute a statistically reliable rate. When the number of events in the numerator is greater than 20 but less than 100, the confidence interval for a rate can be estimated using the two formulas which follow and the values in Table IV.

$$\text{Lower limit} = R \times L$$

$$\text{Upper limit} = R \times U$$

where:

R = the birth rate

L = the value in [Table C](#) that corresponds to the number B in the numerator of the rate

U = the value in [Table C](#) that corresponds to the number B in the numerator of the rate

Example

Suppose that the first birth rate for American Indian women 40-44 years of age was 0.54 per thousand, based on 47 births in the numerator. Using [Table C](#):

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$$\begin{aligned} \text{Lower limit} &= 0.54 \times 0.73476 = .40 \\ \text{Upper limit} &= 0.54 \times 1.32979 = .72 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual first birth rate for American Indian women 40-44 year of age lies between .40 and .72.

95-percent confidence limits for rates when the numerator is 100 or more

In this case, use the following formula for the birth rate R based on the number of births B:

$$\begin{aligned} \text{Lower limit} &= R - [1.96 \times \sqrt{R/B}] \\ \text{Upper limit} &= R + [1.96 \times \sqrt{R/B}] \end{aligned}$$

where:

- R = the birth rate
- B = the number of births

Example

Suppose the first birth rate for white women 40-44 years of age was 1.55 per thousand, based on 14,108 births in the numerator. Therefore, the 95-percent confidence interval would be:

$$\begin{aligned} \text{Lower limit} &= 1.55 - [1.96 \times \sqrt{1.55 / 14,108}] \\ &= 1.55 - .026 \\ &= 1.52 \end{aligned}$$

$$\begin{aligned} \text{Upper limit} &= 1.55 + [1.96 \times \sqrt{1.55 / 14,108}] \\ &= 1.55 + .026 \\ &= 1.58 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual first birth rate for white women 40-44 years of age lies between 1.52 and 1.58.

Computing 95-percent confidence intervals for percents

In many instances we need to compute the confidence intervals for percents. Percents derive from a binomial distribution. As with birth rates, an asterisk will be shown for any percent which is based on fewer than 20 births in the numerator. We easily compute a 95-percent confidence interval for a percent when the following conditions are met:

$$\begin{aligned} B \times p &\geq 5 \quad \text{and} \\ B \times q &\geq 5 \end{aligned}$$

where:

- B = number of births in the denominator
- p = percent divided by 100
- q = 1 - p

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For natality data, these conditions will be met except for very rare events in small subgroups. If the conditions are *not* met, the variation in the percent will be so large as to render the confidence intervals meaningless. When these conditions are met the 95-percent confidence interval can be computed using the normal approximation of the binomial. The 95-percent confidence intervals are computed by the following formulas:

$$\begin{aligned} \text{Lower limit} &= p - [1.96 \times (\sqrt{p \times q/B})] \\ \text{Upper limit} &= p + [1.96 \times (\sqrt{p \times q/B})] \end{aligned}$$

where:

$$\begin{aligned} B &= \text{number of births in the denominator} \\ p &= \text{percent divided by 100} \\ q &= 1 - p \end{aligned}$$

Example

Suppose the percent of births to Hispanic women in Alabama that were to unmarried women was 23.0 percent. This was based on 310 births in the numerator and 1,345 births in the denominator. First we test to make sure we can use the normal approximation of the binomial:

$$\begin{aligned} 1,345 \times .230 &= 309 \\ 1,345 \times (1 - .230) \\ &= 1,345 \times .770 = 1,036 \end{aligned}$$

Both 309 and 1,036 are greater than 5 so we can proceed. The 95-percent confidence interval would be:

$$\begin{aligned} \text{Lower limit} &= .23 - [1.96 \times (\sqrt{.23 \times .77/1,345})] \\ &= .23 - .022 \\ &= .208 \text{ or } 20.8 \text{ percent} \\ \text{Upper limit} &= .23 + [1.96 \times (\sqrt{.23 \times .77/1,345})] \\ &= .23 + .022 \\ &= .252 \text{ or } 25.2 \text{ percent} \end{aligned}$$

This means that the chances are 95 out of 100 that the actual percent of births in Alabama to Hispanic women that are to unmarried women lies between 20.8 and 25.2 percent.

Significance testing

One of the rates is based on fewer than 100 cases

To compare two rates, when one or both of those rates are based on less than 100 cases, you first compute the confidence intervals for both rates. Then you check to see if those intervals overlap. If they **do** overlap, the difference is not statistically significant at the 95-percent level. If they **do not** overlap, the difference is indeed “statistically significant.”

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Example

Is the first birth rate for American Indian women 40-44 years of age (.54 per 1,000) significantly lower than the comparable rate for white women (1.55)? The rate for American Indian women is based on 47 events whereas the rate for white women is based on 14,108 events. The rate for American Indian women is based on less than 100 events; therefore, the first step is to compute the confidence intervals for both rates.

	Lower Limit	Upper Limit
American Indian women	0.40	0.72
White women	1.52	1.58

These two confidence intervals do not overlap. Therefore, the first birth rate for American women 40-44 is significantly lower (at the 95-percent confidence level) than the comparable rate for white women.

Both rates are based on 100 or more events

When both rates are based on 100 or more events, the difference between the two rates is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two rates.

$$1.96 \sqrt{\frac{R_1^2}{N_1} \% \frac{R_2^2}{N_2}}$$

where:

- R₁ = the first rate
- R₂ = the second rate
- N₁ = the first number of births
- N₂ = the second number of births

If the difference is greater than this statistic, then the difference would occur by chance less than 5 times out of 100. If the difference is less than this statistic, the difference might occur by chance more than 5 times out of 100. We say that the difference is not statistically significant at the 95-percent confidence level.

Example

Is the first birth rate for black women 40-44 years of age (1.08 per 1,000) significantly lower than the comparable rate for white women (1.55)? Both rates are based on more than 100 births (1,535 for black women and 14,108 for white women). The difference between the rates is 1.55 - 1.08 = .47. The statistic is then calculated as follows:

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$$1.96 \sqrt{\frac{1.08^2}{1,535} \% \frac{1.55^2}{14,108}}$$

$$\begin{aligned} &= 1.96 \times /[(1.166/1,535 + 2.403/14,108)] \\ &= 1.96 \times /(.00076+0.00017) \\ &= 1.96 \times /.00093 \\ &= 1.96 \times .03 \\ &= .06 \end{aligned}$$

The difference between the rates (.47) is greater than this statistic (.06). Therefore, the difference is statistically significant at the 95-percent confidence level.

Testing differences between two percents

When testing the difference between two percents, both percents must meet the following conditions:

$$\begin{aligned} B \times p &\geq 5 \quad \text{and} \\ B \times q &\geq 5 \end{aligned}$$

where:

$$\begin{aligned} B &= \text{number of births in the denominator} \\ p &= \text{percent divided by 100} \\ q &= 1 - p \end{aligned}$$

When both percents meet these conditions then the difference between the two percents is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two percents.

$$1.96 \sqrt{p(1-p) \left(\frac{1}{B_1} \% \frac{1}{B_2} \right)}$$

where:

$$\begin{aligned} B_1 &= \text{the number of births in the denominator for the first percent} \\ B_2 &= \text{the number of births in the denominator for the second percent} \\ p &= \end{aligned}$$

$$\frac{B_1 p_1 \% B_2 p_2}{B_1 \% B_2}$$

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p_1 = the first percent divided by 100
 p_2 = the second percent divided by 100

Example

Is the percent of births to Hispanic women that were to unmarried women higher in Alaska (28.8 percent) than in Alabama (23.0). The number in the denominator was 1,345 in Alabama and 593 in Alaska. The necessary conditions are met for both percents (calculations not shown). The difference between the two percents is $.288 - .230 = .058$. The statistic is then calculated as follows:

$$\begin{aligned} & 1.96 \sqrt{(.2477) (.7523) (.0024)} \\ & = 1.96 \times \sqrt{.000447} \\ & = 1.96 \times .021 \\ & = .042 \end{aligned}$$

The difference between the percents (.058) is greater than this statistic (.042). Therefore, the difference is statistically significant at the 95-percent confidence level.

Computation of rates and other measures

Population bases

The rates shown in this report were computed on the basis of population statistics prepared by the U.S. Bureau of the Census. Rates for 1940, 1950, 1960, 1970, 1980, and 1990 are based on the population enumerated as of April 1 in the censuses of those years. Rates for all other years are based on the estimated midyear (July 1) population for the respective years. Birth rates for the United States, individual States, and metropolitan areas are based on the total resident populations of the respective areas. Except as noted these populations exclude the Armed Forces abroad but include the Armed Forces stationed in each area. The resident population of the birth- and death-registration States for 1900-32 and for the United States for 1900-98 is shown in table 4-1. In addition, the population including Armed Forces abroad is shown for the United States. Table D shows the sources for these populations.

In both the 1980 and 1990 censuses, a substantial number of persons did not specify a racial group that could be classified as any of the White, Black, American Indian, Eskimo, Aleut, Asian, or Pacific Islander categories on the census form (18). In 1980 the number of persons of "other" race was 6,758,319; in 1990 it was 9,804,847. In both censuses, the large majority of these persons were of Hispanic origin (based on response to a separate question on the form), and many wrote in their Hispanic origin, or Hispanic origin type (for example, Mexican, Puerto Rican) as their race. In both 1980 and 1990, persons of unspecified race were allocated to one of the four tabulated racial groups (white, black, American Indian, Asian or Pacific Islander), based on their response to the Hispanic origin question. These four race categories conform with the 1979 edition of OMB Directive 15 which mandates that race data must

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contain at least these 4 categories. These categories are also more consistent with the race categories in vital statistics.

In the allocation of unspecified race was carried out using cross-tabulations of age, sex, race, type of Hispanic origin, and county of residence. Persons of Hispanic origin and unspecified race were allocated to either white or black, based on their Hispanic origin type. Persons of "other" race and Mexican origin were categorically assumed to be white, while persons in other Hispanic categories were distributed to white and black pro rata within the county-age-sex group. For "other-not-specified" persons who were not Hispanic, race was allocated to white, black, or Asian and Pacific Islander, based on proportions gleaned from sample data. The 20-percent sample (respondents who were enumerated on the longer census form) provided a highly detailed coding of race, which allowed identification of otherwise unidentifiable responses with a specified race category. Allocation proportions were thus established at the State level, which were used to distribute the non-Hispanic persons of "other" race in the 100-percent tabulations.

In 1990 the race modification procedure was carried out using individual census records. Persons whose race could not be specified were assigned to a racial category using a pool of "race donors," which was derived from persons of specified race and the identical response to the Hispanic origin question within the auspices of the same Census District Office. As in 1980, the underlying assumption was that the Hispanic origin response was the major criterion for allocating race. Unlike 1980, persons of Hispanic origin, including Mexican, could be assigned to any racial group, rather than white or black only, and the non-Hispanic component of "other" race was allocated primarily on the basis of geography (District Office), rather than detailed characteristic.

The means by which respondent's age was determined were fundamentally different in the two censuses; therefore, the problems that necessitated the modification were different. In 1980 respondents reported year of birth and quarter of birth (within year) on the census form. When census results were tabulated, persons born in the first quarter of the year (before April 1) had age equal to 1980 minus year of birth, while persons born in the last three quarters had age equal to 1979 minus year of birth.

In 1990 the quarter year of birth was not reported on the census form, so that direct determination of age from year of birth was impossible. In 1990 census publications age is based on respondents' direct reports of age at last birthday. This definition proved inadequate for postcensal estimates, because it was apparent that many respondents had reported their age at time of either completion of the census form or interview by an enumerator, which could occur several months after the April 1 reference data. As a result, age was biased upward. Modification was based on a respecification of age, for most individual respondents, by year of birth, with allocation to first quarter (persons aged 1990 minus year of birth) and last three quarters (aged 1989 minus year of birth) based on a historical series of registered births by month. This process partially restored the 1980 logic for assignment of age. It was not considered necessary to correct for age overstatement and heaping in 1990, because the availability of age and year of birth on the census form provided elimination of spurious year-of-birth reports in the census data before modification occurred.

Populations for 1998--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington, DC: U.S. Bureau of the Census, <http://www.census.gov/population/www/estimates/uspop.html> Internet release, June 4, 1999.

Populations for 1997--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. PPL-91R. U.S. Bureau of the Census. Rounded populations are consistent with U.S. Bureau of the Census file NESTV97. Washington: U.S. Department of Commerce. 1998.

Populations for 1996--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report, United States population estimates by age, sex, race and Hispanic origin: 1990 to 1996. U.S. Bureau of the Census. PPL-57. Washington: U.S. Department of Commerce. 1997.

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Populations for 1995--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report, United States population estimates by age, sex, race and Hispanic origin: 1990 to 1995. U.S. Bureau of the Census. Census file RESDO795, PPL-41. Washington: U.S. Department of Commerce. 1996.

Populations for 1994--The population of the United States by age, sex, race, and Hispanic origin is shown in the Census Bureau report, United States population estimates by age, sex, race and Hispanic origin: 1990 to 1994. U.S. Bureau of the Census. PPL-21. Washington: U.S. Department of Commerce. 1995.

Populations for 1993--The population of the United States by age, sex, race and Hispanic origin is tabulated from Census file RESO793.

Populations for 1992--The population of the United States by age, sex, race and Hispanic origin is tabulated from census file RESPO792.

Populations for 1991--The population of the United States by age, race, and sex is shown in *Current Population Reports*, Series P-25, Number 1095. Monthly population figures were published in *Current Population Reports*, Series P-25, Number 1097.

Populations for 1990--The population of the United States by age, race, and sex, and the population for each State is shown in *Current Population Reports*, Series P-25, Number 1095. The figures have been modified as described above. Monthly population figures were published in *Current Population Reports*, Series P-25, Number 1094.

Population estimates for 1981-89--Birth rates for 1981-89 (except those for cohorts of women) have been revised, based on revised population estimates that are consistent with the 1990 census levels, and thus may differ from rates published in volumes of *Vital Statistics of the United States* for these years. The 1990 census counted approximately 1.5 million fewer persons than had earlier been estimated for April 1, 1990. The revised estimates for the United States by age, race, and sex were published by the U.S. Bureau of the Census in *Current Population Reports*, Series P-25, Number 1095. Population estimates by month are based on data published in *Current Population Reports*, Series P-25, Number 1094 and unpublished data. Unpublished revised estimates for States were obtained from the U.S. Bureau of the Census.

Populations for 1980--The population of the United States by age, race, and sex, and the population for each State are shown in tables 4-2 and 4-3 of volume I, *Vital Statistics of the United States*, 1980. The figures by race have been modified as described above. Monthly population figures were published in *Current Population Reports*, Series P-25, Number 899.

Population estimates for 1971-79--Birth rates for 1971-79 (except those for cohorts of women) have been revised, based on revised population estimates that are consistent with the 1980 census levels, and thus may differ from rates published in volumes of *Vital Statistics of the United States* for these years. The 1980 census counted approximately 5.5 million more persons than had earlier been estimated for April 1, 1980 (19). The revised estimates for the United States by age, race, and sex were published by the U.S. Bureau of the Census in *Current Population Reports*, Series P-25, Number 917. Population estimates by month are based on data published in *Current Population Reports*, Series P-25, Number 899. Unpublished revised estimates for States were obtained from the U.S. Bureau of the Census.

Population estimates for 1961-69--Birth rates for 1961-69 are based on revised estimates of the population and thus may differ slightly from rates published before 1976. The revised estimates used in computing these rates were published in *Current Population Reports*, Series P-25, Number 519. The rates for 1961-64 are based on revised estimates of the population published in *Current Population Reports*, Series P-25, Numbers 321 and 324 and may differ slightly from rates published in those years.

Population estimates for 1951-59--Final intercensal estimates of the population by age, race, and sex and total population by State for 1951-59 are shown in tables 4-4 and 4-5 of volume I, *Vital Statistics of the United States*, 1966. Beginning with 1963 these final estimates have been used to compute birth rates for 1951-59 in all issues of *Vital Statistics of the United States*.

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Net census undercounts and overcounts

The U.S. Bureau of the Census has conducted extensive research to evaluate the coverage of the U.S. population (including undercount, overcount, and misstatement of age, race, and sex) in the last five decennial censuses 1950, 1960, 1970, 1980, and 1990. These studies provide estimates of the national population, that were not enumerated or over enumerated in the respective censuses, by age, race, and sex (19-21). The report for 1990 (22) includes estimates of net under enumeration and over enumeration for age, sex, and racial subgroups of the national population, modified for race consistency with previous population counts as described in the section "Population bases."

These studies indicate that there are differential coverages in the censuses among the population subgroups; that is, some age, race, and sex groups are more completely enumerated than others. To the extent that these estimates of overcounts or undercounts are valid, that they are substantial, and that they vary among subgroups and geographic areas, census miscounts can have consequences for vital statistics measures (20). However, the effects of undercounts in the census are reduced to the extent that there is underregistration of births. If these two factors are of equal magnitude, rates based on unadjusted populations are more accurate than those based on adjusted populations because the births have not been adjusted for underregistration.

The impact of net census miscounts on vital statistics measures includes the effects on levels of the rates and effects on differentials among groups.

If adjustments were made for persons who were not counted in the census of population, the size of the denominators would generally increase and the rates would be smaller than without an adjustment. Adjusted rates for 1990 can be computed by multiplying the reported rates by ratios of the 1990 census-level population adjusted for the estimated net census miscounts, which are shown in table E. A ratio of less than 1.0 indicates a net census undercount and would result in a corresponding decrease in the rate. A ratio in excess of 1.0 indicates a net census overcount and would result in a corresponding increase in the rate.

Enumeration of white females in the childbearing ages was at least 97 percent complete for all ages. Among black women, the undercount ranged up to 5 percent. Generally, females in the childbearing ages were more completely enumerated than males for similar race-age groups.

If vital statistics measures were calculated with adjustments for net census miscounts for each of these subgroups, the resulting rates would have been differentially changed from their original levels; that is, rates for those groups with the greatest estimated overcounts or undercounts would show the greatest relative changes due to these adjustments. Thus the racial differential in fertility between the white and the "All other" population can be affected by such adjustments.

Cohort fertility tables

The various fertility measures shown for cohorts of women are computed from births adjusted for underregistration and population estimates corrected for under enumeration and misstatement of age. Data published after 1974 use revised population estimates prepared by the U.S. Bureau of the Census and have been expanded to include data for the two major racial groups. Heuser has prepared a detailed description of the methods used in deriving these measures as well as more detailed data for earlier years (23).

Parity distribution--The percent distribution of women by parity (number of children ever born alive to mother) is derived from cumulative birth rates by order of birth. The percent of zero-parity women is found by subtracting the cumulative first birth rate from 1,000 and dividing by 10. The proportions of women at parities one through six are found from the following formula:

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Percent at N parity = (cum. rate, order N) - (cum. rate, order N + 1)/10

The percent of women at seventh and higher parities is found by dividing the cumulative rate for seventh-order births by 10.

Birth probabilities--birth probabilities indicate the likelihood that a woman of a certain parity and age at the beginning of the year will have a child during the year. Birth probabilities differ from central birth rates in that the denominator for birth probabilities is specific for parity as well as for age.

Age-sex-adjusted birth rates

The age-sex-adjusted birth rates are computed by the direct method. The age distribution of women aged 10-49 years as enumerated in 1940 and the total population of the United States for that year are used as the standard populations. The age-sex-adjusted birth rates show differences in the level of fertility independent of differences in the age and sex composition of the population. It is important not to confuse these adjusted rates with the crude rates shown in other tables.

Total fertility rate

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 are the same number of women in each age group. The rate of 2,058.5 in 1998, 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 1998, they would have a total of 2,058.5 children by the time they reached the end of the reproductive period (taken here to be age 55 years), assuming that all of the women survived to that age.

Intrinsic vital rates

The intrinsic vital rates are calculated from a stable population. A stable population is that hypothetical population, closed to external migration, that would become fixed in age-sex structure after repeated applications of a constant set of age-sex specific birth and death rates. For the mathematical derivation of intrinsic vital rates, see pages 4-13 and 4-14 in the Technical Appendix of volume I, Vital Statistics of the United States, 1962. The technique of calculating intrinsic vital rates is described by Barclay (24).

Seasonal adjustment of rates

The seasonally adjusted birth and fertility rates are computed from the X-11 variant of Census Method II (25). This method of seasonal adjustment 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.

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Computation of percents, medians, and means

Percent distributions, medians, and means are computed using only events for which the characteristic is reported. The "Not stated" category is subtracted from the total before computation of these measures. The asterisk (*) indicates that the numerator and/or denominator number is less than 20.

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References

1. World Health Organization. Official records; no 28 (Third World Health Assembly 3.6). Geneva: World Health Organization, 16-17. 1950.
2. National Office of Vital Statistics. International recommendations on definitions of live birth and fetal deaths. Washington: Public Health Service. 1950.
3. Statistical Office of the United Nations. Principles for vital statistics system: Recommendations for the improvement and standardization of vital statistics. Doc. ST/STAT/SER.M/19. New York: United Nations. 1953.
4. National Office of Vital Statistics. Births and birth rates in the entire United States, 1909 to 1948. Vital Statistics--Special reports; vol 33 no 8. Washington: Public Health Service. 1950.
5. U.S. Bureau of the Census. Population of metropolitan areas and component geography: 1990 and 1980 (6-30-90 definitions). 1990 CPH-L-10. Washington: U.S. Department of Commerce. 1991.
6. U.S. Department of Commerce. Metropolitan statistical area classification. Federal Register; vol 45 no 2. Washington: U.S. Government Printing Office, 956-62. 1980.
7. U.S. Office of Management and Budget. Standard metropolitan statistical areas. Rev. ed. Washington: U.S. Government Printing Office, 89-90. 1975.
8. U.S. Bureau of the Census. 1990 Census of Population. General population characteristics; (1990 CP-1-1). Washington: U.S. Department of Commerce. 1992.
9. Martin JA. Birth characteristics for Asian or Pacific Islander subgroups, 1992. Monthly vital statistics report; vol 43 no 10, suppl. Hyattsville, Maryland: National Center for Health Statistics. 1995.
10. Schachter J. Matched record comparison of birth certificate and census information in the United States, 1950. Vital statistics--Special Reports; vol 47 no 12. Washington: Public Health Service. 1962.
11. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Report of final natality statistics, 1996. Monthly vital statistics report; vol 46 no 11, suppl. Hyattsville, Maryland: National Center for Health Statistics. 1998.
12. Ventura SJ. Births to unmarried mothers, United States, 1980-92. National Center for Health Statistics. Vital Health Stat 21(53). 1995.
13. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Births: Final data for 1997. National vital statistics reports; vol 47 no 18. Hyattsville, Maryland: National Center for Health Statistics. 1999.
14. Berkov B. An evaluation of California's inferred birth statistics for unmarried women. National Center for Health Statistics. Vital Health Stat 2(97). 1985.
15. Taffel S, Johnson D, Heuser R. A method for imputing length of gestation on birth certificates. National Center for Health Statistics. Vital Health Stat 2(93). 1982.
16. Brockert JE, Stockbauer JW, Senner JW, et al. Recommended standard medical definitions for the U.S. Standard Certificate of Live Birth, 1989 revision. Paper presented at annual meeting of the Association for the Vital Record and Health Statistics. June 1990.
17. U.S. Bureau of the Census. Test of birth-registration completeness, 1964 to 1968. 1970 census of population and housing; PHC (E)-2. Evaluation and Research Program. Washington: U.S. Department of Commerce. 1973.
18. U.S. Bureau of the Census. U.S. population estimates, by age, sex, race, and Hispanic origin, 1980-91. Current population reports; series P-25, no 1095. Washington: U.S. Department of Commerce. 1993.
19. U.S. Bureau of the Census. Coverage of the national population in the 1980 census by age, sex, and race. Preliminary estimates by demographic analysis. Current population reports; series P-23, no 115. Washington: U.S. Department of Commerce. 1982.
20. U.S. Bureau of the Census. Estimates of coverage of the population by sex, race, and age--Demographic analysis. 1970 census of population and housing; PHC (E)-4. Evaluation and Research Program. Washington: U.S. Department of Commerce. 1974.
21. U.S. Bureau of the Census. Developmental estimates of the coverage of the population of States in the 1970 census-demographic analysis. Current population reports; series P-23, no 65. Washington: U.S. Department of

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- Commerce. 1977.
22. Robinson JG, Ahmed B, Das Gupta P, et al. Estimation of population coverage in the 1990 United States census based on demographic analysis. *JASA* 88(423):1061-71. 1993.
 23. Heuser R. Fertility tables for birth cohorts by color: United States, 1917-73. Washington: National Center for Health Statistics. 1976.
 24. Barclay GW. Techniques of population analysis. New York: John Wiley & Sons, Inc., 216-22. 1958.
 25. U.S. Bureau of the Census. The X-11 variant of the Census Method II Seasonal Adjustment Program. Technical paper; no 15, 1967 rev. Washington: U.S. Department of Commerce. 1967.

TYPE/PRINT
IN
PERMANENT
BLACK INK
FOR
INSTRUCTIONS
SEE
HANDBOOK

**U.S. STANDARD
CERTIFICATE OF LIVE BIRTH**

LOCAL FILE NUMBER

BIRTH NUMBER

CHILD

1. CHILD'S NAME (First, Middle, Last)		2. DATE OF BIRTH (Month, Day, Year)	3. TIME OF BIRTH
4. SEX	5. CITY, TOWN, OR LOCATION OF BIRTH		6. COUNTY OF BIRTH
7. PLACE OF BIRTH: <input type="checkbox"/> Hospital <input type="checkbox"/> Freestanding Birthing Center <input type="checkbox"/> Clinic/Doctor's Office <input type="checkbox"/> Residence <input type="checkbox"/> Other (Specify) _____		8. FACILITY NAME (If not institution, give street and number)	

**CERTIFIER/
ATTENDANT**

DEATH UNDER
ONE YEAR OF
AGE
Enter State File
Number of death
certificate for
this child

9. I certify that this child was born alive at the place and time and on the date stated. Signature _____	10. DATE SIGNED (Month, Day, Year)	11. ATTENDANT'S NAME AND TITLE (If other than certifier) (Type/Print) Name _____ <input type="checkbox"/> M.D. <input type="checkbox"/> D.O. <input type="checkbox"/> C.N.M. <input type="checkbox"/> Other Midwife <input type="checkbox"/> Other (Specify) _____
12. CERTIFIER'S NAME AND TITLE (Type/Print) Name _____ <input type="checkbox"/> M.D. <input type="checkbox"/> D.O. <input type="checkbox"/> Hospital Admin. <input type="checkbox"/> C.N.M. <input type="checkbox"/> Other Midwife <input type="checkbox"/> Other (Specify) _____		13. ATTENDANT'S MAILING ADDRESS (Street and Number or Rural Route Number, City or Town, State, Zip Code)

MOTHER

14. REGISTRAR'S SIGNATURE _____		15. DATE FILED BY REGISTRAR (Month, Day, Year)	
16a. MOTHER'S NAME (First, Middle, Last)		16b. MAIDEN SURNAME	17. DATE OF BIRTH (Month, Day, Year)
18. BIRTHPLACE (State or Foreign Country)	19a. RESIDENCE—STATE	19b. COUNTY	19c. CITY, TOWN, OR LOCATION
19d. STREET AND NUMBER		19e. INSIDE CITY LIMITS? (Yes or no)	20. MOTHER'S MAILING ADDRESS (If same as residence, enter Zip Code on _____)

FATHER

21. FATHER'S NAME (First, Middle, Last)	22. DATE OF BIRTH (Month, Day, Year)	23. BIRTHPLACE (State or Foreign Country)
---	--------------------------------------	---

INFORMANT

24. I certify that the personal information provided on this certificate is correct to the best of my knowledge and belief.
Signature of Parent or Other Informant _____

INFORMATION FOR MEDICAL AND HEALTH USE ONLY

MOTHER

FATHER

25. OF HISPANIC ORIGIN? (Specify No or Yes—If yes, specify Cuban, Mexican, Puerto Rican, etc.)		26. RACE—American Indian, Black, White, etc. (Specify below)		27. EDUCATION (Specify only highest grade completed)	
25a. <input type="checkbox"/> No <input type="checkbox"/> Yes Specify: _____		26a. _____		27a. _____	
25b. <input type="checkbox"/> No <input type="checkbox"/> Yes Specify: _____		26b. _____		27b. _____	
28. PREGNANCY HISTORY (Complete each section)			29. MOTHER MARRIED? (At birth, conception, or any time between) (Yes or no)		30. DATE LAST NORMAL MENSTRUATION BEGAN (Month, Day, Year)
LIVE BIRTHS (Do not include this child)		OTHER TERMINATIONS (Spontaneous and induced at any time after conception)		31. MONTH OF PREGNANCY PRENATAL CARE BEGAN—First, Second, Third, etc. (Specify)	
28a. Now Living Number _____ <input type="checkbox"/> None	28b. Now Dead Number _____ <input type="checkbox"/> None	28d. _____ <input type="checkbox"/> None		32. PRENATAL VISITS—Total Number (If none, so state)	
28c. DATE OF LAST LIVE BIRTH (Month, Year)		28e. DATE OF LAST OTHER TERMINATION (Month, Year)		33. BIRTH WEIGHT (Specify unit)	
36. APGAR SCORE		37a. MOTHER TRANSFERRED PRIOR TO DELIVERY? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, enter name of facility transferred from: _____			
36a. 1 Minute	36b. 5 Minutes	37b. INFANT TRANSFERRED? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, enter name of facility transferred to: _____			

MULTIPLE BIRTHS
Enter State File
Number for Mate(s)
LIVE BIRTH(S)

FETAL DEATH(S)

<p>38a. MEDICAL RISK FACTORS FOR THIS PREGNANCY (Check all that apply)</p> <p>Anemia (Hct. <30/Hgb. <10) 01 <input type="checkbox"/></p> <p>Cardiac disease 02 <input type="checkbox"/></p> <p>Acute or chronic lung disease 03 <input type="checkbox"/></p> <p>Diabetes 04 <input type="checkbox"/></p> <p>Genital herpes 05 <input type="checkbox"/></p> <p>Hydramnios/Oligohydramnios 06 <input type="checkbox"/></p> <p>Hemoglobinopathy 07 <input type="checkbox"/></p> <p>Hypertension, chronic 08 <input type="checkbox"/></p> <p>Hypertension, pregnancy-associated 09 <input type="checkbox"/></p> <p>Eclampsia 10 <input type="checkbox"/></p> <p>Incompetent cervix 11 <input type="checkbox"/></p> <p>Previous infant 4000+ grams 12 <input type="checkbox"/></p> <p>Previous preterm or small-for-gestational-age infant 13 <input type="checkbox"/></p> <p>Renal disease 14 <input type="checkbox"/></p> <p>Rh sensitization 15 <input type="checkbox"/></p> <p>Uterine bleeding 16 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 17 <input type="checkbox"/></p> <p>(Specify)</p>	<p>40. COMPLICATIONS OF LABOR AND/OR DELIVERY (Check all that apply)</p> <p>Febrile (>100°F. or 38°C.) 01 <input type="checkbox"/></p> <p>Meconium, moderate/heavy 02 <input type="checkbox"/></p> <p>Premature rupture of membrane (>12 hours) 03 <input type="checkbox"/></p> <p>Abruptio placenta 04 <input type="checkbox"/></p> <p>Placenta previa 05 <input type="checkbox"/></p> <p>Other excessive bleeding 06 <input type="checkbox"/></p> <p>Seizures during labor 07 <input type="checkbox"/></p> <p>Precipitous labor (<3 hours) 08 <input type="checkbox"/></p> <p>Prolonged labor (>20 hours) 09 <input type="checkbox"/></p> <p>Dysfunctional labor 10 <input type="checkbox"/></p> <p>Breech/Malpresentation 11 <input type="checkbox"/></p> <p>Cephalopelvic disproportion 12 <input type="checkbox"/></p> <p>Cord prolapse 13 <input type="checkbox"/></p> <p>Anesthetic complications 14 <input type="checkbox"/></p> <p>Fetal distress 15 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 16 <input type="checkbox"/></p> <p>(Specify)</p>	<p>43. CONGENITAL ANOMALIES OF CHILD (Check all that apply)</p> <p>Anencephalus 01</p> <p>Spina bifida/Meningocele 02</p> <p>Hydrocephalus 03</p> <p>Microcephalus 04</p> <p>Other central nervous system anomalies (Specify) _____ 05</p> <p>Heart malformations 06</p> <p>Other circulatory/respiratory anomalies (Specify) _____ 07</p> <p>Rectal atresia/stenosis 08</p> <p>Tracheo-esophageal fistula/ Esophageal atresia 09</p> <p>Omphalocele/ Gastroschisis 10</p> <p>Other gastrointestinal anomalies (Specify) _____ 11</p> <p>Malformed genitalia 12</p> <p>Renal agenesis 13</p> <p>Other urogenital anomalies (Specify) _____ 14</p> <p>Cleft lip/palate 15</p> <p>Polydactyly/Syndactyly/Adactyly 16</p> <p>Club foot 17</p> <p>Diaphragmatic hernia 18</p> <p>Other musculoskeletal/integumental anomalies (Specify) _____ 19</p> <p>Down's syndrome 20</p> <p>Other chromosomal anomalies (Specify) _____ 21</p> <p>None 00</p> <p>Other _____ 22</p> <p>(Specify)</p>
<p>38b. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items)</p> <p>Tobacco use during pregnancy Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Average number cigarettes per day _____</p> <p>Alcohol use during pregnancy Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Average number drinks per week _____</p> <p>Weight gained during pregnancy _____ lbs.</p>	<p>41. METHOD OF DELIVERY (Check all that apply)</p> <p>Vaginal 01 <input type="checkbox"/></p> <p>Vaginal birth after previous C-section 02 <input type="checkbox"/></p> <p>Primary C-section 03 <input type="checkbox"/></p> <p>Repeat C-section 04 <input type="checkbox"/></p> <p>Forceps 05 <input type="checkbox"/></p> <p>Vacuum 06 <input type="checkbox"/></p>	
<p>39. OBSTETRIC PROCEDURES (Check all that apply)</p> <p>Amniocentesis 01 <input type="checkbox"/></p> <p>Electronic fetal monitoring 02 <input type="checkbox"/></p> <p>Induction of labor 03 <input type="checkbox"/></p> <p>Stimulation of labor 04 <input type="checkbox"/></p> <p>Tocolysis 05 <input type="checkbox"/></p> <p>Ultrasound 06 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 07 <input type="checkbox"/></p> <p>(Specify)</p>	<p>42. ABNORMAL CONDITIONS OF THE NEWBORN (Check all that apply)</p> <p>Anemia (Hct. <39/Hgb. <13) 01 <input type="checkbox"/></p> <p>Birth injury 02 <input type="checkbox"/></p> <p>Fetal alcohol syndrome 03 <input type="checkbox"/></p> <p>Hyaline membrane disease/RDS 04 <input type="checkbox"/></p> <p>Meconium aspiration syndrome 05 <input type="checkbox"/></p> <p>Assisted ventilation <30 min 06 <input type="checkbox"/></p> <p>Assisted ventilation ≥30 min 07 <input type="checkbox"/></p> <p>Seizures 08 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 09 <input type="checkbox"/></p> <p>(Specify)</p>	

Table A. Percent of birth records on which specified items were not stated: United States each State, and Territory, 1998

(Page 1 of 2)

[By place of residence]

Area	Number of births	Place of birth	Attendant at birth	Mother's birth-place	Father's age	Father's race	Hispanic Origin		Educational attainment Mother	Live-birth order	Length of Gestation	Month prenatal care began	Number of prenatal visits
							Mother	Father					
Total of reporting areas 1/	3,941,553	0.0	0.0	0.3	14.4	14.8	1.2	15.3	1.5	0.7	1.0	2.8	3.6
Alabama	62,074	-	-	0.0	23.8	23.8	.0	23.8	0.3	0.0	0.1	0.3	0.3
Alaska	9,926	.0	.0	.2	12.9	14.7	.5	13.7	2.0	.2	.3	1.7	1.5
Arizona	78,243	-	.0	.3	21.5	23.3	1.3	23.6	2.0	.4	.2	2.1	3.6
Arkansas	36,865	.0	.0	.4	20.6	21.8	.1	21.0	.9	.2	.3	2.4	3.3
California	521,661	.0	.1	.3	7.4	6.8	.7	6.3	1.7	.1	2/ 5.4	1.6	2.9
Colorado	59,577	-	-	.2	9.6	10.2	.0	10.3	1.4	.0	.0	.7	.9
Connecticut	43,820	.0	.0	.4	9.4	10.8	5.3	14.4	3.9	8.3	.1	5.4	9.0
Delaware	10,578	.0	.0	.3	30.7	31.6	.3	30.7	.7	.3	.1	.9	1.1
District of Columbia	7,686	-	-	.0	44.9	51.3	.5	44.7	9.0	.2	.4	15.3	18.6
Florida	195,637	.0	-	.2	17.6	17.7	.1	19.1	.4	.0	.1	.8	1.7
Georgia	122,368	.0	.0	.2	18.0	18.4	.8	18.6	2.0	.3	.1	2.9	2.7
Hawaii	17,583	-	.0	.1	8.4	8.6	.1	8.4	.4	.0	10.4	5.3	6.1
Idaho	19,391	.0	.0	.3	8.6	11.2	1.5	11.4	4.2	1.3	.6	2.2	2.6
Illinois	182,588	.0	.0	.1	15.5	16.8	.0	16.8	.8	.2	.2	1.8	2.2
Indiana	85,122	.3	.1	.2	13.5	13.7	.4	13.7	.9	.4	.1	1.5	2.6
Iowa	37,282	.0	.0	.4	12.1	14.2	1.1	15.0	1.5	.1	.1	1.3	3.9
Kansas	38,422	.0	.0	.1	10.6	10.7	1.0	12.1	.4	.0	.1	.6	.8
Kentucky	54,329	.0	.1	.0	22.0	22.7	.1	23.7	.2	.1	.1	1.1	1.3
Louisiana	66,888	-	.0	.0	22.3	22.5	.2	22.5	.1	.0	.0	.3	.5
Maine	13,733	-	.0	-	10.0	10.0	4.3	18.7	.8	.3	.1	.5	.5
Maryland	71,972	.0	.0	.7	8.4	10.1	.6	6.8	2.0	1.6	.5	4.7	8.2
Massachusetts	81,411	.0	.0	.0	7.8	7.6	.4	6.8	.3	.2	.2	.9	.3
Michigan	133,666	.0	.2	.1	16.0	18.0	5.4	22.5	1.4	.6	.1	3.9	5.4
Minnesota	65,202	.0	.0	.0	8.9	11.3	5.2	15.4	2.2	.5	1.0	5.6	5.0
Mississippi	42,939	.0	.0	.1	24.2	24.0	.1	24.3	.2	.1	.2	.6	1.1
Missouri	75,358	.0	.0	.2	18.3	18.3	.1	18.5	.8	.3	.2	1.4	2.0
Montana	10,795	.0	.1	-	10.2	11.5	2.0	13.4	.4	.0	.1	.5	.5
Nebraska	23,534	.0	.0	.0	12.2	12.8	2.2	14.4	.1	.0	.0	.3	.6
Nevada	28,699	-	.0	.8	22.4	23.3	.7	22.0	3.2	1.1	1.1	6.2	10.0
New Hampshire	14,429	-	-	.0	7.2	9.1	3.5	11.6	.8	2.8	.2	1.7	1.8
New Jersey	114,550	.1	.1	.2	8.9	11.1	.4	9.4	2.3	.2	.2	5.0	6.0
New Mexico	27,318	.0	.0	2.8	27.5	26.8	.0	26.8	5.1	.5	.7	5.7	5.5
New York	258,207	.1	.1	.4	15.7	16.1	6.2	20.8	1.7	.1	.2	10.0	6.7
North Carolina	111,688	.0	.0	.0	17.2	17.2	.0	17.1	.2	.0	.1	.5	.5
North Dakota	7,932	-	-	.0	7.9	9.4	3.1	12.3	.2	-	.1	.6	.3
Ohio	152,794	.0	.0	.2	15.2	16.0	.4	15.8	.5	.2	.0	.5	1.5
Oklahoma	49,461	.0	.1	.1	17.0	18.9	1.1	18.8	2.0	12.2	3.2	10.9	12.8
Oregon	45,273	-	-	.1	11.6	4.6	.2	4.9	1.2	.1	.0	.4	.5
Pennsylvania	145,899	.0	.0	.8	5.7	4.3	.6	3.8	2.3	.4	.2	3.2	4.8
Rhode Island	12,599	-	-	.3	13.6	14.2	12.8	23.1	2.9	2.2	2.6	8.8	9.8
South Carolina	53,877	-	.0	.3	28.8	28.9	.1	28.8	4.6	.1	.2	1.5	1.6
South Dakota	10,288	.0	-	.0	11.8	12.1	.1	13.3	.2	-	.0	.4	.4
Tennessee	77,396	.0	.0	.0	16.1	16.2	.0	16.3	.2	.0	.2	1.1	.9
Texas	342,283	.0	.0	.4	15.3	15.4	.3	15.4	1.3	1.2	.6	2.0	5.2
Utah	45,165	.0	.0	.2	9.7	10.8	.3	9.3	.9	.2	.1	2.9	3.0
Vermont	6,582	.0	-	.1	9.1	15.3	2.6	16.4	2.5	.4	.2	3.6	1.2
Virginia	94,351	.0	.1	.1	17.8	18.6	.1	18.5	.5	1.1	.3	.6	1.2
Washington	79,663	.0	.0	.8	11.8	12.0	3.2	12.3	10.6	4.5	1.0	9.7	13.1
West Virgin	20,747	.1	.0	.1	13.3	14.2	.2	14.6	.5	.2	.5	4.3	3.2
Wisconsin	67,450	-	-	.0	28.4	28.4	.0	28.4	.1	.0	.0	.2	.3
Wyoming	6,252	.0	-	.0	13.6	14.0	.1	13.9	.4	.0	.1	.5	.5
Puerto Rico	60,412	-	.1	-	2.9	3.4	...	...	.2	.0	.1	.2	.1
Virgin Islands	1,800	.1	.6	-	21.6	24.3	3.2	26.4	1.7	.9	.8	.6	1.7
Guam	4,318	.1	.5	.1	23.6	24.9	.4	23.3	.6	.6	.2	.8	1.2
American Samoa	1,688	.1	-	5.9	34.2	34.8	...	...	...	-	...	...	...
Northern Marianas	1,462	.2	1.0	0.3	9.6	24.4	...	...	25.0	23.1	26.3	56.5	25.0

See footnotes at end of table.

Table A. Percent of birth records on which specified items were not stated: United States each State, and Territory, 1998

(Page 2 of 2)
[By place of residence]

Area	Number of births	Birth weight	5-minute Apgar score *	Medical risk factors	Tobacco use	Alcohol use	Weight gain	Obstetric procedures	Complications of labor and/or delivery	* Method of delivery	Abnormal conditions of newborn	Congenital anomalies
Total of reporting areas 1/	3,941,553	0.1	0.6	1.4	1.5	1.5	8.3	0.9	1.2	0.9	2.4	1.7
Alabama	62,074	0.0	0.2	3/ 0.0	0.0	0.1	3.1	0.0	0.0	0.3	0.0	0.1
Alaska	9,926	.2	.6	.3	.6	.6	1.6	.3	.3	.4	.4	.3
Arizona	78,243	.1	.6	.0	1.8	2.0	11.3	.0	.0	.2	.0	.4
Arkansas	36,865	.1	3.6	.5	.9	1.0	9.5	.4	.5	.7	.4	.4
California	521,661	.0	...	.0	...	...	...	.0	.0	.0	.0	.0
Colorado	59,577	.0	.3	.0	.1	.1	3.4	.0	.0	.0	.0	.1
Connecticut	43,820	.0	1.5	11.8	8.1	7.4	18.6	10.4	12.2	4.5	18.9	20.1
Delaware	10,578	.0	.4	.0	.2	.2	1.9	.0	.0	.0	.1	.1
District of Columbia	7,686	.1	1.1	.0	.1	.1	16.4	.0	.0	.0	.0	.0
Florida	195,637	.1	.2	.0	.1	.1	4.4	.0	.0	.6	.0	.0
Georgia	122,368	.0	.5	.4	.4	.4	5.6	.0	.0	.3	.0	.0
Hawaii	17,583	2.8	7.2	16.2	.1	.1	13.8	9.7	7.3	16.5	17.2	18.9
Idaho	19,391	.3	.6	1.0	.7	1.0	10.2	.9	.9	.3	.7	.7
Illinois	182,588	.1	.3	.1	1.0	.2	3.9	.0	.1	.4	.1	.1
Indiana	85,122	.5	.5	.1	...	.4	3.2	.1	.2	.4	.6	.6
Iowa	37,282	.1	.3	.2	3.3	3.8	6.9	.1	.3	.4	.3	.4
Kansas	38,422	.0	.4	3/ .5	.5	.5	.7	.4	.4	2.9	.4	.4
Kentucky	54,329	.1	.4	6.1	4.5	4.5	8.6	3.9	6.5	4.1	11.3	10.3
Louisiana	66,888	.1	.3	.0	.1	.1	6.8	.0	.1	.1	.1	.0
Maine	13,733	.1	.2	.1	1.1	1.4	1.8	.0	.1	.2	.1	.2
Maryland	71,972	.1	.5	.0	.5	.7	8.3	.0	.0	.2	.0	.0
Massachusetts	81,411	.2	.3	.6	.3	.3	1.1	.6	.6	.4	1.0	1.0
Michigan	133,666	.3	.4	.1	1.8	1.5	9.4	.1	.1	.6	.1	.1
Minnesota	65,202	.1	.8	8.3	7.2	7.3	18.1	6.5	7.6	4.5	8.2	8.5
Mississippi	42,939	.0	.4	.1	.2	.2	4.6	.1	.1	.2	.1	.1
Missouri	75,358	.0	.5	.1	.4	.4	3.0	.1	.1	.7	.1	.1
Montana	10,795	.0	.4	.1	.8	1.5	1.4	.1	.1	.5	.2	.1
Nebraska	23,534	.0	.2	.0	.9	.9	1.3	.0	.0	.2	6/ .0	.0
Nevada	28,699	.1	1.7	10.7	2.2	2.5	11.8	.5	6.6	1.5	12.4	12.5
New Hampshire	14,429	.1	.3	.0	.2	.3	5.5	.0	.0	.2	.1	.1
New Jersey	114,550	.1	.2	2.3	1.0	1.0	6.1	.1	1.6	.5	26.2	1.7
New Mexico	27,318	1.6	4.0	.1	2.0	2.1	11.3	.0	.0	.4	.1	...
New York	258,207	.1	.2	1.1	4/ 4.3	.2	9.6	.2	.4	.3	7/ 0.9	1.0
North Carolina	111,688	.0	.3	.0	.1	.1	2.3	.0	.0	.4	.0	.4
North Dakota	7,932	.1	.4	.1	.6	.7	1.3	.1	.1	1.0	.1	.1
Ohio	152,794	.1	.2	.0	.3	.1	2.6	.0	.0	.4	.0	.0
Oklahoma	49,461	.6	5.5	34.0	23.9	24.2	34.6	30.2	33.0	26.9	39.5	40.3
Oregon	45,273	.0	.4	.5	.7	.7	3.0	.0	.0	.2	.0	.0
Pennsylvania	145,899	.1	.3	.1	.9	.6	8.3	.0	.1	.1	.6	.5
Rhode Island	12,599	.4	.7	8.4	2.7	2.9	12.0	8.3	8.4	.7	18.9	19.3
South Carolina	53,877	.0	.4	.0	.1	.1	2.6	.0	.0	.5	.0	.0
South Dakota	10,288	.0	.3	.0	...	...	1.4	.0	.0	.2	.0	.0
Tennessee	77,396	.0	.3	.0	.2	.2	6.1	.0	.1	.4	.1	.0
Texas	342,283	.1	...	5/ 1.3	.4	.5	19.6	.1	8/ .1	.7	6/ .2	.3
Utah	45,165	.0	.3	.1	.5	.4	4.1	.0	.0	.0	.2	.4
Vermont	6,582	.2	.2	.1	.9	.5	2.0	.1	.1	.0	.2	.2
Virginia	94,351	.3	.4	.0	.1	.1	4.8	.0	.0	.4	.1	.1
Washington	79,663	.3	.4	5.5	5.2	15.1	23.7	7.1	9.3	.4	11.0	10.4
West Virginia	20,747	.1	.2	.0	.8	.8	9.0	.0	.0	.2	.0	.0
Wisconsin	67,450	.0	.4	.1	.1	.1	1.6	.0	.1	.0	9/ .1	.1
Wyoming	6,252	.0	.4	.0	1.1	1.1	2.1	.0	.0	.2	.0	.0
Puerto Rico	60,412	.0	.2	.0	.0	.0	.1	.0	.1	.0	.1	.1
Virgin Islands	1,800	.1	2.9	6.4	2.3	2.3	9.8	2.5	7.4	3.0	8.7	6.8
Guam	4,318	.1	1.3	5.4	1.1	1.3	4.0	1.9	2.9	1.3	5.7	5.5
American Samoa	1,688	-	...	...	...	...	...	...	...	...	...	...
Northern Marianas	1,462	12.3	21.5	...	...	...	...	...	...	43.6	...	...

0.0 Quantity more than zero but less than 0.05.

--Data not available.

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

2/ California reports date last normal menses began but does not report clinical estimate of gestation.

3/ Kansas does not report Rh sensitization.

4/ New York city (but not New York State) reports tobacco use.

5/ Texas does not report genital herpes and uterine bleeding.

6/ Nebraska and Texas do not report birth injury.

7/ New York city does not report assisted ventilation less than 30 minutes and assisted ventilation of 30 minutes or more.

8/ Texas does not report anesthetic complications and fetal distress.

9/ Wisconsin does not report fetal alcohol syndrome.

Table B. Births by State of Occurrence and Residence for Births Occurring in the 50 States and the District of Columbia, 1998

Area	Occurrence	Residence
United States	3,945,192	3,941,553
Alabama	61,209	62,074
Alaska	9,832	9,926
Arizona	78,076	78,243
Arkansas	35,763	36,865
California	522,290	521,661
Colorado	59,816	59,577
Connecticut	43,669	43,820
Delaware	11,023	10,578
District of Columbia	15,138	7,686
Florida	195,734	195,637
Georgia	123,262	122,368
Hawaii	17,619	17,583
Idaho	18,959	19,391
Illinois	179,462	182,588
Indiana	85,176	85,122
Iowa	37,433	37,282
Kansas	37,450	38,422
Kentucky	52,880	54,329
Louisiana	67,100	66,888
Maine	13,530	13,733
Maryland	67,408	71,972
Massachusetts	82,216	81,411
Michigan	132,443	133,666
Minnesota	65,094	65,202
Mississippi	41,942	42,939
Missouri	77,701	75,358
Montana	10,742	10,795
Nebraska	23,915	23,534
Nevada	28,218	28,699
New Hampshire	13,933	14,429
New Jersey	111,709	114,550
New Mexico	26,960	27,318
New York State only	135,408	138,296
New York City only	124,240	119,911
North Carolina	112,785	111,688
North Dakota	9,156	7,932
Ohio	153,400	152,794
Oklahoma	48,449	49,461
Oregon	46,278	45,273
Pennsylvania	146,465	145,899
Rhode Island	13,489	12,599
South Carolina	51,701	53,877
South Dakota	10,391	10,288
Tennessee	82,412	77,396
Texas	346,101	342,283
Utah	46,128	45,165
Vermont	6,257	6,582
Virginia	92,021	94,351
Washington	78,980	79,663
West Virginia	21,574	20,747
Wisconsin	66,421	67,450
Wyoming	5,834	6,252
Foreign Residents	-	3,639
Puerto Rico	-	21
Virgin Islands	-	19
Guam	-	4
American Samoa	-	-
Northern Marianas	-	-
Canada	-	111
Cuba	-	2
Mexico	-	2,818
Remainder of world	-	664

- Quantity zero.

Table C. Lower and upper 95 percent confidence limit factors for a birth rate based on a Poisson variable of 1-99 births

Number of births	L	U	Number of births	L	U
1	0.02532	5.57164	51	0.74457	1.31482
2	0.12110	3.61234	52	0.74685	1.31137
3	0.20622	2.92242	53	0.74907	1.30802
4	0.27247	2.56040	54	0.75123	1.30478
5	0.32470	2.33367	55	0.75334	1.30164
6	0.36698	2.17658	56	0.75539	1.29858
7	0.40205	2.06038	57	0.75739	1.29562
8	0.43173	1.97040	58	0.75934	1.29273
9	0.45726	1.89831	59	0.76125	1.28993
10	0.47954	1.83904	60	0.76311	1.28720
11	0.49920	1.78928	61	0.76492	1.28454
12	0.51671	1.74680	62	0.76669	1.28195
13	0.53246	1.71003	63	0.76843	1.27943
14	0.54671	1.67783	64	0.77012	1.27698
15	0.55969	1.64935	65	0.77178	1.27458
16	0.57159	1.62394	66	0.77340	1.27225
17	0.58254	1.60110	67	0.77499	1.26996
18	0.59266	1.58043	68	0.77654	1.26774
19	0.60207	1.56162	69	0.77806	1.26556
20	0.61083	1.54442	70	0.77955	1.26344
21	0.61902	1.52861	71	0.78101	1.26136
22	0.62669	1.51401	72	0.78244	1.25933
23	0.63391	1.50049	73	0.78384	1.25735
24	0.64072	1.48792	74	0.78522	1.25541
25	0.64715	1.47620	75	0.78656	1.25351
26	0.65323	1.46523	76	0.78789	1.25165
27	0.65901	1.45495	77	0.78918	1.24983
28	0.66449	1.44528	78	0.79046	1.24805
29	0.66972	1.43617	79	0.79171	1.24630
30	0.67470	1.42756	80	0.79294	1.24459
31	0.67945	1.41942	81	0.79414	1.24291
32	0.68400	1.41170	82	0.79533	1.24126
33	0.68835	1.40437	83	0.79649	1.23965
34	0.69253	1.39740	84	0.79764	1.23807
35	0.69654	1.39076	85	0.79876	1.23652
36	0.70039	1.38442	86	0.79987	1.23499
37	0.70409	1.37837	87	0.80096	1.23350
38	0.70766	1.37258	88	0.80203	1.23203
39	0.71110	1.36703	89	0.80308	1.23059
40	0.71441	1.36172	90	0.80412	1.22917
41	0.71762	1.35661	91	0.80514	1.22778
42	0.72071	1.35171	92	0.80614	1.22641
43	0.72370	1.34699	93	0.80713	1.22507
44	0.72660	1.34245	94	0.80810	1.22375
45	0.72941	1.33808	95	0.80906	1.22245
46	0.73213	1.33386	96	0.81000	1.22117
47	0.73476	1.32979	97	0.81093	1.21992
48	0.73732	1.32585	98	0.81185	1.21868
49	0.73981	1.32205	99	0.81275	1.21746
50	0.74222	1.31838			

Table D. Sources for resident population and population including Armed Forces abroad: Birth- and death-registration States, 1900-1932, and United States, 1900-1998.

Year	Source
1998-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington: U.S. Bureau of the Census. Internet release, June 4, 1999. Http://www.census.gov/population/www/estimates/uspop.html .
1997-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1997. PPL-91R. Rounded populations consistent with U.S. Bureau of the Census file NESTV97. Washington:U.S. Department of Commerce. 1998.
1996-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1996. PPL-57. Washington:U.S. Department of Commerce. 1997.
1995-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1995. Census file RESD0795, PPL-41. Washington:U.S. Department of Commerce. 1996.
1994-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1990 to 1994. PPL-21. Washington:U.S. Department of Commerce. 1995.
1993-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1993. Census file RESO793. Washington:U.S. Department of Commerce. 1995.
1992-----	U.S. Bureau of the Census, United States population estimates, by age, sex, race, and Hispanic origin: 1992. Census file RESPO792. Washington:U.S. Department of Commerce. 1994.
1991-----	U.S. Bureau of the Census, Unpublished data consistent with Current Population Reports, Series P-25, No. 1095, Feb. 1993.
1990-----	U.S. Bureau of the Census, Unpublished data from the 1990 census. 1990 CPH-L-74 and unpublished data consistent with Current Population Reports, Series P-25, No. 1095, Feb. 1993.
1989-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1057, Mar. 1990.
1988-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1045, Jan. 1990.
1986-87-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1022, Mar. 1988.
1985-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1000, Feb. 1987.
1984-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 985, Apr. 1986.
1983-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 965, Mar. 1985.
1982-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 949, May 1984.
1981-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 929, May 1983.
1980-----	U.S. Bureau of the Census, U.S. Census of Population: 1980, Number of Inhabitants, PC80-1-A1, United States Summary, 1983.
1971-79-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 917, July 1982.
1970-----	U.S. Bureau of the Census, U.S. Census of Population: 1970, Number of Inhabitants, Final Report PC(1)-A1, United States Summary, 1971.
1961-69-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 519, April 1974.
1960-----	U.S. Bureau of the Census, U.S. Census of Population: 1960, Number of Inhabitants, PC(1)-A1, United States Summary, 1964.
1951-59-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 310, June 30, 1965.
1940-50-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 499, May 1973.
1930-39-----	U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 499, May 1973, and National Office of Vital Statistics, Vital Statistics Rates in the United States, 1900-1940, 1947.
1920-29-----	National Office of Vital Statistics, Vital Statistics Rates in the United States, 1900-1940, 1947.
1917-19-----	Same as for 1930-39.
1900-1916-----	Same as for 1920-29.

Table E. Ratio of census-level resident population to resident population adjusted for estimated net census undercount
by age, sex, and race: April 1, 1990

Age	Total			White			Black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	0.9815	0.9721	0.9906	0.9802	0.9728	0.9873	0.9432	0.9151	0.9699
10-14	0.9882	0.9891	0.9873	0.9830	0.9841	0.9818	0.9591	0.9586	0.9595
15-19	1.0166	1.0198	1.0133	1.0094	1.0128	1.0059	0.9988	1.0016	0.9959
20-24	1.0002	0.9987	1.0017	0.9975	0.9985	0.9966	0.9593	0.9432	0.9753
25-29	0.9591	0.9439	0.9748	0.9558	0.9441	0.9681	0.9123	0.8732	0.9510
30-34	0.9687	0.9487	0.9892	0.9669	0.9518	0.9828	0.9129	0.8599	0.9651
35-39	0.9790	0.9628	0.9954	0.9764	0.9643	0.9888	0.9303	0.8808	0.9778
40-44	0.9901	0.9758	1.0044	0.9875	0.9764	0.9988	0.9410	0.8943	0.9850
45-49	0.9775	0.9633	0.9916	0.9762	0.9648	0.9877	0.9302	0.8807	0.9762
50-54	...	0.9623	...	...	0.9651	...	...	0.8802	...
55 years and over	...	0.9758	...	...	0.9783	...	...	0.9294	...
15-44	...	...	0.9954	...	...	0.9890	...	...	0.9739
15-54	...	0.9710	...	...	0.9710	...	...	0.9046	...

... Category not applicable.

Table 4-1. Population of Birth- and Death-Registration States, 1990-1932, and United States, 1900-1998

(Population enumerated as of April 1 for 1940, 1950, 1960, 1970, 1980 and 1990 and estimated as of July 1 for all other years)

Year	United States/1		Year	United States/1		Birth-registration States		Death-registration States	
	Population including Armed Forces abroad	Population residing in area		Population including Armed Forces abroad	Population residing in area	Number of States/2	Population residing in area	Number of States/2	Population residing in area
1998	270,509,187	270,298,524	1950	151,132,000	150,697,361	...	...	...	...
1997	267,901,000	267,636,061	1949	149,188,000	148,665,000	...	...	...	...
1996	265,556,890	265,283,783	1948	146,631,000	146,093,000	...	...	...	...
1995	263,033,968	262,755,270	1947	144,126,000	143,446,000	...	...	...	...
1994	260,659,690	260,340,990	1946	141,389,000	140,054,000	...	...	...	...
1993	258,119,768	257,783,004	1945	139,928,000	132,481,000	...	...	...	...
1992	255,457,501	255,077,536	1944	138,397,000	132,885,000	...	...	...	...
1991	252,688,000	252,177,000	1943	136,739,000	134,245,000	...	...	...	...
1990	249,225,000	248,709,873	1942	134,860,000	133,920,000	...	...	...	...
1989	247,342,000	246,819,000	1941	133,402,000	133,121,000	...	...	...	...
1988	245,021,000	244,499,000	1940	131,820,000	131,669,275	...	...	...	...
1987	242,804,000	242,289,000	1939	131,028,000	130,879,718	...	...	...	...
1986	240,651,000	240,133,000	1938	129,969,000	129,824,939	...	...	...	...
1985	238,466,000	237,924,000	1937	128,961,000	128,824,829	...	...	...	...
1984	236,348,000	235,825,000	1936	128,181,000	128,053,180	...	...	...	...
1983	234,307,000	233,792,000	1935	127,362,000	127,250,232	...	...	...	...
1982	232,188,000	231,664,000	1934	126,485,000	126,373,773	...	...	...	...
1981	229,966,000	229,466,000	1933	125,690,000	125,578,763	...	...	...	...
1980	227,061,000	226,545,805	1932	124,949,000	124,840,471	47	118,903,899	47	118,903,899
1979	225,055,000	224,567,000	1931	124,149,000	124,039,648	46	117,455,229	47	118,148,987
1978	222,585,000	222,095,000	1930	123,188,000	123,076,741	46	116,544,946	47	117,238,278
1977	220,239,000	219,760,000	1929	---	121,769,939	46	115,317,450	46	115,317,450
1976	218,035,000	217,563,000	1928	---	120,501,115	44	113,636,160	44	113,636,160
1975	215,973,000	215,465,000	1927	---	119,038,062	40	104,320,830	42	107,084,532
1974	213,854,000	213,342,000	1926	---	117,399,225	35	90,400,590	41	103,822,683
1973	211,909,000	211,357,000	1925	---	115,831,963	33	88,294,564	40	102,031,555
1972	209,896,000	209,284,000	1924	---	114,113,463	33	87,000,295	39	99,318,098
1971	207,661,000	206,827,000	1923	---	111,949,945	30	81,072,123	38	96,788,197
1970	204,270,000	203,211,926	1922	---	110,054,778	30	79,560,746	37	92,702,901
1969	202,677,000	201,385,000	1921	---	108,541,489	27	70,807,090	34	87,814,447
1968	200,706,000	199,399,000	1920	---	106,466,420	23	63,597,307	34	86,079,263
1967	198,712,000	197,457,000	1919	105,063,000	104,512,110	22	61,212,076	33	83,157,982
1966	196,560,000	195,576,000	1918	104,550,000	103,202,801	20	55,153,782	30	79,008,412
1965	194,303,000	193,526,000	1917	103,414,000	103,265,913	20	55,197,952	27	70,234,775
1964	191,889,000	191,141,000	1916	---	101,965,984	11	32,944,013	26	66,971,177
1963	189,242,000	188,483,000	1915	---	100,549,013	10	31,096,697	24	61,894,847
1962	186,538,000	185,771,000	1914	---	99,117,567	...	...	24	60,963,309
1961	183,691,000	182,992,000	1913	---	97,226,814	...	...	23	58,156,740
1960	179,933,000	179,323,175	1912	---	95,331,300	...	...	22	54,847,700
1959	177,264,000	176,513,000	1911	---	93,867,814	...	...	22	53,929,644
1958	174,141,000	173,320,000	1910	---	92,406,536	...	...	20	47,470,437
1957	171,274,000	170,371,000	1909	---	90,491,525	...	...	18	44,223,513
1956	168,221,000	167,306,000	1908	---	88,708,976	...	...	17	38,634,759
1955	165,275,000	164,308,000	1907	---	87,000,271	...	...	15	34,552,837
1954	162,391,000	161,164,000	1906	---	85,436,556	...	...	15	33,782,288
1953	159,565,000	158,242,000	1905	---	83,819,666	...	...	10	21,767,980
1952	156,954,000	155,687,000	1904	---	82,164,974	...	...	10	21,332,076
1951	154,287,000	153,310,000	1903	---	80,632,152	...	...	10	20,943,222
			1902	---	79,160,196	...	...	10	20,582,907
			1901	---	77,585,128	...	...	10	20,237,453
			1900	---	76,094,134	...	...	10	19,965,446

... Category not applicable

1/Alaska included beginning 1959 and Hawaii, 1960.

2/The District of Columbia is not included in "Number of States," but it is represented in all data shown for each year.

SOURCE: Published and unpublished data from the U.S. Bureau of the Census; see text.

Table 4-2. Estimated Population of the United States, by Age, Race, and Sex: July 1, 1998

[Figures include Armed Forces stationed in the United States but exclude those stationed outside the United States.]

Age	All races			White			Black			American Indian			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	270,298,524	132,046,327	138,252,197	223,000,729	109,489,380	113,511,349	47,297,795	22,556,947	24,740,848	34,430,569	16,340,144	18,090,425	2,359,946	1,168,063	1,191,883
Under 1	3,776,389	1,929,312	1,847,077	2,993,441	1,532,601	1,460,840	782,948	396,711	386,237	560,713	284,257	276,456	40,887	20,523	20,364
1-4 years	15,189,749	7,766,906	7,422,843	12,058,700	6,179,436	5,879,264	3,131,049	1,587,470	1,543,579	2,266,865	1,149,017	1,117,848	158,834	80,347	78,487
5-9 years	19,920,862	10,195,027	9,725,835	15,686,897	8,038,094	7,648,803	4,233,965	2,156,933	2,077,032	3,170,130	1,609,577	1,560,553	224,191	113,894	110,297
10-14 years	19,241,808	9,854,788	9,387,020	15,202,008	7,799,351	7,402,657	4,039,800	2,055,437	1,984,363	2,992,945	1,520,299	1,472,646	243,014	123,463	119,551
15-19 years	19,539,327	10,045,566	9,493,761	15,492,233	7,991,575	7,500,658	4,047,094	2,053,991	1,993,103	3,024,366	1,537,293	1,487,073	228,853	115,032	113,821
15-17 years	11,743,251	6,049,165	5,694,086	9,301,764	4,803,090	4,498,674	2,441,487	1,246,075	1,195,412	1,803,798	922,334	881,464	143,997	72,700	71,297
18-19 years	7,796,076	3,996,401	3,799,675	6,190,469	3,188,485	3,001,984	1,605,607	807,916	797,691	1,220,568	614,959	605,609	84,856	42,332	42,524
20-24 years	17,674,134	8,996,110	8,678,024	14,093,581	7,224,785	6,868,796	3,580,553	1,771,325	1,809,228	2,633,203	1,300,285	1,332,918	188,975	95,301	93,674
25-29 years	18,588,114	9,246,888	9,341,226	14,867,714	7,473,057	7,394,657	3,720,400	1,773,831	1,946,569	2,622,710	1,253,815	1,368,895	192,668	99,429	93,239
30-34 years	20,186,296	10,006,893	10,179,403	16,347,087	8,201,666	8,145,421	3,839,209	1,805,227	2,033,982	2,727,967	1,279,155	1,448,812	181,362	91,972	89,390
35-39 years	22,625,784	11,256,018	11,369,766	18,626,277	9,364,283	9,261,994	3,999,507	1,891,735	2,107,772	2,883,922	1,354,291	1,529,631	184,914	92,388	92,526
40-44 years	21,894,075	10,844,698	11,049,377	18,177,682	9,098,379	9,079,303	3,716,393	1,746,319	1,970,074	2,676,120	1,251,755	1,424,365	169,796	82,912	86,884
45-49 years	18,859,365	9,252,354	9,607,011	15,830,743	7,858,712	7,972,031	3,028,622	1,393,642	1,634,980	2,153,894	984,132	1,169,762	138,416	67,158	71,258
50-54 years	15,725,519	7,647,607	8,077,912	13,473,817	6,624,094	6,849,723	2,251,702	1,023,513	1,228,189	1,587,413	711,774	875,639	108,289	52,080	56,209
55-59 years	12,406,909	5,956,213	6,450,696	10,672,553	5,180,801	5,491,752	1,734,356	775,412	958,944	1,249,295	546,840	702,455	80,560	38,082	42,478
60-64 years	10,269,061	4,849,497	5,419,564	8,853,308	4,231,745	4,621,563	1,415,753	617,752	798,001	1,028,261	439,816	588,445	62,606	29,241	33,365
65-69 years	9,593,497	4,392,568	5,200,929	8,340,929	3,857,225	4,483,704	1,252,568	535,343	717,225	936,144	400,002	536,142	49,192	22,202	26,990
70-74 years	8,801,796	3,857,005	4,944,791	7,821,943	3,452,264	4,369,679	979,853	404,741	575,112	729,672	299,327	430,345	39,937	17,868	22,069
75-79 years	7,218,007	2,997,107	4,220,900	6,487,580	2,705,650	3,781,930	730,427	291,457	438,970	553,805	216,180	337,625	30,116	12,799	17,317
80-84 years	4,734,182	1,764,311	2,969,871	4,308,395	1,609,889	2,698,506	425,787	154,422	271,365	326,973	112,476	214,497	18,396	7,374	11,022
85 years +	4,053,650	1,187,459	2,866,191	3,665,841	1,065,773	2,600,068	387,809	121,686	266,123	306,171	89,853	216,318	18,940	5,998	12,942

SOURCE: Published and unpublished data from the U.S. Bureau of the Census; see text.

Table 4-3. Estimated Total Population and Female Population Aged 15-44 Years: United States, Each Division and State, Puerto Rico, Virgin Islands, Guam, American Samoa, and the Northern Marianas: July 1, 1998

[Figures include Armed Forces stationed in each area and exclude those stationed outside the United States.]

Area	Total	Female 15-44 years	Area	Total	Female 15-44 years
United States	270298524	60111557			
Geographic divisions:			South Atlantic		
New England	13,429,862	3,012,806	Delaware	743,603	172,819
Middle Atlantic	38,291,763	8,382,361	Maryland	5,134,808	1,196,880
East North Central	44,194,756	9,863,754	District of Columbia	523,124	126,426
West North Central	18,694,626	4,088,137	Virginia	6,791,345	1,597,037
South Atlantic	48,944,678	10,864,320	West Virginia	1,811,156	386,346
East South Central	16,471,211	3,718,882	North Carolina	7,546,493	1,677,166
West South Central	30,013,597	6,755,599	South Carolina	3,835,962	879,477
Mountain	16,813,233	3,681,878	Georgia	7,642,207	1,820,738
Pacific	43,444,798	9,743,820	Florida	14,915,980	3,007,431
New England			East South Central		
Maine	1,244,250	276,187	Kentucky	3,936,499	882,559
New Hampshire	1,185,048	275,914	Tennessee	5,430,621	1,225,736
Vermont	590,883	133,989	Alabama	4,351,999	981,633
Massachusetts	6,147,132	1,392,583	Mississippi	2,752,092	628,954
Rhode Island	988,480	218,934	West South Central		
Connecticut	3,274,069	715,199	Arkansas	2,538,303	545,749
Middle Atlantic			Louisiana	4,368,967	1,002,566
New York	18,175,301	4,038,534	Oklahoma	3,346,713	717,052
New Jersey	8,115,011	1,781,092	Texas	19,759,614	4,490,232
Pennsylvania	12,001,451	2,562,735	Mountain		
East North Central			Montana	880,453	182,845
Ohio	11,209,493	2,497,235	Idaho	1,228,684	268,122
Indiana	5,899,195	1,324,439	Wyoming	480,907	102,643
Illinois	12,045,326	2,675,096	Colorado	3,970,971	886,746
Michigan	9,817,242	2,213,708	New Mexico	1,736,931	378,533
Wisconsin	5,223,500	1,153,276	Arizona	4,668,631	1,000,352
West North Central			Utah	2,099,758	494,186
Minnesota	4,725,419	1,054,458	Nevada	1,746,898	368,451
Iowa	2,862,447	607,088	Pacific		
Missouri	5,438,559	1,198,407	Washington	5,689,263	1,279,008
North Dakota	638,244	136,091	Oregon	3,281,974	699,329
South Dakota	738,171	158,153	California	32,666,550	7,377,208
Nebraska	1,662,719	361,056	Alaska	614,010	135,809
Kansas	2,629,067	572,884	Hawaii	1,193,001	252,466
			Territories		
			Puerto Rico	3,857,070	904,668
			Virgin Islands	118,382	29,315
			Guam	149,101	31,057
			American Samoa	62,093	13,547
			Northern Marianas	66,611	22,483

Source: Published and unpublished data from the Bureau of the Census; see text.

Births: Final Data for 1998

by Stephanie J. Ventura, M.A.; Joyce A. Martin, M.P.H.; Sally C. Curtin, M.A.;
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Abstract

Objectives—This report presents 1998 data on U.S. births according to a wide variety of characteristics. Data are presented for maternal demographic characteristics including age, live-birth order, race, Hispanic origin, marital status, and educational attainment; maternal lifestyle and health characteristics (medical risk factors, weight gain, and tobacco and alcohol use); medical care utilization by pregnant women (prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth, and method of delivery); and infant health characteristics (period of gestation, birthweight, Apgar score, abnormal conditions, congenital anomalies, and multiple births). Also presented are birth and fertility rates by age, live-birth order, race, Hispanic origin, and marital status. Selected data by mother's State of residence are shown including teenage birth rates and total fertility rates, as well as data on month and day of birth, sex ratio, and age of father. Trends in fertility patterns and maternal and infant characteristics are described and interpreted.

Methods—Descriptive tabulations of data reported on the birth certificates of the 3.94 million births that occurred in 1998 are presented.

Results—Birth and fertility rates increased in 1998 by about 1 percent, the first increase since 1990. Birth rates for teenagers fell 2–5 percent. Rates for women in their twenties increased 1–2 percent each, whereas rates for women in their thirties rose 2–4 percent. All measures of childbearing by unmarried women increased in 1998; the number of births rose 3 percent, the birth rate increased about 1 percent while the percent of births that were to unmarried women rose to 32.8 percent. Smoking by pregnant women overall dropped again in 1998, but continued to increase among teenagers. Improvements in prenatal care utilization continued. The cesarean delivery rate increased for the second year after declining for 7 consecutive years. The proportion of multiple births continued to rise; higher order multiple births (e.g., triplets, quadruplets) rose by 13 percent in 1998, following a 14 percent rise from 1996 to 1997. Key measures of birth outcome—the percents of low birthweight and preterm births—increased. These changes are in large part the result of increases in multiple births.

Keywords: births • birth certificate • maternal and infant health • birth rates • maternal characteristics

Highlights

Births in the United States increased 2 percent in 1998, to 3,941,553, the first increase since 1990. The **birth rate** rose slightly in 1998 to 14.6 births per 1,000 total population. The **fertility rate**, which relates births to the number of women of childbearing age, increased 1 percent to 65.6 births per 1,000 women aged 15–44 years.

Fertility rates for women in racial and Hispanic origin subgroups increased 1–5 percent for non-Hispanic white, non-Hispanic black, American Indian, and Puerto Rican women. Rates declined for Asian or Pacific Islander, Mexican, and Cuban women. The variation in rates found for recent years continued in 1998: rates were highest for Mexican women, followed by Puerto Rican, non-Hispanic black, and American Indian women. Rates were much lower for Asian or Pacific Islander, non-Hispanic white, and Cuban women.

The birth rate for teenagers declined again in 1998, falling 2 percent to 51.1 births per 1,000 women aged 15–19 years. The rate has declined 18 percent since 1991 (62.1). The birth rate for young teenagers 15–17 years fell 5 percent from 1997 to 1998 to 30.4 per 1,000, a record low. The rate for older teenagers 18–19 years declined

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2 percent to 82.0. From 1991 to 1998, the rate for young teenagers dropped 21 percent, while the rate for older teenagers declined 13 percent. The declines in birth rates have been steepest for non-Hispanic black teenagers; rates fell by 20 to 32 percent. The teenage pregnancy rate declined 15 percent from 1991 (116.5) to 1996 (98.7), reflecting concurrent declines in birth and abortion rates.

The **birth rate for women in their early twenties** increased in 1998, rising to 111.2 per 1,000 women aged 20–24 years. The rate for women aged 25–29 years increased 2 percent to 115.9 per 1,000 women. Women in their twenties have the highest birth rates; therefore, their rates are critical to determining overall childbearing patterns.

Birth rates for women in their thirties increased to 87.4 per 1,000 women aged 30–34 years, up 2 percent, and to 37.4 per 1,000 women aged 35–39 years, up 4 percent. The rates for these age groups are at their highest in at least three decades. **The birth rate for women aged 40–44 years** increased again in 1998 to 7.3 per 1,000.

The **first birth rate** declined again in 1998, to 26.4 first births per 1,000 women aged 15–44 years, a record low. The **median age at first birth** increased to 24.3 years; the median has risen slowly but steadily since 1972 (22.0).

The **birth rate for unmarried women** increased 1 percent in 1998 to 44.3 births per 1,000 unmarried women aged 15–44 years. The number of births to unmarried women rose 3 percent to 1,293,567, the highest number ever reported. Most of the increase was linked to the rise in the number of unmarried women in the childbearing ages. The percent of all births that were to unmarried women increased to 32.8 percent in 1998, compared with 32.4 percent in 1997.

Cigarette smoking during pregnancy declined again in 1998, to 12.9 percent. The overall rate has fallen steadily since 1989. However tobacco use by pregnant teenagers continued to increase in 1998. Sizeable increases were reported for non-Hispanic black teenagers. Overall smoking rates remain lowest for non-Hispanic black, Hispanic, and Asian or Pacific Islander women. Infant birthweight is seriously compromised by maternal smoking: In 1998, 12.0 percent of births to smokers compared with 7.2 percent of births to nonsmokers weighed less than 2,500 grams (5 lb 8 oz).

The proportion of women beginning **prenatal care** in the first trimester of pregnancy rose slightly to 82.8 percent for 1998, the ninth consecutive year of increase. After showing little change in the 1980's, the percent of women with timely care has risen 10 percent during the 1990's. Gains in first trimester care for 1997–98 were found for all race and ethnic groups except non-Hispanic white mothers. The overall proportion of late or no care was unchanged at 3.9 percent, but is down from a high of 6.4 percent in 1989. Over the decade, the largest gains in timely care have occurred among groups with the least favorable levels of care: Hispanic, non-Hispanic black, American Indian, and Hawaiian women.

Data on **method of delivery** show that the rate of cesarean delivery increased 2 percent between 1997 and 1998 (from 20.8 to 21.2 percent). This was the second consecutive increase in the cesarean rate after declining each year between 1989 and 1996. Despite the recent increase, the cesarean rate in 1998 was still 7 percent lower than in 1989 (22.8 percent). The **primary cesarean rate** in 1998 (14.9 per 100 live births to women who had no previous cesarean) was 2 percent higher than in 1997 (14.6). This was the first time this rate increased during the 1989–98 period. The rate of vaginal birth following a previous cesarean delivery (VBAC) declined 4 percent

between 1997 and 1998 (from 27.4 to 26.3 per 100 births to women who had a previous cesarean). Between 1996 and 1998 the VBAC rate fell 7 percent after increasing 50 percent between 1989 (18.9) and 1996 (28.3). The **rate of induction of labor** has risen every year since 1989, rising from 9 percent to 19 percent, or nearly one in five births in 1998.

Multiple births continued to climb in 1998; the number of twin births jumped 6 percent to 110,670, the largest single year increase in several decades. The number of triplets and other higher order multiple births climbed 13 percent to 7,625. Since 1980, the twin birth rate has risen 49 percent (from 18.9 to 28.1 per 1,000 live births), and the triplet and other higher order multiple birth rate has risen 423 percent (from 37.0 to 193.5 per 100,000). In 1998 one in every six infants born to women 45–49 years of age, and one in every three births to women 50–54 years of age was born in a multiple delivery.

The rate of **preterm birth** (less than 37 completed weeks of gestation) increased again for 1998 to 11.6 percent, from 11.4 percent for 1997. The percent of births born preterm has risen 9 percent since 1990 (10.6 percent), and 23 percent since 1981 (from 9.4 percent). Most of the current year rise was among births born moderately preterm, or at between 32 and 36 weeks of gestation. For 1997–98, the preterm birth rate increased among non-Hispanic whites (9.9 to 10.2 percent) and Hispanics (from 11.2 to 11.4), and was unchanged among non-Hispanic blacks (17.6 percent). The upswing in preterm births of recent years has been influenced in part by increases in multiple births, which are more likely to be born at shorter gestational ages than singleton births; the preterm rate has risen slightly for singleton births.

The overall rate of **low birthweight (LBW)** (less than 2,500 grams) rose from 7.5 to 7.6 percent for 1997–98. The percent LBW has increased 9 percent for the 1990's. All of the current year rise, and much of the rise since 1990, is the result of increases in the multiple birth rate (multiple births are at much greater risk of LBW than singletons); LBW among singleton births declined slightly for 1997–98, from 6.08 to 6.05 percent. Singleton LBW was down slightly for the current year among each of the three largest racial and ethnic groups: non-Hispanic white, non-Hispanic black, and Hispanic.

Introduction

This report presents detailed data on numbers and characteristics of births in 1998, birth and fertility rates, maternal lifestyle and health characteristics, medical services utilization by pregnant women, and infant health characteristics. These data provide important information on fertility patterns among American women by such characteristics as age, live-birth order, race, Hispanic origin, marital status, and educational attainment. Up-to-date information on these fertility patterns is critical to understanding population growth and change in this country and in individual States. Data on maternal characteristics such as weight gain, tobacco and alcohol use, and medical risk factors are useful in accounting for differences in birth outcomes. Information on use of prenatal care, obstetric procedures, complications of labor and/or delivery, attendant at birth and place of delivery, and method of delivery by maternal demographic characteristics can also help to explain differences in birth outcomes. It is very important that data on birth outcomes, especially levels of plurality, low birthweight, and preterm birth, be continuously monitored because these variables are important predictors of infant mortality and morbidity.

A report of preliminary birth statistics for 1998 presented data on selected topics based on a substantial sample (more than 99 percent) of the 1998 birth file (1). The selected measures included birth rates by age, race, and Hispanic origin of mother, and by live-birth order, and births by marital status, prenatal care, cesarean delivery, and low birthweight. Findings for these selected measures based on the preliminary data are essentially identical to those presented here based on final data.

In addition to the tabulations included in this report, more detailed analysis is possible by using the natality public-use data tape, which is issued for each year. Birth data have also been available in CD-ROM format since 1990, and a selection of tables of detailed data are available on the NCHS Internet site at <http://www.cdc.gov/nchs/births.htm> (2).

Methods

Data shown in this report are based on 100 percent of the birth certificates registered in all States and the District of Columbia. More than 99 percent of births occurring in this country are registered (3). Tables that show data by State also provide separate information for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas (Northern Marianas). However, these areas are not included in totals for the United States. Data for the Northern Marianas were available for the first time in 1998.

In this report, tabulations of births beginning with 1980 data are by race of mother; for years prior to 1980, tabulations are by race of child. Details of the differences in tabulation procedure are described in the [Technical notes](#). Text references to black births and black mothers or white births and white mothers are used interchangeably.

Race and Hispanic origin are reported independently on the birth certificate. In tabulations of birth data by race and Hispanic origin, data for Hispanic persons are not further classified by race because the vast majority of women of Hispanic origin are reported as white. Most tables in this report show data for these categories: white, total; white, non-Hispanic; black, total; black, non-Hispanic; and Hispanic. Except when presenting birth rates, data for Hispanic subgroups are presented for the following five groups: Mexican, Puerto Rican, Cuban, Central and South American, and other and unknown Hispanic. When reporting birth rates for Hispanic subgroups, births to Central and South American women are added to births to other and unknown Hispanic women because detailed population data for Central and South American women are not separately available. Data are shown for five Asian or Pacific Islander (API) subgroups: Chinese, Japanese, Hawaiian, Filipino, and "other" API. In addition, nine States report data on API subgroups included in the "other API" category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API); see [Technical notes](#).

U.S. and State-level birth and fertility rates in this report were computed on the basis of population denominators provided by the U.S. Bureau of the Census. Rates by State shown in this report may differ from rates computed on the basis of other population estimates. Additional information on the measurement of marital status, gestational age, and birthweight; the computation of derived statistics and rates; population denominators; random variation and relative standard error; and the definitions of terms are presented in the [Technical notes](#).

Information on births by age, race, or marital status of mother is imputed if it is not reported on the birth certificate. These items were

not reported for less than 1 percent of U.S. births in 1998. (See [Technical notes](#) for additional information.) All other maternal and infant characteristics (except items on which length of gestation is calculated) are not imputed; see [Technical notes](#). Births for which a particular characteristic is unknown are subtracted from the figures for total births that are used as denominators before percents, percent distributions, and medians are computed. Thus, for example, the proportion of women receiving care in the first trimester of pregnancy is computed on the basis of births for which the month of pregnancy prenatal care began was reported. Levels of nonreporting vary substantially by specific item and by State. [Table I](#) in the [Technical notes](#) provides information on the percent of records with missing information for each item by State for 1998. Readers should note that the levels of incomplete reporting for some of the medical items are quite high in some States. Data for Connecticut, Hawaii, and Oklahoma, as well as the Northern Marianas, are of particular concern.

Demographic characteristics

Births and birth rates

Number of births

The number of births in the United States increased 2 percent in 1998, to 3,941,553, compared with 3,880,894 in 1997. This is the first increase in the number of births since 1990. Between 1990, the most recent high point in U.S. births, and 1997, the number of births fell 7 percent (see [tables 1–12](#) for national and State birth data by age, live-birth order, race, and Hispanic origin).

The number of births for nearly all race and Hispanic origin groups increased in 1998 ([tables 1 and 6](#)). Increases of up to 2 percent were reported for non-Hispanic white and non-Hispanic black births. Births increased 3 to 4 percent for American Indian, Mexican, Puerto Rican, and Cuban women. Hawaiian births increased 6 percent. Declines of 1 percent were reported for births to Chinese and Filipino women (data for 1998 are shown in [table 13](#)).

Crude birth rate

The crude birth rate increased from 14.5 live births per 1,000 total population in 1997 to 14.6 in 1998. The increase in 1998 was the first since 1990 (16.7). Between 1990 and 1997, the rate fell 13 percent.

Fertility rate

The fertility rate, which relates births to the number of women in the childbearing ages, was 65.6 live births per 1,000 women aged 15–44 years in 1998, 1 percent higher than in 1997 (65.0). Like the number of births and the birth rate, the recent high point for the fertility rate was 1990 (70.9); between 1990 and 1997, the fertility rate dropped 8 percent ([table 1 and figure 1](#)).

Fertility rates by race and Hispanic origin increased 1 percent each for non-Hispanic white (57.7 per 1,000 women aged 15–44 years) and non-Hispanic black women (73.0), 2 percent for American Indian women (70.7), and 5 percent for Puerto Rican women (75.5). Rates fell 3 to 4 percent for Asian or Pacific Islander (API) (64.0) and Mexican women (112.1). The rate for Cuban women dropped from 57.4 to 50.1

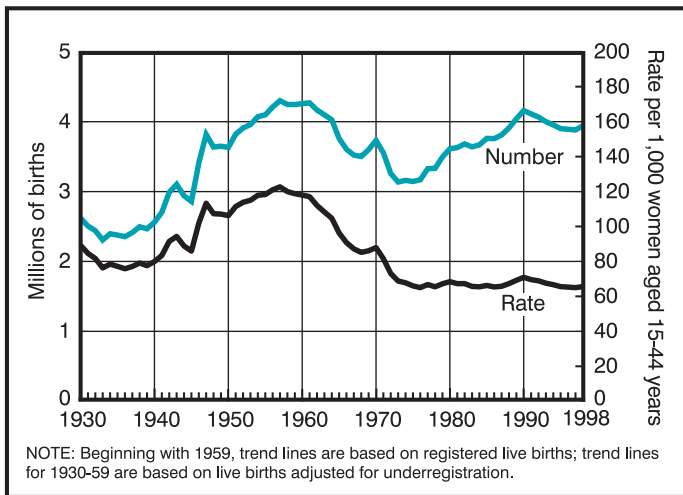


Figure 1. Live births and fertility rates: United States, 1930-98

per 1,000 (tables 1 and 6). Birth and fertility rates for specific API groups cannot be computed because the necessary populations are not available.

The modest increases in fertility rates for non-Hispanic white and black women account in large part for the 1-percent upturn in the overall fertility rate. It is possible that the 7-year downward trend in U.S. fertility has ended, at least temporarily. During the years 1990-97, the fertility rate for non-Hispanic white women declined 9 percent, and the rate for non-Hispanic black women fell 19 percent. The trends in fertility rates in the 1990's for Mexican, Puerto Rican, Cuban, and API women have not been consistent. The fertility rate for American Indian women has increased modestly for 2 consecutive years, marking a halt in the general downward trend in this rate during the 1990's.

The fertility rate for Hispanic women in 1998 was the lowest reported since 1989 when data accounting for virtually all Hispanic births in the United States first became available. The fertility rate for Mexican women in 1998 is also at its lowest since 1989, 8 percent below the peak recorded in 1991 (121.6). Trends in fertility for Hispanic women by subgroup for 1989-95 are presented in more detail in a recent report (4).

Age of mother

Teenagers—The birth rate for the youngest teenagers was 1.0 births per 1,000 females 10-14 years in 1998, a record low for this age group (table 4). This rate has declined steadily since 1994 (the rate was 1.4 in each year 1989 through 1994). The number of births to 10-14-year-olds fell 7 percent from 1997 to 1998, to 9,462, the lowest total reported in more than three decades (8,593 in 1967). The decline in the number of births to very young teenagers occurred solely as a result of the reduction in the birth rate; the number of female teenagers has increased steadily in the 1990's (5).

The birth rate for teenagers 15-19 years fell 2 percent to 51.1 per 1,000. This rate was 18 percent lower than the recent peak reported in 1991 (62.1) (table A). The declines in the 1990's in the teenage birth rate almost fully reverse the 24-percent increase that occurred from 1986 (50.2 per 1,000) to 1991. State-specific birth rates for teenagers are discussed in the section "Births and birth rates by State."

Table A. Birth rates for teenagers 15-19 by age, race, and Hispanic origin of mother: United States, 1991, 1997, and 1998, and percent change, 1991-98

[Rates per 1,000 women in specified group]

Year and age	Total ¹	Non-Hispanic		
		White	Black	Hispanic
15-19 years				
1998	51.1	35.2	88.2	93.6
1997	52.3	36.0	90.8	97.4
1991 ²	62.1	43.4	118.9	106.7
Percent decline				
1991-98	-18	-19	-26	-12
Percent decline				
1997-98	-2	-2	-3	-4
15-17 years				
1998	30.4	18.4	58.8	62.3
1997	32.1	19.4	62.6	66.3
1991 ²	38.7	23.6	86.7	70.6
Percent decline				
1991-98	-21	-22	-32	-12
Percent decline				
1997-98	-5	-5	-6	-6
18-19 years				
1998	82.0	60.6	130.9	140.1
1997	83.6	61.9	134.0	144.3
1991 ²	94.4	70.5	163.1	158.5
Percent decline				
1991-98	-13	-14	-20	-12
Percent decline				
1997-98	-2	-2	-2	-3

¹Includes races other than white and black and origin not stated.

²See reference 4 for information on reporting areas in 1991.

Birth rates for teenage subgroups 15-17 and 18-19 years also fell between 1997 and 1998. The rate for teenagers 15-17 years declined 5 percent to 30.4 per 1,000, a record low (3,6). This rate fell by 21 percent from 1991 (38.7) to 1998 (table 4 and figure 2). The number of births to teenagers 15-17 years fell 4 percent from 1997 to 1998 to 173,231, the fewest since 1987 (172,591).

The birth rate for older teenagers 18-19 years declined 2 percent, to 82.0 per 1,000. This rate fell 13 percent from 94.5 in 1992 (its recent high) to 1998. However, the number of births to older teenagers increased 3 percent between 1997 and 1998 to 311,664, the first increase since 1990. This increase is due entirely to the 5-percent rise in the number of female teenagers 18-19 years from 1997 to 1998. (5).

Teenage birth rates by race and Hispanic origin vary substantially (tables 3, 4, 8, and 9). Rates in 1998 were highest for Mexican, non-Hispanic black, Puerto Rican, and American Indian teenagers and lowest for non-Hispanic white, Cuban, and API teenagers, a pattern that has been observed since 1994. Between 1997 and 1998, teenage birth rates declined for all race and Hispanic origin groups except American Indian, Puerto Rican, and "other" Hispanic teenagers. The rate for Mexican teenagers fell 9 percent; declines for non-Hispanic white, non-Hispanic black, and API teenagers were 2 to 3 percent each. The rate for Puerto Rican teenagers rose 8 percent, while the rate for American Indian teenagers increased very slightly.

From 1991, when rates for teenagers generally were at a peak, to 1998, birth rates fell 19 and 26 percent for non-Hispanic white and

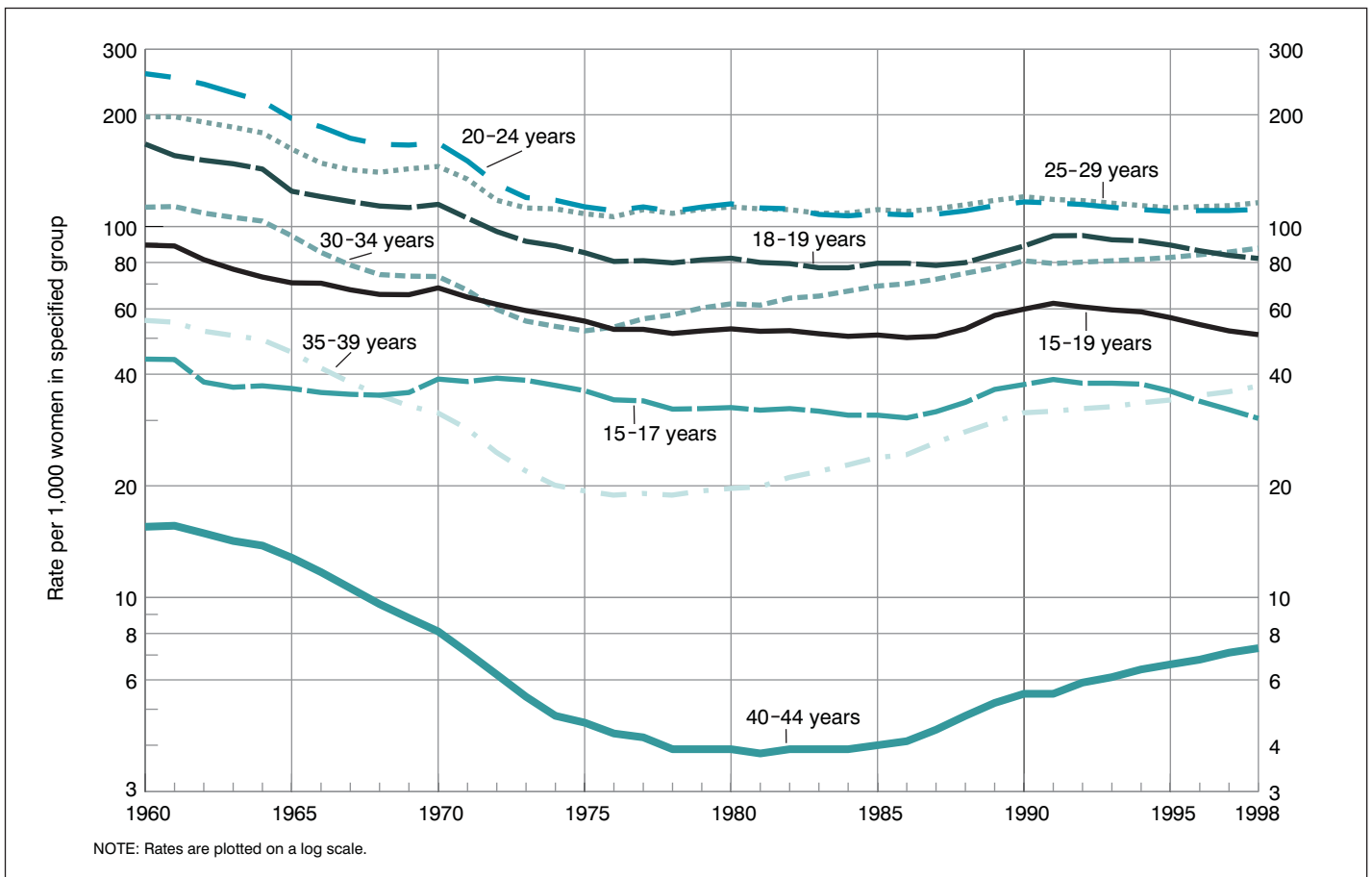


Figure 2. Birth rates by age of mother: United States, 1960-98

black teenagers, respectively. Despite the 8-percent increase in the rate for Puerto Rican teenagers, their rate in 1998 was still 26 percent lower than its recent peak in 1992 (110.4). The 1998 rates for American Indian and API teenagers were 15 to 16 percent lower, respectively, than in 1991. The rate for Mexican teenagers has declined by 12 percent just since 1995.

Teenage pregnancy rates (based on the sum of live births, induced abortions, and fetal losses) have also declined in recent years (6-8). The pregnancy rate for teenagers 15-19 years fell 15 percent from 116.5 per 1,000 in 1991 to 98.7 in 1996, reversing an 11-percent rise from 1986 to 1991 (7). (The most recent year for which pregnancy rates are available is 1996.) From 1990 to 1996, pregnancy rates declined 20 to 22 percent for non-Hispanic white (68.1 per 1,000 in 1996) and non-Hispanic black (177.8) teenagers. The rate for Hispanic teenagers declined 6 percent from 1994 to 1996 (157.1) (7). Further declines in the teenage pregnancy rate since 1996 are indicated by the steady decline in the teenage birth rate and declines in abortions among teenagers, according to preliminary data (9).

The factors accounting for the current downturn in teenage pregnancy and birth rates are discussed in recent reports (6,7). Briefly, the proportion of teenagers who are sexually experienced stabilized in the mid 1990's, reversing the steady increases over the past two decades (7,10). Many public and private initiatives have focused teenagers' attention on the importance of pregnancy prevention through abstinence (11). Moreover, teenagers are more likely to use contraceptives at first intercourse, especially condoms (12). Some sexually active teenagers

have switched to implant and injectable contraceptives, which are effective new birth control methods (13).

Women aged 20 years and over: Women in their twenties—The birth rate for women aged 20-24 years increased 1 percent in 1998 to 111.2 per 1,000, (tables 3, 4, 8, and 9). This rate had declined 5 percent during 1990-96, and was unchanged between 1996 and 1997. The birth rate for women aged 25-29 years rose 2 percent in 1998 to 115.9 per 1,000; this rate has increased by 3 percent over a 3-year period, following steady declines during 1990-95. Birth rates for women in their twenties, the principal childbearing ages, have been relatively stable over the past two decades (figure 2).

Birth rates for women in age groups 20-24 and 25-29 years were consistently highest for Mexican women. For example, the rate for Mexican women aged 20-24 years, 197.6 per 1,000, was nearly three times the rate for API women in this age group (68.8) and more than double the rate for Cuban women (85.6).

Women in their thirties—Birth rates for women in their thirties rose again in 1998. Rates for women in these age groups have generally increased steadily since the late 1970's, a pattern unlike any other age group (tables 4 and 9 and figure 2) (14). The rate for women aged 30-34 years increased 2 percent in 1998 to 87.4 per 1,000. This rate increased by 67 percent since its low point in 1975 (52.3), and the 1998 rate is higher than any year since 1965 (94.4). Most of this increase occurred by 1990. Despite the higher birth rate, the number of births to women aged 30-34 years increased only slightly in 1998 because the number of women in that age group declined 2 percent (5).

The **birth rate for women in their mid- to late thirties** increased 4 percent to 37.4 per 1,000 women aged 35–39 years. This rate has nearly doubled since 1978 (19.0); the 1998 rate is higher than in any year since 1967 (38.3). Although the pace of increase slowed in the 1990's through 1997, the 1998 rate was still 18 percent higher than the rate in 1990 (31.7). The number of births to women aged 35–39 reached a record high in 1998 (424,890), 4 percent more than in 1997, and one-third more than in 1990 (317,583). All of this increase resulted from the increase in the birth rate; the number of women aged 35–39 years was essentially unchanged in 1998 (5). Among women in their thirties, birth rates were highest for API, Mexican, and “other” Hispanic women ([tables 3 and 8](#)).

Women in their forties—The **birth rate for women aged 40–44 years** increased from 7.1 per 1,000 to 7.3 in 1998. This rate increased nearly a third from 1990 (5.5) to 1998. From 1981 to 1998, the rate increased by 92 percent; the 1998 rate is higher than in any year since 1970 (8.1). From 1997 to 1998, the number of births in this age group rose 6 percent to 81,027; the number has increased by two-thirds during the 1990's.

The **birth rate for women aged 45–49 years** remained unchanged at 0.4 births per 1,000 in 1998. Reflecting the continued increase in the number of women in this age group (who were born during 1949–53), the number of births to women aged 45–49 years rose 9 percent to 3,624, the highest number recorded in three decades (3,790 in 1968).

Births to women aged 50 years and over—Birth data for women aged 50–54 years are reported for the second consecutive year in this report. These data were not available during 1964–96; for that period, mother's age was edited for ages 10–49 years (3). Additional information on the editing procedures is presented in the [Technical notes](#). Because of the recent advances in fertility-enhancing therapies, an increasing number of women are giving birth at age 50 years and over. In 1998, 158 births were reported to women aged 50–54 years ([tables 2 and 7](#)); 54 of these births were part of a multiple delivery (see section below on “Multiple births”). This number is too small for computing a reliable age-specific birth rate. Therefore, in computing birth rates by age of mother, births to women aged 50–54 years have been included with births to women aged 45–49 years; the denominator for the rate is women aged 45–49 years.

Birth rates for women in their mid to late thirties and over increased somewhat more during 1997–98 than earlier in the 1990's when the pace of increase slowed ([table 4](#)). Contributing to the renewed rise may be several factors, including increasing birth expectations among childless women as the availability and use of fertility-enhancing therapies has increased (15). Among currently childless women aged 35–44 years reporting impaired fecundity according to the National Survey of Family Growth, the proportion seeking fertility drug treatment rose considerably from 1982 to 1995 (12,16).

Live-birth order

The first birth rate dropped slightly in 1998 to 26.4 first births per 1,000 women aged 15–44 years ([table 5](#)). This is a record low. The 1998 rate was 9 percent lower than in 1990 (29.0), its recent high point. The rates for second, third, and fourth births increased. Birth rates for higher birth orders were unchanged.

While the first birth rate declined less than 1 percent overall, there were substantial differences in the trends by age of mother ([table 3](#);

tabular data not shown for 1997 and earlier years). Rates declined for teenage subgroups 15–17 and 18–19 years by 5 and 2 percent, respectively. Rates for women in their twenties declined up to 1 percent. In contrast, first birth rates rose 3 to 4 percent for women in their thirties. The proportion of all first births occurring to women aged 30 years and over remained unchanged in 1998 at 23 percent; in 1975 it was just 5 percent (14).

Another measure that can be useful in interpreting age trends in childbearing is the **median age at first birth**. This measure has gradually increased since the mid-1970's as the tendency for women to postpone childbearing was underway. The median age at first birth was 24.3 years in 1998, compared with 23.8 in 1990 and 22.0 in 1972.

The **birth rate for second births to teenagers** who have had a first birth increased again slightly in 1998 compared with 1997, after falling 21 percent from 1991 to 1996 (6). All of the decline in teenage birth rates in 1998 was thus due to declines in first birth rates.

Total fertility rate

The total fertility rate (TFR) indicates the number of births that a hypothetical group of 1,000 women would have if they experienced throughout their childbearing years the age-specific birth rates observed in a given year. This measure shows the potential impact of current fertility patterns on completed family size. Because it is computed from age-specific birth rates, the TFR is age-adjusted; it is not affected by changes over time in age composition.

The TFR in 1998 was 2,058.5, 1 percent higher than in 1997 ([tables 4 and 9](#)). The TFR has increased slightly from 1995—by 2 percent overall—following a 3-percent decline from 1990 to 1995. The increase in the TFR in 1998 resulted from the rise in age-specific birth rates for all women in age groups 20–44 years, which more than compensated for the declines in the teenage birth rates.

The U.S. TFR remains below “replacement” level (2,100), the rate at which a given generation can exactly replace itself. The TFR has been below “replacement” since 1971 (2,266.5). TFR's vary substantially among racial and Hispanic origin groups. In 1998, as in recent years, the TFR was above “replacement” for Mexican, non-Hispanic black, and Puerto Rican women. Rates were below “replacement” for American Indian, API, Cuban, and non-Hispanic white women ([tables 4, 9, 13, and 14](#)). Increases and decreases between 1997 and 1998 in most TFR's were 2 percent or less; rates declined 3 percent for Mexican and API women and increased 5 percent for Puerto Rican women. State-specific total fertility rates for 1998 are discussed in the next section.

Births and birth rates by State

Birth data by race and by Hispanic origin for 1998 are shown in [tables 10–12](#) for the 50 States and the District of Columbia, and Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Marianas. Note that the American Indian, Asian or Pacific Islander (API) and Hispanic populations (and Hispanic subgroups) are highly concentrated geographically.

The **number of births** increased in 43 States and Guam and American Samoa, and declined in 7 States, the District of Columbia, Puerto Rico, and the Virgin Islands. Increases and declines of up to 3 percent were found in 42 of the States, the District of Columbia, Guam, and American Samoa. The number increased 4 to 7 percent in

Colorado, Georgia, Idaho, Nevada, North Carolina, Tennessee, and Utah, and declined 5 to 11 percent in North Dakota, Puerto Rico, and the Virgin Islands.

Crude birth rates by State ranged from 11 births per 1,000 total population (Maine and Vermont) to 22 per 1,000 (Utah) (table 10). Birth rates increased in 32 States and American Samoa, declined in 6 States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam, and were unchanged in 12 States. Changes were no more than 2 percent in most States, and were not significant in 34 of the States and the District of Columbia or in Guam and American Samoa. A statistically significant decline of 5 percent was recorded for North Dakota.

Fertility rates per 1,000 women aged 15–44 years ranged by State from a low of 49 (Vermont) to a high of 91 (Utah) (table 10). Rates increased in 42 States, Guam, and American Samoa, and declined in 7 States, the District of Columbia, Puerto Rico, and the Virgin Islands; the rate was unchanged in New York. Changes in most States were no more than 2 percent and were not statistically significant in 23 States, the District of Columbia, Guam, and American Samoa. A significant increase of 5 percent was reported for Colorado, whereas a 4-percent decline was found for North Dakota; the rate for American Samoa fell 24 percent.

State-specific **total fertility rates** for 1998 are shown in table 10. These rates provide a summary measure of lifetime fertility at the State level; rates for 1980, 1990, and 1996–97 have been published (17–20).

Rates by State for 1998 vary substantially, from a low of 1,569.5 (or 1.57 births per woman) for Vermont to a high of 2,712.0 (2.71 births per woman) for Utah. Differences in the total fertility rates and changes between 1997 and 1998 by State are quite similar to those in the general fertility rate.

Birth rates for teenagers

Birth rates for teenagers by age group and State are shown for 1998 in table 10. Rates per 1,000 women aged 15–19 years ranged by State from 24.4 (Vermont) to 73.0 (Mississippi). The highest rate was reported for Guam, 104.8. Birth rates for teenagers have been declining in the United States since 1991. Teenage birth rates were lower in 1998 than in 1997 in all but 9 States. However, the overall trend for the 1990's was downward: Rates for 1998 were lower than for 1991 in all States and the District of Columbia and the Virgin Islands; declines were statistically significant in all States and in the territories except for Puerto Rico and Guam which increased (table B). Declines exceeded 25.0 percent in 5 States, and exceeded 20.0 percent in 13 States, the District of Columbia, and the Virgin Islands. More detailed information on current trends and variations in State-specific teenage birth rates by age, race, and Hispanic origin is presented in recent reports (6,21).

Table B. Birth rates for teenagers aged 15–19 years by State, 1991 and 1998, and percent change, 1991–98: United States, each State and territory

[Birth rates per 1,000 estimated female population aged 15–19 years in each area]

State	1991	1998	Percent change, 1991–98	State	1991	1998	Percent change, 1991–98
United States ¹	62.1	51.1	-17.7	Nebraska	42.4	37.0	-12.7
Alabama	73.9	65.5	-11.4	Nevada	75.3	65.7	-12.7
Alaska	65.4	42.4	-35.2	New Hampshire	33.3	27.1	-18.6
Arizona	80.7	70.5	-12.6	New Jersey	41.6	34.6	-16.8
Arkansas	79.8	70.8	-11.3	New Mexico	79.8	69.0	-13.5
California	74.7	53.5	-28.4	New York	46.0	38.5	-16.3
Colorado	58.2	48.7	-16.3	North Carolina	70.5	61.0	-13.5
Connecticut	40.4	35.8	-11.4	North Dakota	35.6	30.4	-14.6
Delaware	61.1	53.9	-11.8	Ohio	60.5	48.1	-20.5
District of Columbia	114.4	86.7	-24.2	Oklahoma	72.1	61.6	-14.6
Florida	68.8	55.5	-19.3	Oregon	54.9	47.4	-13.7
Georgia	76.3	65.4	-14.3	Pennsylvania	46.9	36.9	-21.3
Hawaii	58.7	45.7	-22.1	Rhode Island	45.4	41.0	-9.7
Idaho	53.9	44.8	-16.9	South Carolina	72.9	60.4	-17.1
Illinois	64.8	53.2	-17.9	South Dakota	47.5	38.5	-18.9
Indiana	60.5	53.3	-11.9	Tennessee	75.2	64.3	-14.5
Iowa	42.6	35.2	-17.4	Texas	78.9	70.9	-10.1
Kansas	55.4	47.0	-15.2	Utah	48.2	40.9	-15.1
Kentucky	68.9	57.0	-17.3	Vermont	39.2	24.4	-37.8
Louisiana	76.1	65.4	-14.1	Virginia	53.5	43.5	-18.7
Maine	43.5	30.4	-30.1	Washington	53.7	41.7	-22.3
Maryland	54.3	43.1	-20.6	West Virginia	57.8	49.2	-14.9
Massachusetts	37.8	30.8	-18.5	Wisconsin	43.7	34.8	-20.4
Michigan	59.0	42.6	-27.8	Wyoming	54.2	47.8	-11.8
Minnesota	37.3	30.6	-18.0	Puerto Rico	72.4	74.3	2.6**
Mississippi	85.6	73.0	-14.7	Virgin Islands	77.9	62.0	-20.4
Missouri	64.5	51.2	-20.6	Guam	95.7	104.8	9.5**
Montana	46.7	37.1	-20.6	American Samoa	---	43.9	---
				Northern Marianas	---	65.5	---

** Not significant at $p < .05$.

--- Data not available.

¹Excludes data for the territories.

Sex ratio

There were 2,016,205 male live births in 1998 compared with 1,925,348 female live births. These numbers yielded a sex ratio of 1,047 male per 1,000 female live births ([tables 13 and 14](#)). The sex ratio has changed very little over the last 50 years and was 1,048 in 1997. Similar to previous years, Asian or Pacific Islander mothers had the highest sex ratio (1,061). The sex ratio for Hispanic mothers (1,040) was intermediate between non-Hispanic white mothers (1,052) and non-Hispanic black mothers (1,034). The ratio for American Indian births was 1,038.

Month of birth

Monthly birth rates in 9 months of 1998 were above the rates for the same months observed in 1997. The peak months of occurrence of births in 1998 were July, August, and September ([table 15](#)). If the birth and fertility rates are adjusted to account for the characteristic seasonal variation, it is then possible to observe the underlying trends in these rates. The months of January, May, and July had the lowest seasonally adjusted birth rates since 1976. The seasonally adjusted birth rate for 7 months was higher in 1998 than for the same months in 1997.

Day of the week

The average number of births on any given day in 1998 was 10,799 ([table 16](#)). There is a large variation in the number of births by day of the week. For Tuesdays, the most common day to have a birth, the average was 12,393 while for Sundays, the least common day, the average was 7,829.

Variation in the daily pattern of births can also be measured by an index of occurrence. In 1998 the Sunday index was 72.5, an indication that there were 27.5 percent fewer births on Sundays than the daily average, considered to be 100.0. The Saturday index was 80.8. As in past years, Tuesdays had the highest index in 1998, 114.8.

A weekend deficit is apparent for vaginal and cesarean deliveries, but is far larger for cesarean deliveries, particularly repeat cesareans. In 1998 the Sunday index for vaginal births was 77.6, compared with 63.4 for primary cesareans and 37.9 for repeat cesareans.

Births to unmarried women

The birth rate for unmarried women in 1998 was 44.3 births per 1,000 unmarried women aged 15–44 years, 1 percent higher than in 1997 (44.0), but still 6 percent below its highest level, 46.9 in 1994. The **number of births to unmarried women** increased 3 percent to 1,293,567 in 1998, the highest number ever reported. Most of this 3-percent increase is due to the 2-percent growth in the population of unmarried women. The **percent of all births occurring to unmarried women** rose from 32.4 to 32.8 percent in 1998. (See [table C](#) and [tables 17,18](#).)

The **procedures for reporting the mother's marital status changed only in Connecticut**, beginning June 15, 1998. Connecticut now reports the mother's marital status from a direct question, and the question is on the State's birth certificate. The reporting change in Connecticut, which accounts for just 1 percent of U.S. births, is discussed in more detail in the [Technical notes](#). Prior to June 1998, the mother's marital status was inferred in Connecticut by comparing the

Table C. Number, rate, and percent of births to unmarried women, and birth rate for married women: United States, 1980 and 1985–98

Year	Births to unmarried women			Birth rate for married women ³
	Number	Rate ¹	Percent ²	
1998.	1,293,567	44.3	32.8	85.7
1997.	1,257,444	44.0	32.4	84.3
1996.	1,260,306	44.8	32.4	83.7
1995.	1,253,976	45.1	32.2	83.7
1994.	1,289,592	46.9	32.6	83.8
1993.	1,240,172	45.3	31.0	86.8
1992.	1,224,876	45.2	30.1	89.0
1991.	1,213,769	45.2	29.5	89.9
1990.	1,165,384	43.8	28.0	93.2
1989.	1,094,169	41.6	27.1	91.9
1988.	1,005,299	38.5	25.7	90.8
1987.	933,013	36.0	24.5	90.0
1986.	878,477	34.2	23.4	90.7
1985.	828,174	32.8	22.0	93.3
1980.	665,747	29.4	18.4	97.0

¹Births to unmarried women per 1,000 unmarried women aged 15–44 years.

²Percent of all births to unmarried women.

³Births to married women per 1,000 married women aged 15–44 years.

surnames of the mother, father, and child. Reporting procedures for marital status in Connecticut are now essentially the same as those in all but two States (Michigan and New York); see [Technical notes](#).

If the reporting change in Connecticut had not occurred, it is estimated that the number of nonmarital births would have been about 1,000 higher. The birth rate and the percent of births to unmarried women for the Nation, however, were not affected by the change in Connecticut. It is important to note that as a result of the change implemented by Connecticut, its birth data by marital status are more accurate in 1998 than in prior years.

Birth rates for unmarried women vary considerably by race and Hispanic origin. In 1998 the rates per 1,000 unmarried women were 27.4 per 1,000 for non-Hispanic white women, 73.3 for black women, and 90.1 for Hispanic women. The only rate to increase was for non-Hispanic white women, up 1 percent. The birth rate for unmarried black women has declined 19 percent since 1989 (90.7); the 1998 rate is lower than in any year since 1969 when data for black women became available. The birth rate for unmarried Hispanic women in 1998, 90.1 per 1,000, was at its lowest level since 1990 (89.6)

Birth rates for unmarried women by age continue to be highest for women aged 18–19 and 20–24 years, followed closely by women aged 25–29 years ([figure 3](#)). Rates for younger teenagers and women in age groups 30 years and over are considerably lower ([tables 17 and 18](#)). Among teenagers and women aged 20–24 years, rates for unmarried black and Hispanic women on average were 2 to 4 times the rates for non-Hispanic white women in the same age groups. Among age groups 25–29 years and over, rates were considerably higher for Hispanic women than for black or non-Hispanic white women.

Age-specific birth rates for unmarried women declined only for teenagers in 1998, continuing a trend underway since 1994. During the 1994–98 period, the rates for unmarried teenagers 15–17 and 18–19 years declined 16 and 8 percent, respectively. The rate for young black teenagers has been falling since 1991, and dropped steeply, by 30 percent, during 1991–98.

Birth rates for unmarried women in age groups 20–24 and 25–29 years increased by 2 and 4 percent, respectively, between 1997 and

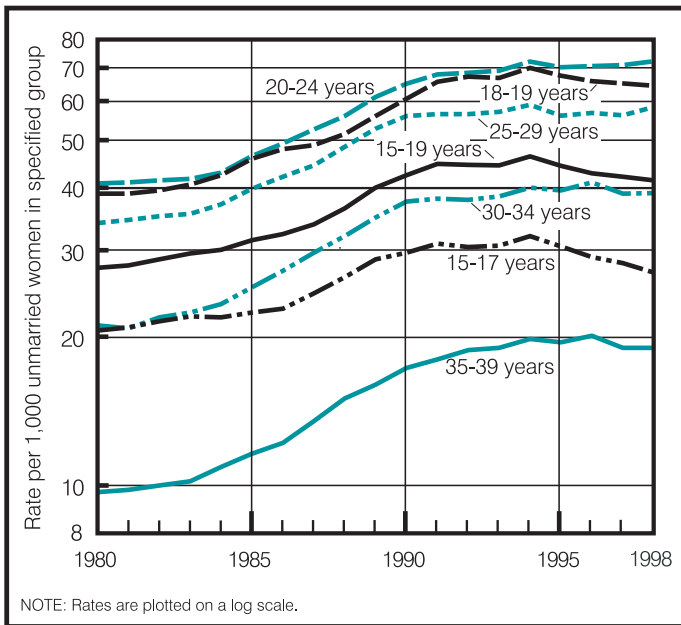


Figure 3. Birth rates for unmarried women, by age of mother: United States, 1980-98

1998, reaching record highs in 1998. Birth rates for unmarried women in age groups 30-34 through 40-44 years were essentially unchanged in 1998. These patterns by age were generally found for all population groups; among women 30 years and over, increases were found only for non-Hispanic white women.

The proportion of all births occurring to unmarried women increased to 32.8 percent in 1998, compared with 32.4 percent in 1997. The proportions for subgroups in 1998 were 21.9 percent, non-Hispanic white; 69.3 percent, non-Hispanic black; and 41.6 percent, Hispanic; each changed very little in recent years (see tables 13, 14, 17, and 19 for 1998 data).

Changes in the proportion of births to unmarried women are affected by trends in births and birth rates for married as well as unmarried women (table C). Because of compensating changes in these measures and in the populations of women by marital status, the proportion of births to unmarried women has changed relatively little since 1994. The birth rate for unmarried women has generally declined, but increased 1 percent from 1997 to 1998. The number of nonmarital births fluctuated during 1994-98, with a small overall increase, reflecting the 6-percent rise in the number of unmarried women during that period (22). In 1998 total births—mostly births to married women—increased for the first time since 1990. However, the increases in the number of unmarried women and their birth rate were larger than the increases in marital fertility. Thus, the proportion of births to unmarried women rose in 1998. Trends in the factors affecting the number and proportion of births to unmarried women should be kept in mind when examining trends in these measures (23).

The numbers and proportions of births to unmarried women by State and by race and Hispanic origin for 1998 are shown in table 19 for the 50 States and the District of Columbia, and each territory. The numbers increased in 46 States, Guam, and American Samoa, and declined in four States (California, Connecticut, New York, and North Dakota), the District of Columbia, Puerto Rico, and the Virgin Islands. Similarly, increases in the proportions exceeded declines: The

proportion increased in 44 States, Puerto Rico, the Virgin Islands, and Guam, declined in three States, the District of Columbia, and American Samoa, and was unchanged in three States.

Age of father

The birth rate per 1,000 men aged 15-54 years reversed a 7 year decline in 1998, rising 1 percent to 51.0 (table 20). This rate fell by 14 percent between 1990 and 1997. Birth rates increased for men in age groups 20-24 through 45-49 years, and declined for teenagers. Information on age of father is often missing on birth certificates of children born to unmarried women, greatly inflating the number of "not stated" in all tabulations by age of father. In 1990 age of father was not reported for 16 percent of births; by 1998 this figure had declined to 14 percent of births. The procedures for computing birth rates by age of father are described in the Technical notes.

Educational attainment

The educational attainment of women who give birth is important because higher educational attainment is associated with more timely receipt of prenatal care and fewer lifestyle and health behaviors during pregnancy that are detrimental to birth outcome (discussed in later sections).

Data from the birth certificate show that the educational attainment of women who gave birth increased substantially over the last few decades, partly reflecting the increases in educational attainment of all women during the time period (24). More than three-fourths of women who gave birth in 1998 had at least 12 years of schooling (78 percent), and 23 percent had at least 4 years of college (table 21). The percent of mothers with at least a high school diploma increased with additional age, to about 90 percent for women who gave birth in their 30's, and then declined slightly for mothers 40 years of age and over (88 percent). The percent of mothers with at least 4 years of college was highest for women 35 years of age and over (43 percent). The median educational attainment for all mothers in 1998 was 12.9 years.

In general, Japanese and Filipino mothers were the most likely to have completed high school—98 percent and 93 percent, respectively (tables 13 and 14). Eighty-seven percent of non-Hispanic white mothers compared with 73 percent of non-Hispanic black mothers and 51 percent of Hispanic mothers had completed high school. Although the overall proportion of Hispanic mothers with at least 12 years of schooling was low, there was tremendous variation among Hispanic subgroups, ranging from 45 percent of Mexican mothers to 87 percent of Cuban mothers (table 14). Only two-thirds of American Indian mothers had 12 or more years of schooling. Thirty percent of non-Hispanic white mothers had at least 4 years of college compared with 11 percent of non-Hispanic black mothers and 7 percent of Hispanic mothers.

Maternal lifestyle and health characteristics

Weight gain

Maternal weight gain is one of the components in the complex relationship between lifestyle characteristics of the mother and the development of the fetus (25). In 1990 the National Academy of Sciences published weight-gain guidelines that varied according to

mother's body mass index (BMI), which is calculated from her prepregnancy weight and height. The guidelines recommend that women who are underweight (low BMI) gain 28 to 40 pounds, those who are of normal weight (average BMI) gain 25 to 35 pounds, those who are overweight (high BMI), gain 15 to 25 pounds, and obese women, gain not more than 15 pounds (26).

Information on maternal weight gain is collected on the birth certificate, but information on the mother's prepregnancy weight and height is not. Therefore, it is not possible to determine whether the weight gain was within the recommendations for the mother's BMI. Differences between subgroups in maternal weight gain may reflect differences in the proportion of mothers who gained outside the recommended range but could also be the result of group differences in maternal height and prepregnancy weight.

In 1998 all States except California reported information on weight gain. Births to mothers residing in those States accounted for 87 percent of all births in the United States. In 1998 the majority of women (64 percent) gained 26 pounds or more during pregnancy (table 22). The **median weight gain** changed very little during the 1989–98 period and was 30.5 pounds in 1998. Despite the consistency of the median weight gain, the percent of mothers who gained at either end of the weight gain spectrum was higher in 1998 than in 1989—weight gains of less than 16 pounds increased from 9.4 percent in 1989 to 11.3 percent in 1998, while weight gains of 46 pounds or more increased from 9.1 percent in 1989 to 11.9 percent in 1998.

The **weight gain of the mother during pregnancy varied considerably by period of gestation**. Mothers who had preterm infants (gestations of under 37 completed weeks) gained 3 pounds less during pregnancy (27.9 pounds) than mothers who had babies with gestations of 40 weeks and over (30.9 pounds). The median weight gain for non-Hispanic white women (30.8 pounds) was about a pound higher than for either non-Hispanic black women (29.8 pounds) or Hispanic women (30.0 pounds).

The percent of non-Hispanic black mothers who had weight gains of less than 16 pounds (16.8 percent) was much higher than for Asian or Pacific Islander (API) and non-Hispanic white mothers (9.6 percent each) while American Indian mothers were intermediate (15.3 percent) (tables 24 and 25).

Within Hispanic subgroups, the percent of Mexican mothers who gained less than 16 pounds (14.7 percent) was nearly double that for Cuban mothers (7.8 percent) while the remaining groups were intermediate (table 25).

Maternal weight gain has been shown to have a positive correlation with the birthweight of the infant (27). This relationship is substantiated by the data in table 23. The percent of infants with low birthweight drops steadily with increasing weight gain through 45 pounds, from 14.2 to 5.1 percent, and then increases slightly for mothers who gained 46 pounds or more (5.4 percent). The general decline in the percent low birthweight with greater maternal weight gain is replicated when the data are examined according to the period of gestation.

Medical risk factors

Maternal medical risk factors have a major influence on pregnancy complications and infant survival (28–30). Some of the more serious conditions necessitate close medical supervision to prevent severe complications. Sixteen medical risk factors affecting pregnancy

are separately identified on the birth certificate. Data for this item were missing from only 1.4 percent of records for 1998, but birth certificate data may underreport overall medical risk factor prevalence (31). Also, rates for rarely occurring medical risk factors and for smaller population groups can vary widely from year to year and should be used with caution.

The most frequently reported medical risk factor is **pregnancy-associated hypertension**. The rate for this factor rose for the seventh consecutive year, from 36.8 to 37.6 per 1,000 for 1997–98. This rate has risen by nearly a third during the 1990's. (See table 26 for 1998 data.) The pregnancy-associated hypertension rate has risen among all age and race and ethnic groups since the early 1990's. Rates for the related hypertensive disorders, **chronic hypertension** and **eclampsia**, were largely unchanged for 1998, at 7.1 and 3.2 per 1,000, respectively, and have not risen notably during the 1990's.

Diabetes and **anemia** are the second and third most frequently reported complications of pregnancy. The diabetes rate was 26.7 per 1,000 for 1998 compared with 26.4 in 1997. The anemia rate rose to 21.8 from 20.2 in 1997. Despite slight fluctuations in rates for these two conditions, rates have not risen markedly during the 1990's.

Overall, and for the majority of all racial and ethnic groups, the reported rate of **hydramnios/oligohydramnios** (the excess or shortage of amniotic fluid) has consistently increased each year since data for this factor first became available in 1989, and has more than doubled during the 1990's (from 5.9 to 13.2 per 1,000 between 1990 and 1998). Acute or chronic **lung disease** (e.g., asthma, tuberculosis) has exhibited an even more dramatic upward trend. Significant increases for 1990–98 were found for all racial and ethnic groups. Although lung disease is reported in only 1 percent of all pregnant women, the level of lung disease has more than tripled overall since 1990 (from 3.0 per 1,000 to 10.3 between 1990 and 1998).

Medical risk factors during pregnancy vary greatly by **race and ethnicity** (tables 27 and 28). American Indian women have consistently had the highest rates of pregnancy-associated hypertension, diabetes, and anemia, comprising about 5 percent of all American Indian pregnancies for each condition in 1998. In comparison, only about 1 percent of Chinese mothers had pregnancy-associated hypertension or anemia. Overall rates can sometimes mask striking differences in age-specific rates among racial and ethnic groups. For example, although the overall diabetes rate for white mothers was 25.9, higher than the black rate of 25.1, black mothers aged 40 years and over (77.7 per 1,000) have a rate 28 percent higher than white mothers 40 years and over (60.8 per 1,000).

Medical risk factor rates also often differ widely by **maternal age** (table 26). Anemia, for example, is more common among younger mothers (30.6 per 1,000 for mothers under 20 years of age compared with 17.6 for mothers 40 years of age and over). Older mothers, conversely, are more prone to chronic conditions such as diabetes (65.7 for mothers 40 years and over compared with 8.2 for mothers under 20 years of age). Some risk factors, however, such as pregnancy-associated hypertension follow a U-shaped pattern, with the highest levels at the extremes of the maternal age distribution.

Tobacco use during pregnancy

Smoking during pregnancy continued to decline according to birth certificate data. In 1998, 12.9 percent of women giving birth were reported to have smoked, down 2 percent compared with 1997

(13.2 percent) and 34 percent since 1989 (19.5 percent), when this information first became available on the birth certificate (20,32). Tobacco use was reported in a comparable manner on the birth certificate in 1998 by 46 States, the District of Columbia, and New York City, comprising 81 percent of U.S. births. Comparable information was not available for California, Indiana, South Dakota, and the remainder of New York State. (See [tables 24, 25, and 29–32](#) for 1998 data.)

Some studies have suggested that smoking may be underreported on birth certificates due to a variety of factors, including the lack of a specific time reference for smoking status, variations in the source of this information for each birth, and the growing stigma associated with smoking (32–35). Nevertheless, trends in maternal smoking based on the birth certificate are generally consistent with those reported for recent years from the National Survey of Family Growth and more recently from the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance Summary, and variations in smoking among population subgroups found in birth certificate data have been corroborated in other studies (12,36–38).

Tobacco use during pregnancy is associated with a variety of adverse outcomes, including increased risk of miscarriage, intrauterine growth retardation, low birthweight, and infant mortality, as well as negative consequences for child health and development (39–42).

Maternal smoking declined or was unchanged in most racial and Hispanic origin groups; smoking rates increased for Japanese and Hawaiian women, the second year of increase for Hawaiians. As in previous years, rates were highest for non-Hispanic white, American Indian, and Hawaiian women, and lowest for Mexican, Cuban, Central and South American, and Asian or Pacific Islander women (API) (except Hawaiian) ([tables 24 and 25](#)). The generally very low smoking rates found for Mexican, Central and South American, Chinese, and Filipino women from birth certificate data have been confirmed by other studies (36,37). Women born in the 50 States and the District of Columbia had substantially higher smoking rates than women born outside these areas, a pattern that has been described elsewhere ([tables 24 and 25](#)) (43).

Maternal smoking among teenagers rose about 1 percent overall, the fourth consecutive year of increase, with all of the 1997–98 increase confined to older teenagers (up from 18.8 to 19.2 percent) ([figure 4](#)) (32). Smoking rates increased among non-Hispanic white and black teenagers 15–19 years in 1998; the rate for Hispanic teenagers was unchanged at 4.9 percent. The smoking rate for non-Hispanic black teenagers was 7.0 percent in 1998, compared with 5.0 percent in 1994 when the rate began to rise (see [table 30](#) for 1998 data.) The rate for non-Hispanic white teenagers increased to 29.8 percent; their rates are still 4 to 5 times the rates for non-Hispanic black teenagers. Non-Hispanic white women aged 18–19 years had the highest smoking rate of any group, 30.4 percent ([table 30](#)). Smoking during pregnancy generally declined for women in age groups 20–39 years. Patterns of smoking rates and trends by age, race, and Hispanic origin are described in detail in a recent NCHS report (32).

Among smokers, **the proportion smoking at least half a pack of cigarettes daily** has declined steadily in recent years—to 31 percent in 1998 (compared with 41 percent in 1990) (32). Non-Hispanic white mothers and older mothers are more likely than other mothers to smoke half a pack or more ([tables 29 and 31](#)).

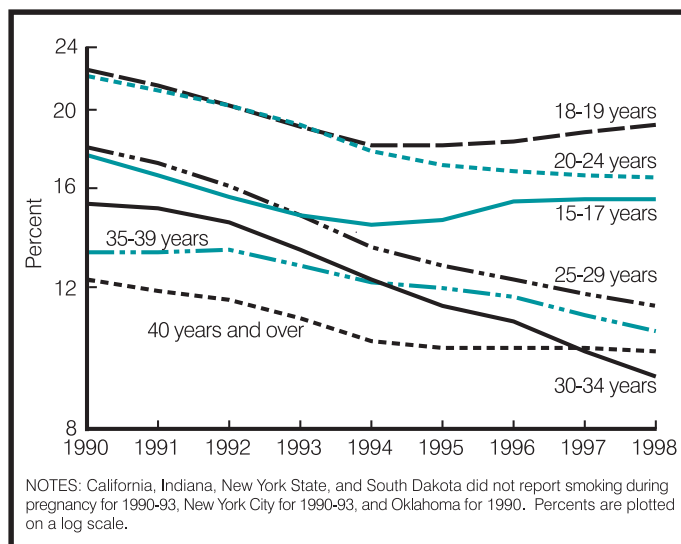


Figure 4. Percent of mothers who smoked during pregnancy by age: Total reporting areas, 1990–98

Smoking rates by maternal educational attainment continue to be highest for women with 9–11 years of education, 26 percent in 1998, and lowest for women with 4 years or more of college, 2 percent ([table 31](#)). Even among women aged 20 years and over, smoking rates were highest for mothers who attended but did not graduate from high school—29 percent overall and 48 percent of non-Hispanic white women (tabular data not shown).

Babies born to mothers who smoke during pregnancy are at greatly elevated risk of low birthweight (LBW), a finding documented in birth certificate data as well as in numerous other studies (39,44). In 1998, 12.0 percent of infants born to smokers weighed less than 2,500 grams (5 lb 8 oz) compared with 7.2 percent of births to non-smokers ([table 32](#)). This substantial differential is found for every race and Hispanic origin group. Heavier smoking heightens the LBW risk, although LBW is elevated even among babies born to the lightest smokers (1 to 5 cigarettes daily), 11.0 percent (tabular data not shown). Advancing maternal age exacerbates the risk, probably a consequence of the much greater cigarette consumption among older women ([table 29](#)).

Alcohol use during pregnancy

Pregnancy and birth outcome can be jeopardized by maternal alcohol use during pregnancy. Even low to moderate alcohol use has been shown to jeopardize birth outcome, independent of other risk factors such as tobacco use and other maternal risk factors (45,46). All States except California and South Dakota included items on alcohol use on their birth certificates in 1998. This reporting area accounted for 87 percent of U.S. births.

Alcohol use during pregnancy is substantially underreported on the birth certificate (31). According to birth certificate data, alcohol use declined again in 1998 to just 1.1 percent of mothers reporting any alcohol use compared with 1.2 percent in 1997 and 4.1 percent in 1989, the first year this information was reported on the birth certificates (see [tables 24 and 25](#) for 1998 data) (20). A recent study based on an analysis of responses by about 1,300 pregnant women in CDC's nationally representative Behavioral Risk Factor Surveillance System

found that about 15 percent of women used alcohol during pregnancy in 1995. The researchers also reported that although alcohol use declined from 1988 (23 percent) to 1992 (10 percent), there was a statistically significant rise to 15 percent in 1995 (47).

The nature of the birth certificate questions on alcohol use apparently has contributed to the underreporting because the questions focus on the number of drinks per week, whereas other studies inquire about drinks per month (47). Women who drink, but less than one drink per week, may report no alcohol use for the birth certificate question. The stigma associated with alcohol use also contributes to the underreporting (25,47).

Medical services utilization

Prenatal care

The percent of women who began **prenatal care in the first trimester** of pregnancy rose for the ninth consecutive year, to 82.8 percent for 1998. This measure of prenatal care showed little improvement during the 1980's, but has risen by 10 percent during the 1990's. (See [table D](#) and [tables 33–35](#).) The proportion of mothers with **late (care beginning in the third trimester) or no care** was 3.9 percent for the current year, unchanged from 1997. The percent of women with late or no care is down from a high of 6.4 percent reported for 1989.

The effects of prenatal care are difficult to quantify (48,49), but appropriate care can promote healthier pregnancies by detecting and managing preexisting medical conditions, and providing health behavior advice (50). Prenatal care can also serve as a gateway into the health care system, especially for socially disadvantaged women (49).

The proportion of women beginning in the first trimester of pregnancy improved by about 1 percent for the current year for all of the **race and ethnic groups** except non-Hispanic white women, among whom the level was stable. Since 1989 timely care has risen for all groups, but gains have been most evident among groups with lower levels of timely care. For example, levels continue to be comparatively low, but increases of 19 to 28 percent have been reported among the following groups for the period 1989–98: American Indian, non-Hispanic black, Puerto Rican, Central and South American, and Mexican. (See [table E](#) and [tables 24](#) and [25](#) for 1998 data.) Despite these gains, there remained a 33-percent differential between the groups with the highest (Cuban at 91.8 percent) compared with the lowest levels (American Indian at 68.8 percent) of timely care.

Improvements in the timely receipt of prenatal care have been quite widespread throughout the country during the 1990's; however, the largest increases have occurred in the South. Five southern States or reporting areas reported increases of about 20 percent or more in the percent of mothers with first trimester care for 1989–98: the District of Columbia, Florida, Georgia, South Carolina, and Texas ([table 34](#) for 1998 data).

The **Adequacy of Prenatal Care Utilization Index (APNCU)**, an alternative measure of prenatal care utilization, which adjusts for some of the weaknesses of the trimester care began and the Kessner Index, also indicates a slight increase in prenatal care utilization for the current year (51). According to this measure, the proportion of women with at least adequate care rose from 74.0 percent to 74.3 percent between 1997 and 1998 ([table F](#)). The proportion of women with intensive use of care (women for whom the number of visits exceeded the American

Table D. First trimester prenatal care by race and Hispanic origin of mother: United States, 1980, 1985, 1990–98

Year	All races ¹	Non-Hispanic		
		White	Black	Hispanic ²
1998	82.8	87.9	73.3	74.3
1997	82.5	87.9	72.3	73.7
1996	81.9	87.4	71.5	72.2
1995	81.3	87.1	70.4	70.8
1994	80.2	86.5	68.3	68.9
1993	78.9	85.6	66.1	66.6
1992	77.7	84.9	64.0	64.2
1991	76.2	83.7	61.9	61.0
1990	75.8	83.3	60.7	60.2
1989	75.5	82.7	59.9	59.5
1985	76.2	...	...	...
1980	76.3	...	...	...

... Data not available.

¹Includes races other than white and black and origin not stated.

²Includes all persons of Hispanic origin of any race.

Table E. Percent of women with care beginning in the first trimester of pregnancy by specified race and Hispanic origin of mother: United States, 1989 and 1998, and percent change, 1989–98

	Percent first trimester care		Percent change
	1998	1989	1989–98
Total, all races ¹	82.8	75.5	10
American Indian	68.8	57.9	19
Mexican	72.8	56.7	28
Non-Hispanic black	73.3	59.9	22
Puerto Rican	76.9	62.7	23
Central and South American	78.0	60.8	28
Hawaiian	78.8	66.8	18
Filipino	84.2	77.6	9
Non-Hispanic white	87.9	82.7	6
Chinese	88.5	81.5	9
Japanese	90.2	86.2	5
Cuban	91.8	83.2	10

¹Includes births to races/Hispanic origin not shown separately.

Table F. Adequacy of Prenatal Care Utilization Index: United States, selected years, 1989–98

	Intensive use	Adequate	Intermediate	Inadequate
1998	31.0	43.3	13.8	11.9
1997	30.7	43.3	14.0	12.0
1996	29.3	43.6	14.7	12.4
1995	28.8	43.7	14.7	12.8
1990	24.6	42.3	15.7	17.4
1989	24.1	42.0	15.9	18.0

NOTES: Levels may differ slightly from those previously published; see Technical notes. See reference 51 for information on calculation of this measure.

College of Obstetricians and Gynecologists' recommendations by a ratio of observed to expected visits of at least 110 percent) was up slightly (from 30.7 to 31.0 percent) and the proportion of women with intermediate or inadequate care declined (from 26.0 to 25.7 percent). For 1989–98, the APNCU shows the percent of mothers with at least

adequate care increasing by 12 percent, (with most of the increase occurring among women with intensive use of care), and the percent of women with inadequate care declining by about one-third.

Obstetric procedures

The most prevalent obstetric procedure in 1998 was electronic fetal monitoring, reported for nearly 3.3 million births, or 84 percent of all live births in the United States (table 36). Six specific obstetric procedures are reported on the birth certificate.

According to data from the birth certificate, 65 percent of mothers who had live births in 1998 received ultrasound. The overall rates per 1,000 live births of stimulation of labor and induction of labor in 1998 were 178 (17.8 percent) and 192 (19.2 percent) respectively. The rates of both of these procedures have been rising steadily every year since 1989 (52,53). Some of the increase may be due to better reporting; a study based on 1989 births found that obstetric procedures were underreported on the birth certificate (54). While the highest rates of induction are found for the longest gestation periods as would be expected, rates have been rising for all gestation groups (figure 5).

Complications of labor and/or delivery

Of the 15 reported complications of labor and/or delivery, 3 were reported at a rate greater than or equal to 30 per 1,000 live births in 1998: Meconium, moderate/heavy (55 per 1,000), fetal distress (40 per 1,000), and breech/malpresentation (39 per 1,000) (table 37). Rates for these three complications varied by race and Hispanic origin (tables 27 and 28). It has been shown that levels of these complications may be underreported on the birth certificate (54).

Attendant at birth and place of delivery

In 1998 more than 9 out of 10 births (91.9 percent) were attended by a physician in a hospital, making this arrangement by far the most typical (table 38). However, the percent of births with this arrangement was slightly lower in 1998 than in 1997 (92.3 percent)

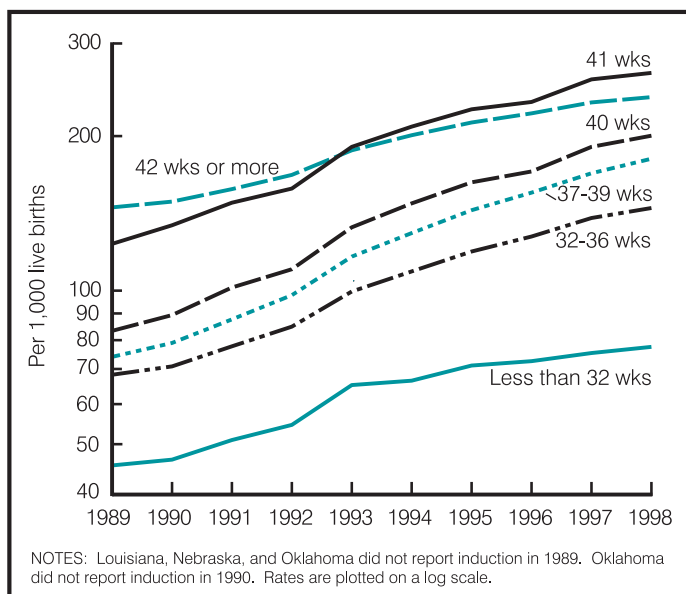


Figure 5. Rates of induction of labor by length of gestation in weeks: United States, 1989-98

and has declined from 98.4 percent in 1975. For physician-attended births, 4.3 percent were by doctors of osteopathy (DO's) while the remaining were attended by doctors of medicine (MD's). Although small, the number and percent of births attended by DO's has grown steadily since 1989, the first year data on DO's were available from the birth certificate, from 2.8 percent of all births to 4.0 percent. The percent of births attended by **midwives** increased sharply between 1975 (1.0 percent) and 1998 (7.4 percent). A recent report found that nearly all of the growth in midwife-attended births was for those in hospitals (53). About 95 percent of midwife-attended births in 1998 were by **certified nurse midwives (CNM's)**.

About 99 percent of births in 1998 were delivered in hospitals, almost unchanged from the 1975 level. The majority of out-of-hospital births were in a residence (63 percent) whereas 29 percent were in a **freestanding birthing center**.

About 93 percent of births to non-Hispanic white women were attended by a physician in a hospital compared with about 92 percent of births to non-Hispanic black women and 90 percent of births to Hispanic women. Hispanic women were more likely to have midwife-attended hospital births (9 percent) than were either non-Hispanic white or black women (6 to 7 percent each).

Method of delivery

The **rate of cesarean delivery** increased 2 percent between 1997 and 1998 (from 20.8 per 100 live births to 21.2), returning to the level observed in 1994. This was the second consecutive year that the rate increased after falling each year during 1989-96 (table G and table 39). Despite the increase, the 1998 rate was 7 percent lower than the rate of 22.8 in 1989, the first year this information was available on the birth certificate. The **primary cesarean rate** in 1998 (14.9 per 100 live births to women who had no previous cesarean) was 2 percent higher than in 1997 (14.6). This was the first time this rate increased during the 1989-98 period; it declined each year between 1989 and 1996 and remained steady between 1996 and 1997 (table G). The primary rate in 1998 was 7 percent lower than in 1989 (16.1) but returned to the level of 1994. The rate of **vaginal birth after previous cesarean delivery (VBAC)** declined 4 percent between 1997 and 1998—from 27.4 per 100 women with a previous

Table G. Total and primary cesarean rates and vaginal births after previous cesarean delivery rates: United States, 1989-98

Year	Cesarean rate		
	Total ¹	Primary ²	VBAC rate ³
1998	21.2	14.9	26.3
1997	20.8	14.6	27.4
1996	20.7	14.6	28.3
1995	20.8	14.7	27.5
1994	21.2	14.9	26.3
1993	21.8	15.3	24.3
1992	22.3	15.6	22.6
1991	22.6	15.9	21.3
1990	22.7	16.0	19.9
1989	22.8	16.1	18.9

¹Percent of all live births by cesarean delivery.

²Number of primary cesareans per 100 live births to women who have not had a previous cesarean.

³Number of vaginal births after previous cesarean (VBAC) delivery per 100 live births to women with a previous cesarean delivery.

cesarean to 26.3. The VBAC rate has declined 7 percent between 1996 and 1998 after increasing by 50 percent between 1989 and 1996 (from 18.9 to 28.3).

Overall cesarean rates increased steadily with advancing age of the mother and were more than twice as high for mothers 40–54 years of age (33.1) than for teenagers (14.5) (table 40). Primary cesarean rates increased with additional age after age 24, to 23.3 for women 40–54 years of age. VBAC rates declined with increasing age—slightly under a third of teenagers who had a previous cesarean had a VBAC delivery (31.7 percent) compared with 20.8 percent of mothers 40–54 years of age. All age groups experienced increases in their total cesarean rate between 1997 and 1998 with mothers 25 years of age and over having slightly greater percent increases than younger women. All age groups experienced declines in VBAC rates between 1997 and 1998 except for mothers 40–54 years of age whose rate increased from 20.5 in 1997 to 20.8 in 1998.

Non-Hispanic black women had a higher cesarean rate in 1998 (22.4) than either non-Hispanic white women (21.2) or Hispanic women (20.6). The percent increase between 1997 and 1998 was highest for black women, thus increasing the disparity. Similarly, the primary cesarean rate for non-Hispanic black women (16.0) was higher than the rate for non-Hispanic white women (15.1) and Hispanic women (13.6). All groups experienced increases in their primary cesarean rate from 1997 to 1998, but the percent increase for non-Hispanic black women was slightly higher than for non-Hispanic white and Hispanic women. The VBAC rate in 1998 was highest for non-Hispanic white women (27.3), lowest for Hispanic women (22.4), and intermediate for non-Hispanic black women (25.7). The VBAC rate for each group declined between 1997 and 1998 with Hispanic women having a slightly greater percent decline than the other groups.

American Indian and Asian or Pacific Islander (API) mothers had lower cesarean rates (18.6 and 19.4, respectively) than either non-Hispanic white or black mothers (tables 24 and 25). With the exception of Filipino mothers, all specified API categories had lower rates of cesarean delivery than either non-Hispanic white or black mothers. The rate of cesarean delivery varied between 19.8 and 22.2 for all Hispanic subgroups except for Cuban mothers whose rate was much higher (31.0) (table 25).

There was considerable variation in cesarean rates by State ranging from a high of 27.0 in Mississippi to a low of 14.7 in Alaska; the rate for Puerto Rico was 35.1 (table 41). There was also considerable variation in VBAC rates by State, from 40.6 in Vermont to 13.1 in Louisiana.

All of the selected medical risk factors in table 42 were associated with overall cesarean rates that were equal to or higher than the national average. Cesarean rates for the medical risk factors ranged from 21.2 for mothers with Rh sensitization to 48.8 for mothers with eclampsia. Certain complications of labor and/or delivery are also associated with high cesarean rates. Nearly all births with cephalopelvic disproportion were cesarean deliveries (96.2) while the cesarean rates for breech/malpresentation (84.2) and placenta previa (81.5) were also very high.

During the 1989–98 period, the percent of births that were delivered by either forceps or vacuum extraction remained steady at around 9 percent. During that period, however, there was a shift as the number and percent of births delivered by forceps declined each year whereas the use of vacuum extraction generally increased (tabular data not

shown). In 1998, 2.6 percent of births were delivered by forceps compared with 5.5 percent in 1989—a 53-percent decline. Vacuum extraction was used in 6.0 percent of births in 1998, a slightly lower proportion than in 1997 (6.2), but 71 percent higher than in 1989 (3.5). The slight decline between 1997 and 1998 in the percent of births delivered by vacuum extraction was also apparent when examining vaginal births only—from 7.8 percent of all vaginal births in 1997 to 7.7 percent in 1998.

Infant health characteristics

Period of gestation

The **preterm birth rate** rose again for 1998, to 11.6 percent, following a rise from 11.0 to 11.4 percent for 1996–97. The percent of births born preterm, or at earlier than 37 completed weeks of gestation, has risen 9 percent since 1989–90 (from 10.6 percent), and 23 percent since 1981 (9.4 percent). Most of the current year rise was among moderately preterm births (32–36 weeks), which increased from 9.43 to 9.63 percent; the percent of births born very preterm, (prior to 32 completed weeks of gestation) was 1.94 percent for 1997 compared with 1.96 percent for 1998. (See tables 43, 44, and figure 6.) Preterm birth, especially very preterm birth, is a major cause of infant mortality and has been associated with long-term neurodevelopmental and respiratory disorders (55,56).

The steady climb in the preterm rate among non-Hispanic white births continued, rising from 9.9 to 10.2 percent between 1997 and 1998. Since 1989 the non-Hispanic white preterm rate has risen more than 20 percent (from 8.4 percent). This upswing is influenced by increases in the rate of multiple births (multiple births are about 6 times more likely to be born preterm than singleton births). However, increases in preterm singleton births have also been observed (57) (figure 6). For 1997–98, the percent of non-Hispanic white preterm singletons rose from 8.42 to 8.59, but most of the rise was among moderately preterm births. Between 1989 and 1998, the singleton preterm birth rate for this group has risen from 7.48 percent (compared with the overall rise of 8.4 to 10.2 percent) with nearly all the increase among moderately preterm births; the percent of very preterm singletons increased only from 1.12 to 1.15 percent (57).

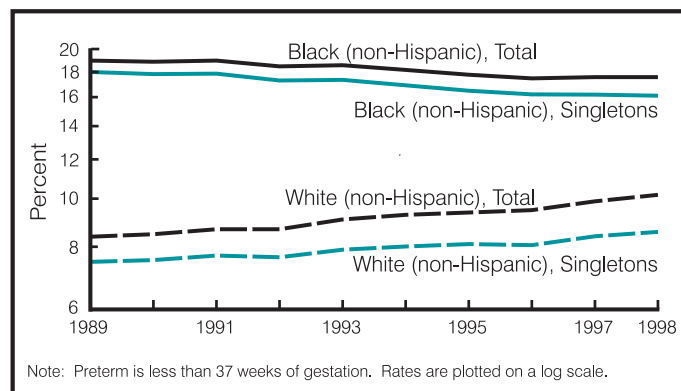


Figure 6. Rate of preterm birth by plurality and race and Hispanic origin of mother: United States, 1989–98

The preterm rate for **non-Hispanic black** births of all pluralities was unchanged at 17.6 percent for 1998. Among singleton births only, however, the preterm rate declined from 16.23 to 16.15 percent between 1997 and 1998 (figure 6). Most of the decline was for very preterm singleton births (from 3.72 to 3.66 percent); the rate for moderately preterm singleton births was essentially unchanged. Since 1989 the non-Hispanic black preterm singleton birth rate is down from 18.03 percent, and very preterm singleton births from 4.29 percent.

The proportion of **Hispanic** births born preterm rose from 11.2 to 11.4 percent between 1997 and 1998; the bulk of the increase was for moderately preterm births. (Relative trends in preterm rates for Hispanic births were largely unaffected by trends in multiple births.) The preterm rate for Hispanic births has fluctuated around 11 percent during the 1990's. Small increases, both for the current year and since 1989, were found for each of the Hispanic subgroups. (See table 25 for 1998 data.)

Birthweight

The rate of **low birthweight** (LBW) (less than 2,500 grams) rose from 7.5 to 7.6 percent for 1997–98. The proportion of LBW births has risen slowly from the low of 6.7 reported in 1984, and is currently at levels as high as those reported in the early 1970's. (See tables 43–47 and figure 7.) The percent **very low birthweight** (VLBW) (less than 1,500 grams) was 1.45 percent for 1998, up slightly from 1.42 percent reported for 1997. The rate of VLBW has also increased over the last two decades (from 1.13 percent in 1977). LBW infants, especially VLBW infants, are at greater risk than heavier babies of long-term morbidity and early death (58). For 1997, VLBW infants comprised 51 percent of all those who did not survive the first year of life; moderately LBW infants, those weighing between 1,500 and 2,499 grams, accounted for an additional 14 percent of infant deaths (56).

The increase in the proportion of twins and triplets, because of their much higher risk of LBW, is continuing to have an important impact on overall trends in LBW. All of the increase in LBW between 1997 and 1998 is attributable to the rise in the proportion of multiple births and

to a small increase (1 percent) in LBW among multiple births. (For 1998, 56.9 percent of multiples were LBW compared with 6.1 percent of singletons.) Among singletons only, low birthweight was down slightly for 1997–98, from 6.08 to 6.05 percent. Since 1989 overall LBW has risen 9 percent, but LBW among singletons has risen by less than 1 percent (from 6.0 percent). See table H.

Overall low birthweight increased slightly between 1997 and 1998 among non-Hispanic white (from 6.5 to 6.6 percent) and non-Hispanic black births (from 13.1 to 13.2 percent), and was unchanged for Hispanic births (6.4 percent). All of the increase in LBW among the former two groups for the current year is attributable to the rise in multiple births. Singleton LBW declined very slightly among both non-Hispanic white and non-Hispanic black births (from 4.95 to 4.91 and 11.46 to 11.44 percent, respectively).

In recent years, the rise in multiple birth rates has especially influenced LBW levels among non-Hispanic white births. Since 1989 overall LBW for this group has risen 18 percent (from 5.6 percent), but singleton LBW has risen a more modest 7 percent (see table H). Singleton non-Hispanic white VLBW was essentially unchanged for 1997–98 at 0.81 percent.

Among non-Hispanic black births, singleton LBW has declined from 12.2 to 11.4 percent between 1989 and 1998, a somewhat steeper decline than is observed for all births (13.6 to 13.2 percent). However, the percent of singleton VLBW non-Hispanic black births has not improved over this period, hovering at about 2.6 percent, a level approximately three times as high as that of non-Hispanic white (0.81 percent) and Hispanic births (0.94 percent).

Overall and singleton LBW among Hispanic births has been comparatively stable during the 1990's. Levels for all pluralities have risen slightly from 6.2 to 6.4 percent; the singleton rate was essentially unchanged at 5.4 percent. The percent VLBW for all Hispanic births has risen slightly during the 1990's from 1.05 to 1.15 for 1989–98. As in previous years, the risk of LBW varied among the Hispanic subgroups for 1998. Levels ranged from 6.0 percent for Mexican, to 9.7 percent for Puerto Rican infants. (See table 25.)

The 1998 incidence of low birthweight among **American Indian** infants was 6.8 percent, unchanged from 1997. There were no notable

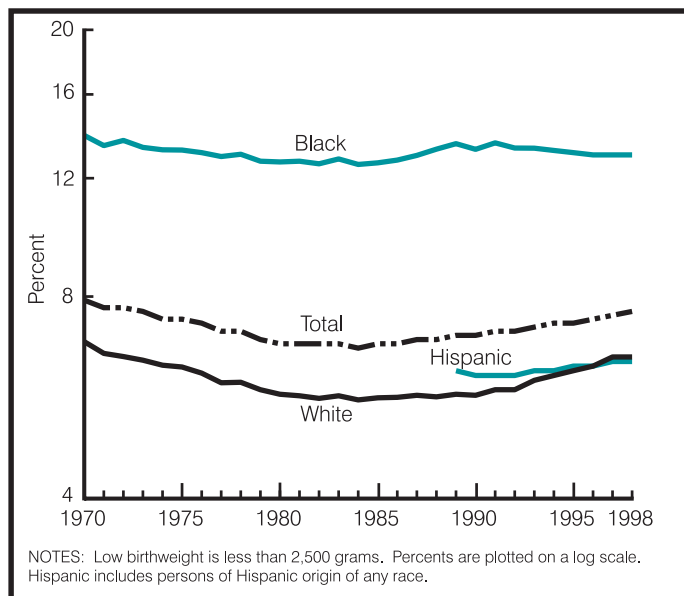


Figure 7. Percent low birthweight by race and Hispanic origin of mother: United States, 1970–98

Table H. Percent low birthweight among singletons by race and Hispanic origin of mother: United States, 1989–98

Year	Total	Non-Hispanic White	Non-Hispanic Black	Hispanic ¹
1998	6.05	4.91	11.44	5.40
1997	6.08	4.95	11.46	5.43
1996	6.03	4.90	11.55	5.34
1995	6.05	4.87	11.66	5.36
1994	6.05	4.79	11.79	5.37
1993	6.05	4.70	11.90	5.34
1992 ²	5.93	4.59	11.91	5.22
1991 ²	5.99	4.61	12.15	5.29
1990 ³	5.90	4.56	11.92	5.23
1989 ⁴	6.00	4.60	12.22	5.35

¹Includes persons of Hispanic origin of any race.

²Excludes data for New Hampshire, which did not require reporting of Hispanic origin of mother.

³Excludes data for New Hampshire and Oklahoma, which did not require reporting of Hispanic origin of mother.

⁴Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not require reporting of Hispanic origin of mother.

NOTE: Low birthweight is less than 2,500 grams, or 5 lb 8 oz.

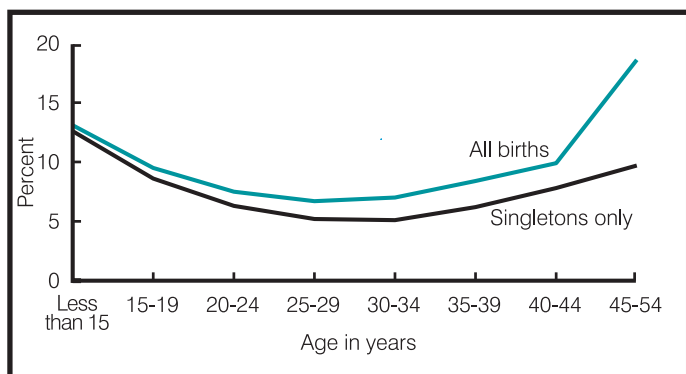


Figure 8. Percent low birthweight for all births and for singleton births only, by age of mother: United States, 1998

changes in LBW for the Asian or Pacific Islander subgroups; levels ranged from 5.3 percent for Chinese to 8.2 percent for Filipino births (table 24).

Age-specific low birthweight rates for all pluralities follow a U-shaped pattern with levels slightly higher among older mothers. This pattern is strongly influenced, however, by the higher multiple birth rates of older women. For example, the overall percent LBW for women aged 45–54 years was 18.6 percent for 1998, by far the highest age-specific rate reported. When only singleton births are examined however, the LBW rate for this age group drops to 9.7 percent, substantially lower than the rate of 12.6 percent reported for teenagers under 15 years of age. (See figure 8.)

The percent **macrosomia** (birthweight of at least 4,000 grams) was 10.1 for 1998, the same level reported for 1997. The percent of macrosomic births peaked at about 11 during the 1980's, but has generally declined in the 1990's.

The **median birthweight** for all births for 1998 was 3,350 grams (7 pounds, 7 ounces), unchanged since 1995. The median for white births was 3,390 grams, and for black births 3,180 grams.

As in previous years, LBW and VLBW rates varied quite widely by **State** for 1998. Among non-Hispanic white births, LBW levels ranged from a low of 5.1 percent in Oregon to a high of 8.9 percent for Wyoming. Among States with at least 1,000 births to non-Hispanic black mothers, LBW rates for this population ranged from 9.8 percent in Washington State to 15.9 percent in the District of Columbia (table 46).

Apgar score

The Apgar score was developed by the late Virginia Apgar, M.D., as a means of evaluating the physical condition of newborns shortly after delivery (59). The score considers five characteristics of the baby that are easily identifiable—heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each of these characteristics is assessed and assigned a value of 0 to 2, with 2 being optimum. The total score is the sum of the scores of the five components and a score of 7 or greater indicates that the baby is in good to excellent physical condition. The **5-minute Apgar score** is based on an assessment at 5 minutes after delivery and is used to predict the newborn's chance of survival.

In 1998 all States except California and Texas collected information on the 5-minute Apgar score. Births to residents of these States accounted for 78 percent of all births in the U.S. Only 1.4 percent of

babies had Apgar scores that were considered low (less than 7) at 5 minutes after birth, unchanged since 1993 (tables 24 and 25).

Of the major racial and ethnic groups, Asian or Pacific Islander babies as a group were in the best physical condition shortly after delivery—only 1.1 percent had scores of less than 7 (table 23). This was particularly true for Japanese and Chinese babies—0.7 percent had low 5-minute scores. The percent of babies with low scores was intermediate for non-Hispanic white and Hispanic women (1.3 and 1.2 percent, respectively) while 2.4 percent of non-Hispanic black babies had low 5-minute scores.

Abnormal conditions of the newborn

Of the eight specific abnormal conditions reported on the birth certificate, the rates per 1,000 live births in 1998 were highest for assisted ventilation less than 30 minutes (22 per 1,000), assisted ventilation 30 minutes or longer (9 per 1,000), and hyaline membrane disease/respiratory distress syndrome (RDS) (6 per 1,000) (table 48). It has been shown that these conditions may be underreported on the birth certificate (54).

Congenital anomalies

In 1998 congenital anomalies were reported on the birth certificates of the District of Columbia and all States except New Mexico. These areas included 99 percent of births in the United States. Several studies have shown that congenital anomalies are underreported on the birth certificate (54, 60, 61). For example, a recent study based on surveillance data estimated that there are about 4,000 cases of spina bifida and anencephalus each year in the United States; birth certificate data for 1998 identified a total of only 1,236 cases for these two neural tube defects (61).

Because many of the congenital anomalies tracked on birth certificates occur infrequently, the rates shown in this report are calculated per 100,000 live births (table 49). Caution should be used in comparing yearly rates for a specific anomaly as a small change in the number of anomalies reported can result in a relatively large change in rates.

Multiple births

The number of births in twin deliveries rose 6 percent for 1997–98, to 110,670 births, the largest single-year rise in several decades. The number of triplet births climbed to 6,919, a rise of 13 percent. Births in quadruplet deliveries increased from 510 to 627 between 1997 and 1998; the number of quintuplet and other higher order multiples was unchanged at 79. (See table J and table 50.) Since 1980 twin births have risen 62 percent (from 68,339) and triplet and other higher order multiple births (heretofore referred to as triplet/+) have jumped 470 percent (from 1,337).

The **twin birth rate** (the number of twin births per 1,000 live births) rose 5 percent for the current year to 28.1 (or 2.8 percent of all births). The **triplet/+ birth rate** (the number of triplet, quadruplet, and quintuplet and other higher-order multiples per 100,000 live births), jumped 11 percent for 1998, to 193.5 per 100,000 (or 0.2 percent of births). Both twin and triplet/+ birth rates have risen steadily since 1980, by 49 and 423 percent respectively (62), but the pace of the increase has quickened in the 1990's (figure 9). Between 1990 and 1998, the twinning rate has risen about 3 percent per year, and the triplet/+ rate an average of

Table J. Numbers of twin, triplet, quadruplet, and quintuplet and other higher order multiple births: United States, 1989–98

Year	Twins	Triplets	Quadruplets	Quintuplets and other higher order multiples ¹
1998	110,670	6,919	627	79
1997	104,137	6,148	510	79
1996	100,750	5,298	560	81
1995	96,736	4,551	365	57
1994	97,064	4,233	315	46
1993	96,445	3,834	277	57
1992	95,372	3,547	310	26
1991	94,779	3,121	203	22
1990	93,865	2,830	185	13
1989	90,118	2,529	229	40

¹Quintuplets, sextuplets, and higher order multiple births are not differentiated in the national data set.

13 percent annually. In 1998, one in every 36 births was a twin; almost one in every 500 births was a triplet/+.

The recent rise in multiple births has been especially pronounced among **women 30 years of age and over**. Between 1980–82 and 1996–98 (data for 3 years are combined to generate more statistically reliable rates) the twin birth rate increased 77 percent among women aged 40–44 years (from 21.6 to 38.2 per 1,000), and by more than 1,000 percent among women 45–49 years of age (from 10.8 to 129.9). The triplet/+ birth rate rose 461 percent for women in their thirties (from 59.3 to 332.4 per 100,000), and almost 15 times for women in their forties (from 28.1 to 411.9). In contrast, among women aged 20–24 years, twin birth rates rose a comparatively modest 18 percent and triplet birth rates by 53 percent over this time period (62).

Two related trends have been associated with the rise in multiple births, especially with the rise of higher order multiples; older age at childbearing (women in their thirties are more likely than younger women to have a multiple birth, even without the use of fertility therapy), and the more widespread use of fertility-enhancing therapies (fertility drugs and techniques such as in vitro fertilization). These therapies have been associated with the remarkable upswing in multiple births of the 1980's and 1990's (63–65). A recent study estimates that about 80

percent of triplet/+ births in 1996 and 1997 were the result of fertility techniques (66).

Twinning rates rose 4 to 5 percent among the three largest U.S. **racial and ethnic groups** for 1997–98, but continue to be slightly higher among non-Hispanic black (31.3) compared with non-Hispanic white (30.2) women. The Hispanic twin birth rate continued to be substantially lower (20.4) than both. Most of the overall increase in the triplet/+ rate was the result of a sizable 14 percent rise among non-Hispanic white women (from 230.8 to 262.8 per 100,000); levels among other groups changed only slightly. Rates have risen substantially for all groups over the past two decades, but the largest increase has been observed among triplet/+ births to white mothers. In 1998 the triplet/+ birth rate for non-Hispanic white women (262.8) was 3 times as high as that for non-Hispanic black women (87.3), and Hispanic women (75.3). This differential is likely associated with the older age at childbearing of non-Hispanic white women compared with their black and Hispanic counterparts, and with their wider use of infertility services (16).

Currently, multiple birth rates rise with increasing **maternal age** until age group 35–39 years, dip slightly for women aged 40–44 years, and then peak sharply for women aged 45–54 years. This is a change from earlier years when rates were highest among women aged 35–39 years (62). In 1998 one of every six births to women aged 45–49 years and one in three births to women 50–54 years was a twin or triplet/+.

Multiple births are at greater risk than singletons of being born too early and too small and, accordingly, of not surviving the first year of life. For 1998, 41.7 percent of twins, and 89.1 percent of triplet/+ were born both **preterm and LBW**, compared with 3.8 percent of singletons. The increase in the multiple birth rate because of their higher levels of risk is having an important impact on these basic measures of national and state perinatal health (57, 67). For example, the overall U.S. level of LBW was up for 1998, but LBW among singleton births only, was slightly lower. (See sections on birthweight and period of gestation.)

References

1. Martin JA, Smith BL, Mathews TJ, Ventura SJ. Births and deaths: Preliminary data for 1998. National vital statistics reports; vol 47 no 25. Hyattsville, Maryland: National Center for Health Statistics. 1999.
2. National Center for Health Statistics. Natality public use tape and CD-ROM. Hyattsville, Maryland: National Center for Health Statistics. Annual products.
3. National Center for Health Statistics. Vital statistics of the United States, 1997, Vol I, natality. Technical Appendix. Available at: <http://www.cdc.gov/nchs/data/tecapp97.pdf>. 1999.
4. Mathews TJ, Ventura SJ, Curtin SC, Martin JA. Births of Hispanic origin, 1989–95. Monthly vital statistics report; vol 46 no 6, supp. Hyattsville, Maryland: National Center for Health Statistics. 1998.
5. U.S. Bureau of the Census. Unpublished census file NESTV98.wk1. Consistent with populations published in: U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington, DC: U.S. Bureau of the Census. Internet release, June 4, 1999. <http://www.census.gov/population/www/estimates/uspop.html>.
6. Ventura SJ, Mathews TJ, Curtin SC. Declines in teenage birth rates, 1991–97: National and State patterns. National vital statistics reports; vol 47 no 12. Hyattsville, Maryland: National Center for Health Statistics. 1998.

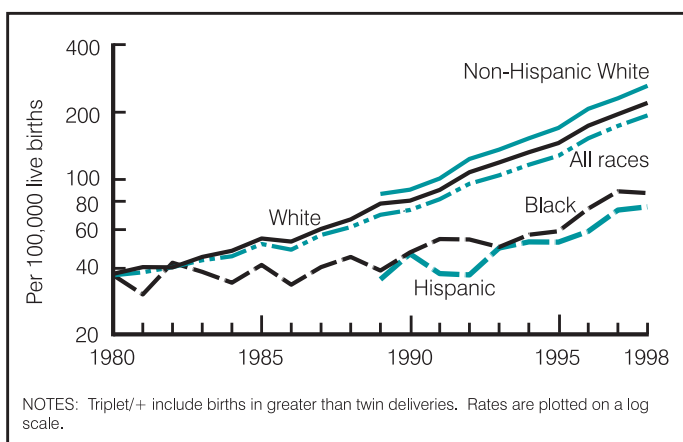


Figure 9. Triplet/+ birth rates by race and Hispanic origin of mother, 1980–98

7. Ventura SJ, Mosher WD, Curtin SC, Abma JC, Henshaw S. Trends in pregnancies and pregnancy rates by outcome: Estimates for the United States, 1976–96. National Center for Health Statistics. *Vital Health Stat* 21(56). 2000.
8. Henshaw SK. U.S. teenage pregnancy statistics. New York, New York: The Alan Guttmacher Institute. 1998.
9. Centers for Disease Control and Prevention. Abortion surveillance: Preliminary analysis—United States, 1997. *MMWR* 48(51,52): 1171–4, 1191. 2000.
10. Abma JC, Sonenstein F. Sexual activity and contraceptive practices among teenagers in the United States, 1988 and 1995. *Vital Health Stat* 23 (forthcoming). 2000.
11. U.S. Department of Health and Human Services. A national strategy to prevent teen pregnancy: Annual report, 1998–99. Washington, DC: U.S. Department of Health and Human Services. 1999.
12. Abma JC, Chandra A, Mosher WD, Peterson LS, Piccinino LJ. Fertility, family planning, and women's health: New data from the 1995 National Survey of Family Growth. National Center for Health Statistics. *Vital Health Stat* 23(19). 1997.
13. Piccinino LJ, Mosher WD. Trends in contraceptive use in the United States: 1982–1995. *Fam Plann Persp* 30(1):4–10, 46. 1998.
14. Ventura SJ. Trends and variations in first births to older women, 1970–86. National Center for Health Statistics. *Vital Health Stat* 21(47). 1989.
15. O'Connell M. Unpublished tabulation from the June 1998 current population survey, U.S. Bureau of the Census.
16. Chandra A, Stephen EH. Impaired fecundity in the United States: 1982–1995. *Fam Plann Persp* 30(1):34–42. 1998.
17. Clarke SC, Ventura SJ. Birth and fertility rates for States: United States, 1990. National Center for Health Statistics. *Vital Health Stat* 21(52). 1994.
18. Taffel SM. Birth and fertility rates for States: United States, 1980. National Center for Health Statistics. *Vital Health Stat* 21(42). 1984.
19. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Report of final natality statistics, 1996. Monthly vital statistics report; vol 46 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1998.
20. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Births: Final data for 1997. National vital statistics reports; vol 47 no 18. Hyattsville, Maryland: National Center for Health Statistics. 1999.
21. Ventura SJ, Mathews TJ, Curtin SC. Declines in teenage birth rates, 1991–98: Update of national and State trends. National vital statistics reports; vol 47 no 26. Hyattsville, Maryland: National Center for Health Statistics. 1999.
22. Lugaila TA. Marital status and living arrangements: March 1998 (update). U.S. Bureau of the Census. Current population reports, P20–514. Washington, DC: U.S. Department of Commerce. 1998.
23. Ventura SJ. Births to unmarried mothers: United States, 1980–92. National Center for Health Statistics. *Vital Health Stat* 21(53). 1995.
24. U. S. Bureau of the Census. Educational attainment in the United States: March 1998 (Update). Detailed tables and documentation for P20–513. Washington: U.S. Government Printing Office. 1998.
25. Chomitz VR, Cheung LWY, Lieberman E. The role of lifestyle in preventing low birth weight. In: *The Future of Children: Low Birthweight*. Vol 5(1):121–38. Los Altos, California: Center for the Future of Children, The David and Lucile Packard Foundation. 1995.
26. Institute of Medicine. Subcommittee on Nutritional Status and Weight Gain During Pregnancy. Nutrition during pregnancy. National Academy of Sciences. Washington DC: National Academy Press. 1990.
27. Abrams B, Selvin S. Maternal weight gain pattern and birth weight. *Am J Obstet Gynecol*. 86(2):163–9. 1995.
28. Lydakis C, Beevers DG, Beevers M, Lip GYH. Obstetric and neonatal outcome following chronic hypertension in pregnancy among different ethnic groups. *Quarterly J Medicine* 91(12):837–44. 1998.
29. Sibai BM, Lindheimer M, Hauth J, et al. Risk factors for preeclampsia, abruptio placentae, and adverse neonatal outcomes among women with chronic hypertension. *NEJM* 339(10):667–71. 1998.
30. Xiong X, Mayes D, Demianczuk N, et al. Impact of pregnancy-induced hypertension on fetal growth. *Am J Obstet and Gynecol* 180(1 Pt 1): 207–13. 1999.
31. Buescher PA, Taylor KP, Davis MH, Bowling JM. The quality of the new birth certificate data: A validation study in North Carolina. *Am J Public Health* 83(8):1163–65. 1993.
32. Mathews TJ. Smoking during pregnancy, 1990–96. National vital statistics reports; vol 47 no 10. Hyattsville, Maryland: National Center for Health Statistics. 1998.
33. Dietz PM, Adams MM, Kendrick JS, Mathis MP, The PRAMS Working Group. Completeness of ascertainment of prenatal smoking using birth certificates and confidential questionnaires: Variations by maternal attributes and infant birth weight. *Am J Epidemiol* 148(11):1048–54. 1998.
34. Kharrazi M, Epstein D, Hopkins B, et al. Evaluation of four smoking questions. *Pub Health Rep* 114(1):60–70. 1999.
35. Ventura SJ. Commentary: Using the birth certificate to monitor smoking during pregnancy. *Pub Health Rep* 114(1):71–3. 1999.
36. National Institute on Drug Abuse. National pregnancy and health Survey—Drug use among women delivering live births: 1992. National Institutes of Health. Rockville, Maryland: U.S. Department of Health and Human Services. 1996.
37. Vega WA, Kolody B, Hwang J, Noble A. Prevalence and magnitude of perinatal substance exposures in California. *NEJM* 329(12):850–4. 1993.
38. Ebrahim SH, Floyd RL, Merriitt RK, et al. Trends in pregnancy-related smoking rates in the United States, 1987–1996. *JAMA* 283(3):361–66. 2000.
39. Kleinman JC, Madans JH. The effects of maternal smoking, physical stature, and educational attainment on the incidence of low birth weight. *Am J Epidemiol* 121(6):843–55. 1985.
40. Schoendorf KC, Kiely JL. Relationship of sudden infant death syndrome to maternal smoking during and after pregnancy. *Pediatrics* 90(6):905–8. 1992.
41. Cunningham J, Dockery DW, Speizer FE. Maternal smoking during pregnancy as a predictor of lung function in children. *Am J Epidemiol* 139(12):1139–52. 1994.
42. U.S. Department of Health and Human Services. The health benefits of smoking cessation. Office of Smoking and Health, Centers for Disease Control and Prevention. Rockville, Maryland: Public Health Service. 1990.
43. Ventura SJ, Taffel SM. Childbearing characteristics of U.S.- and foreign-born Hispanic mothers. *Pub Health Rep* 100(6):647–52. 1985.
44. Fox SH, Koepsell TD, Daling JR. Birth weight and smoking during pregnancy—Effect modification by maternal age. *Am J Epidemiol* 139(10):1008–15. 1994.
45. Sampson PD, Bookstein FL, Barr HM, Steissguth AP. Prenatal alcohol exposure, birthweight, and measures of child size from birth to 14 years. *Am J Public Health* 84(9):1421–28. 1994.
46. Roelevelnd N, Vingerhoets E, Zielhuis GA, Gabreels F. Mental retardation associated with parental smoking and alcohol consumption before, during, and after pregnancy. *Prev Medicine* 21:110–19. 1992.
47. Ebrahim SH, Luman ET, Floyd RL, et al. Alcohol consumption by pregnant women in the United States during 1988–1995. *Obstet and Gynecol* 92(2):187–92. 1998.
48. Huntington J, Connell FA. For every dollar spent—the cost-savings argument for prenatal care. *NEJM*. 33(19):1303–7. 1994.
49. Fiscella K. Does prenatal care improve birth outcomes? A critical review. *Obstet and Gynecol* 85(3):46–79. 1995.

50. U.S. Public Health Service. Caring for our future: The content of prenatal care. Washington DC: U.S. Department of Health and Human Services. 1989.
51. Kotelchuck M. An evaluation of the Kessner adequacy of prenatal care index and a proposed adequacy of prenatal care utilization index. *Am J Public Health* 84(9):1414–20. 1994.
52. Mathews TJ. Trends in stimulation and induction of labor, 1989–1995. *Stat Bulletin* 78(4):20–6. 1998.
53. Curtin SC, Park MM. Trends in the attendant, place, and timing of births, and in the use of obstetric interventions: United States, 1989–97. *National vital statistics reports; vol 47 no 27*. Hyattsville, Maryland: National Center for Health Statistics. 1999.
54. Piper JM, Mitchel EF, Snowden M, et al. Validation of 1989 Tennessee birth certificates using maternal and newborn hospital records. *Am J Epidemiol* 137(7):758–68. 1993.
55. Berkowitz GS, Papiernik E. Epidemiology of preterm birth. *Epidemiologic Reviews; vol 15(2):414–43*. 1993.
56. MacDorman MF, Atkinson JO. Infant mortality statistics from the 1997 linked birth/infant death data set. *National vital statistics reports; vol 47 no 23*. Hyattsville, Maryland: National Center for Health Statistics. 1999.
57. Centers for Disease Control and Prevention. Preterm singleton births: United States, 1989–1996. *MMWR* 48(9):185–9. 1999.
58. Hack M, Klein NK, Taylor HG. Long-term developmental outcomes of low birth weight infants. In: *The Future of Children: Low Birth Weight*. Vol. 5(1):19–34. Los Altos, California: Center for the Future of Children. The David and Lucile Packard Foundation. 1995.
59. Apgar V. A proposal for a new method of evaluation of the newborn infant. *Current Researches in Anesthesia and Analgesia* 260–7. July–Aug. 1953.
60. Watkins ML, Edmonds L, McClearn A, et al. The surveillance of birth defects: The usefulness of the revised U.S. standard birth certificate. *Am J Public Health* 86(5):731–34. 1996.
61. Centers for Disease Control and Prevention. Neural tube defect surveillance and folic acid intervention—Texas-Mexico border, 1993–1998. *MMWR* 49(1):1–4. 2000.
62. Martin JA, Park MM. Trends in twin and triplet births: 1980–1997. *National vital statistics reports; vol 47 no 24*. Hyattsville, Maryland: National Center for Health Statistics. 1999.
63. Martin JA, MacDorman MF, Mathews TJ. Triplet births: Trends and outcomes, 1971–94. *National Center for Health Statistics. Vital Health Stat* 21(55). 1997.
64. Kiely JL, Kleinman JC, Kiely M. Triplets and higher-order multiple births: Time trends and infant mortality. *AJDC* 146:862–8. 1992.
65. Wilcox LS, Kiely JL, Melvin CL, Martin MC. Assisted reproductive technologies: Estimates of their contribution to multiple births and newborn hospital days in the United States. *Fertil Steril* 65(2):361–66. 1996.
66. Centers for Disease Control and Prevention. The contribution of assisted reproductive technology (ART) and ovulation-inducing drugs to triplet and higher order multiple births in the United States, 1980 to 1997. *MMWR*. Forthcoming.
67. Centers for Disease Control and Prevention. Impact of multiple births on low birthweight—Massachusetts, 1989–96. *MMWR* 48(14):289–92. 1999.
68. Ventura SJ, Martin JA, Taffel SM, Mathews TJ, Clarke SC. Advance report of final natality statistics, 1992. *Monthly vital statistics report; vol 43 no 5, supp*. Hyattsville, Maryland: National Center for Health Statistics. 1994.
69. Martin JA. Birth characteristics for Asian or Pacific Islander subgroups, 1992. *Monthly vital statistics report; vol 43 no 10, supp*. Hyattsville, Maryland: National Center for Health Statistics. 1995.
70. National Center for Health Statistics. Computer edits for natality data, effective 1993. *Instruction manual, part 12*. Hyattsville, Maryland: National Center for Health Statistics. 1995.
71. Kogan MD, Martin JA, Alexander GR, Kotelchuck M, Ventura SJ, Frigoletto FD. The changing pattern of prenatal care utilization in the United States, 1981–1995, using different prenatal care indices. *JAMA* 279(20):1623–28. 1998.
72. Alexander GR, Allen MC. Conceptualization, measurement, and use of gestational age. I. Clinical and public health practice. *J Perinatal* 16(1):53–9. 1996.
73. U.S. Bureau of the Census. Age, sex, race, and Hispanic origin information from the 1990 census: A comparison of census results with results where age and race have been modified. 1990 CPH-L-74. Washington, DC: U.S. Department of Commerce. 1991.
74. U.S. Bureau of the Census. Estimates of the population of States by age and sex: 1990 to 1998. Unpublished Census file STRES981.txt, published as: U.S. Bureau of the Census. Internet release date June 15, 1999. <http://www.census.gov/population/www.estimated/statepop.html>.
75. U.S. Bureau of the Census. Population estimates for 1998 based on unpublished tabulations prepared by the Housing and Household Economic Statistics Division. 1999.
76. Brockert JE, Stockbauer JW, Senner JW, et al. Recommended standard medical definitions for the U.S. Standard Certificate of Live Birth, 1989 revision. Paper presented at the annual meeting of the Association for Vital Records and Health Statistics. Traverse City, Michigan. June 25–27, 1990.
77. Mathews TJ, Ventura SJ. Birth and fertility rates by educational attainment: United States, 1994. *Monthly vital statistics report, vol 45 no 10, supp*. Hyattsville, Maryland: National Center for Health Statistics. 1997.
78. Curtin SC. Rates of cesarean birth and vaginal birth after previous cesarean, 1991–95. *Monthly vital statistics report; vol 45 no 11, supp. 3*. Hyattsville, Maryland: National Center for Health Statistics. 1997.

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TABLE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Geographic area:																										
States ¹										10	11	12							19							
United States or all reporting areas	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Years:																										
Current year only		2	3				7	8		10	11	12	13	14	15	16	17		19		21	22	23	24	25	
Trend	1			4	5	6			9									18		20						
Type of entry:																										
Number of births	1	2				6	7			10	11	12	13	14	15	16	17		19		21	22				
Rates or other measures	1		3	4	5	6		8	9	10			13	14	15	16	17	18	19	20	21	22	23	24	25	
Characteristics:																										
Age of father																				20						
Age of mother		2	3	4			7		9									17	18		21					
Alcohol use																								24	25	
Apgar score																								24	25	
Birthweight																							23	24	25	
Day of week																16										
Education													13	14							21					
Gestational age																						22	23	24	25	
Hispanic origin of mother						⁴ 6	⁴ 7	⁴ 8	⁴ 9			⁴ 12		⁴ 14			⁶ 17	⁶ 18	⁶ 19		⁶ 21	⁶ 22	⁴ 23		⁴ 25	
Live-birth order		2	3		5		7	8						13	14											
Method of delivery																16								24	25	
Month of birth															15											
Nativity of mother													13	14										24	25	
Prenatal care																								24	25	
Race of father																				³ 20						
Race of mother	² 1	² 2	² 3	² 4	³ 5	⁴ 6	⁴ 7	⁴ 8	⁴ 9		² 11	⁴ 12	⁵ 13	⁴ 14	³ 15	³ 16	⁶ 17	⁶ 18	⁶ 19		³ 21	⁶ 22	⁴ 23	⁵ 24	⁴ 25	
Sex of child													13	14												
Teenage mothers										10			13	14												
Tobacco use																								24	25	
Unmarried mothers													13	14				17	18	19						
Weight gain during pregnancy																							22	23	24	25

TABLE:	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Geographic area: States ¹									34							41					46	47			
United States or all reporting areas	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Years: Current year only	26	27	28	29	30	31	32	33	34	35	36	37	38		40	41	42	43		45	46	47	48	49	50
Trend														39					44						
Type of entry: Number of births	26	27	28	29	30	31		33		35	36	37	38	39	40		42	43		45	46	47	48	49	50
Rates or other measures	26	27	28	29	30	31	32	33	34	35	36	37		39	40	41	42	43	44	45	46	47	48	49	50
Characteristics: Abnormal conditions of newborn																							48		
Age of mother	26			29	30		32	33			36	37			40					45			48	49	50
Attendant at birth													38												
Birthweight							32											43	44	45	46	47			
Complications of labor		27	28									37					42								
Congenital anomalies																								49	
Education						31																			
Gestational age																		43	44						
Hispanic origin of mother			⁴ 28		⁴ 30	⁶ 31	⁶ 32	⁶ 33	⁶ 34	⁶ 35			⁶ 38	⁶ 39	⁶ 40	⁶ 41		⁶ 43	⁶ 44	⁶ 45	⁶ 46	⁶ 47			⁶ 50
Medical risk factors	26	27	28														42								
Method of delivery														39	40	41	42								
Obstetric procedures		27	28								36														
Place of delivery													38												
Multiple births																									50
Prenatal care								33	34	35															
Race of mother	³ 26	⁵ 27	⁴ 28	³ 29	⁴ 30	³ 31	⁶ 32	⁶ 33	⁶ 34	⁶ 35	³ 36	³ 37	⁶ 38	⁶ 39	⁶ 40	⁶ 41		⁶ 43	³ 44	⁶ 45	⁶ 46	⁶ 47	³ 48	³ 49	⁶ 50
Tobacco use				29	30	31	32																		

¹Includes data for Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas; data for American Samoa not available for tables 34 and 41.

²Includes white, black, American Indian, Asian or Pacific Islander.

³Includes white and black.

⁴Includes Mexican, Puerto Rican, Cuban, Central and South American, other and unknown Hispanic, non-Hispanic white, and non-Hispanic black.

⁵Includes white, black, American Indian, Chinese, Japanese, Hawaiian, Filipino, and other Asian and Pacific Islanders.

⁶Includes Hispanic, non-Hispanic white, and non-Hispanic black.

Table 1. Live births, birth rates, and fertility rates, by race: United States, specified years 1940-55 and each year, 1960-98

[Birth rates are live births per 1,000 population in specified group. Fertility rates per 1,000 women aged 15-44 years in specified group. Population enumerated as of April 1 for census years and estimated as of July 1 for all other years. Beginning with 1970, excludes births to nonresidents of the United States]

Year	Number					Birth rate					Fertility rate				
	All races ¹	White	Black	American Indian ²	Asian or Pacific Islander	All races ¹	White	Black	American Indian ²	Asian or Pacific Islander	All races ¹	White	Black	American Indian ²	Asian or Pacific Islander
Registered births															
Race of mother:															
1998	3,941,553	3,118,727	609,902	40,272	172,652	14.6	14.0	17.7	17.1	16.4	65.6	64.6	71.0	70.7	64.0
1997	3,880,894	3,072,640	599,913	38,572	169,769	14.5	13.9	17.7	16.6	16.9	65.0	63.9	70.7	69.1	66.3
1996	3,891,494	3,093,057	594,781	37,880	165,776	14.7	14.1	17.8	16.6	17.0	65.3	64.3	70.7	68.7	65.9
1995	3,899,589	3,098,885	603,139	37,278	160,287	14.8	14.2	18.2	16.6	17.3	65.6	64.4	72.3	69.1	66.4
1994	3,952,767	3,121,004	636,391	37,740	157,632	15.2	14.4	19.5	17.1	17.5	66.7	64.9	76.9	70.9	66.8
1993	4,000,240	3,149,833	658,875	38,732	152,800	15.5	14.7	20.5	17.8	17.7	67.6	65.4	80.5	73.4	66.7
1992	4,065,014	3,201,678	673,633	39,453	150,250	15.9	15.0	21.3	18.4	18.0	68.9	66.5	83.2	75.4	67.2
1991	4,110,907	3,241,273	682,602	38,841	145,372	16.3	15.4	21.9	18.3	18.2	69.6	67.0	85.2	75.1	67.6
1990	4,158,212	3,290,273	684,336	39,051	141,635	16.7	15.8	22.4	18.9	19.0	70.9	68.3	86.8	76.2	69.6
1989	4,040,958	3,192,355	673,124	39,478	133,075	16.4	15.4	22.3	19.7	18.7	69.2	66.4	86.2	79.0	68.2
1988	3,909,510	3,102,083	638,562	37,088	129,035	16.0	15.0	21.5	19.3	19.2	67.3	64.5	82.6	76.8	70.2
1987	3,809,394	3,043,828	611,173	35,322	116,560	15.7	14.9	20.8	19.1	18.4	65.8	63.3	80.1	75.6	67.1
1986	3,756,547	3,019,175	592,910	34,169	107,797	15.6	14.8	20.5	19.2	18.0	65.4	63.1	78.9	75.9	66.0
1985	3,760,561	3,037,913	581,824	34,037	104,606	15.8	15.0	20.4	19.8	18.7	66.3	64.1	78.8	78.6	68.4
1984 ³	3,669,141	2,967,100	568,138	33,256	98,926	15.6	14.8	20.1	20.1	18.8	65.5	63.2	78.2	79.8	69.2
1983 ³	3,638,933	2,946,468	562,624	32,881	95,713	15.6	14.8	20.2	20.6	19.5	65.7	63.4	78.7	81.8	71.7
1982 ³	3,680,537	2,984,817	568,506	32,436	93,193	15.9	15.1	20.7	21.1	20.3	67.3	64.8	80.9	83.6	74.8
1981 ³	3,629,238	2,947,679	564,955	29,688	84,553	15.8	15.0	20.8	20.0	20.1	67.3	64.8	82.0	79.6	73.7
1980 ³	3,612,258	2,936,351	568,080	29,389	74,355	15.9	15.1	21.3	20.7	19.9	68.4	65.6	84.7	82.7	73.2
Race of child:															
1980 ³	3,612,258	2,898,732	589,616	36,797	---	15.9	14.9	22.1	---	---	68.4	64.7	88.1	---	---
1979 ³	3,494,398	2,808,420	577,855	34,269	---	15.6	14.5	22.0	---	---	67.2	63.4	88.3	---	---
1978 ³	3,333,279	2,681,116	551,540	33,160	---	15.0	14.0	21.3	---	---	65.5	61.7	86.7	---	---
1977 ³	3,326,632	2,691,070	544,221	30,500	---	15.1	14.1	21.4	---	---	66.8	63.2	88.1	---	---
1976 ³	3,167,788	2,567,614	514,479	29,009	---	14.6	13.6	20.5	---	---	65.0	61.5	85.8	---	---
1975 ³	3,144,198	2,551,996	511,581	27,546	---	14.6	13.6	20.7	---	---	66.0	62.5	87.9	---	---
1974 ³	3,159,958	2,575,792	507,162	26,631	---	14.8	13.9	20.8	---	---	67.8	64.2	89.7	---	---
1973 ³	3,136,965	2,551,030	512,597	26,464	---	14.8	13.8	21.4	---	---	68.8	64.9	93.6	---	---
1972 ³	3,258,411	2,655,558	531,329	27,368	---	15.6	14.5	22.5	---	---	73.1	68.9	99.9	---	---
1971 ⁴	3,555,970	2,919,746	564,960	27,148	---	17.2	16.1	24.4	---	---	81.6	77.3	109.7	---	---
1970 ⁴	3,731,386	3,091,264	572,362	25,864	---	18.4	17.4	25.3	---	---	87.9	84.1	115.4	---	---
1969 ⁴	3,600,206	2,993,614	543,132	24,008	---	17.9	16.9	24.4	---	---	86.1	82.2	112.1	---	---
1968 ⁴	3,501,564	2,912,224	531,152	24,156	---	17.6	16.6	24.2	---	---	85.2	81.3	112.7	---	---
1967 ⁵	3,520,959	2,922,502	543,976	22,665	---	17.8	16.8	25.1	---	---	87.2	82.8	118.5	---	---
1966 ⁴	3,606,274	2,993,230	558,244	23,014	---	18.4	17.4	26.2	---	---	90.8	86.2	124.7	---	---
1965 ⁴	3,760,358	3,123,860	581,126	24,066	---	19.4	18.3	27.7	---	---	96.3	91.3	133.2	---	---
1964 ⁴	4,027,490	3,369,160	607,556	24,382	---	21.1	20.0	29.5	---	---	104.7	99.8	142.6	---	---
1963 ^{4,6}	4,098,020	3,326,344	580,658	22,358	---	21.7	20.7	---	---	---	108.3	103.6	---	---	---
1962 ^{4,6}	4,167,362	3,394,068	584,610	21,968	---	22.4	21.4	---	---	---	112.0	107.5	---	---	---
1961 ⁴	4,268,326	3,600,864	611,072	21,464	---	23.3	22.2	---	---	---	117.1	112.3	---	---	---
1960 ⁴	4,257,850	3,600,744	602,264	21,114	---	23.7	22.7	31.9	---	---	118.0	113.2	153.5	---	---
Births adjusted for underregistration															
Race of child:															
1955	4,097,000	3,485,000	---	---	---	25.0	23.8	---	---	---	118.3	113.7	---	---	---
1950	3,632,000	3,108,000	---	---	---	24.1	23.0	---	---	---	106.2	102.3	---	---	---
1945	2,858,000	2,471,000	---	---	---	20.4	19.7	---	---	---	85.9	83.4	---	---	---
1940	2,559,000	2,199,000	---	---	---	19.4	18.6	---	---	---	79.9	77.1	---	---	---

--- Data not available.

¹ For 1960-91 includes births to races not shown separately.

² Includes births to Aleuts and Eskimos.

³ Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

⁴ Based on a 50-percent sample of births.

⁵ Based on a 20- to 50-percent sample of births.

⁶ Figures by race exclude New Jersey.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 2. Live births by age of mother, live-birth order, and race of mother: United States, 1998

[Live-birth order refers to number of children born alive to mother]

Live-birth order and race of mother	All ages	Age of mother													
		Under 15 years	15-19 years						20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years
			Total	15 years	16 years	17 years	18 years	19 years							
All races	3,941,553	9,462	484,895	24,777	55,033	93,421	137,567	174,097	965,122	1,083,010	889,365	424,890	81,027	3,624	158
1st child	1,576,478	9,181	375,216	23,540	49,823	78,757	105,034	118,062	437,632	394,268	248,986	93,428	16,897	824	46
2d child	1,280,805	160	87,814	984	4,366	12,316	26,584	43,564	334,566	376,634	321,412	137,137	22,217	826	39
3d child	646,539	10	15,265	31	289	1,321	4,206	9,418	133,872	193,783	186,685	99,453	16,821	625	25
4th child	247,955	-	1,958	3	10	92	438	1,415	39,001	72,761	75,459	48,380	9,985	402	9
5th child	90,960	-	237	-	4	5	50	178	10,064	24,957	28,647	21,179	5,628	238	10
6th child	37,303	-	44	-	4	2	9	29	2,453	9,021	12,099	10,273	3,234	170	9
7th child	17,347	-	2	-	-	-	-	2	552	3,347	5,824	5,504	1,984	131	3
8th child and over	17,975	-	7	-	-	-	3	4	241	1,902	4,975	6,786	3,688	360	16
Not stated	26,191	111	4,352	219	537	928	1,243	1,425	6,741	6,337	5,278	2,750	573	48	1
White	3,118,727	4,801	340,694	15,233	36,439	64,951	97,971	126,100	736,664	880,688	737,532	349,799	65,485	2,934	130
1st child	1,252,522	4,673	270,096	14,575	33,472	56,041	77,158	88,850	347,830	329,613	207,898	77,674	14,008	691	39
2d child	1,032,725	64	57,712	511	2,432	7,469	17,277	30,023	259,262	312,718	270,544	113,599	18,111	679	36
3d child	512,186	5	8,619	10	145	693	2,370	5,401	94,400	155,235	156,965	82,949	13,482	508	23
4th child	188,211	-	912	3	4	49	199	657	23,507	54,225	61,391	39,885	7,949	335	7
5th child	64,535	-	90	-	1	3	17	69	5,026	16,311	21,701	16,770	4,435	193	9
6th child	25,024	-	20	-	2	1	4	13	998	5,083	8,366	7,852	2,567	130	8
7th child	11,166	-	-	-	-	-	-	-	191	1,611	3,690	4,031	1,542	98	3
8th child and over	11,591	-	4	-	-	-	2	2	112	807	2,686	4,788	2,928	262	4
Not stated	20,767	59	3,241	134	383	695	944	1,085	5,338	5,085	4,291	2,251	463	38	1
Black	609,902	4,289	126,937	8,599	16,414	25,090	34,885	41,949	189,088	139,302	93,785	46,657	9,496	339	9
1st child	230,875	4,153	91,718	8,078	14,393	19,886	24,310	25,051	69,521	34,951	20,583	8,365	1,523	58	3
2d child	179,852	88	27,134	432	1,765	4,412	8,401	12,124	63,539	44,776	28,982	13,060	2,210	61	2
3d child	105,116	5	6,074	18	122	567	1,681	3,686	34,763	30,520	20,902	10,713	2,076	62	1
4th child	48,635	-	957	-	4	36	220	697	13,909	15,308	10,770	6,270	1,386	35	-
5th child	21,775	-	129	-	3	2	29	95	4,548	7,266	5,490	3,428	880	34	-
6th child	9,942	-	21	-	2	1	5	13	1,288	3,258	2,962	1,878	509	26	-
7th child	4,883	-	2	-	-	-	-	2	305	1,441	1,662	1,124	329	20	-
8th child and over	4,840	-	3	-	-	-	1	2	108	912	1,780	1,492	507	35	3
Not stated	3,984	43	899	71	125	186	238	279	1,107	870	654	327	76	8	-
American Indian ¹	40,272	197	8,201	491	1,044	1,632	2,283	2,751	13,046	9,529	5,930	2,795	555	19	-
1st child	14,051	186	6,152	461	932	1,348	1,672	1,739	4,648	1,877	836	304	47	1	-
2d child	10,879	3	1,591	19	80	220	487	785	4,658	2,679	1,334	531	81	2	-
3d child	7,102	-	262	-	6	26	67	163	2,494	2,344	1,306	584	108	4	-
4th child	3,769	-	34	-	1	4	8	21	799	1,360	1,007	468	98	3	-
5th child	1,957	-	-	-	-	-	-	-	220	685	614	359	77	-	-
6th child	1,008	-	2	-	-	-	-	2	63	315	361	218	48	1	-
7th child	563	-	-	-	-	-	-	-	25	124	231	147	34	2	-
8th child and over	459	-	-	-	-	-	-	-	2	66	174	157	57	3	-
Not stated	484	8	160	11	25	34	49	41	137	79	67	27	5	-	-
Asian or Pacific Islander	172,652	175	9,063	454	1,136	1,748	2,428	3,297	26,324	53,491	52,118	25,639	5,491	332	19
1st child	79,030	169	7,250	426	1,026	1,482	1,894	2,422	15,633	27,827	19,669	7,085	1,319	74	4
2d child	57,349	5	1,377	22	89	215	419	632	7,107	16,461	20,552	9,947	1,815	84	1
3d child	22,135	-	310	3	16	35	88	168	2,215	5,684	7,512	5,207	1,155	51	1
4th child	7,340	-	55	-	1	3	11	40	786	1,868	2,291	1,757	552	29	2
5th child	2,693	-	18	-	-	-	4	14	270	695	842	622	236	9	1
6th child	1,329	-	1	-	-	-	-	1	104	365	410	325	110	13	1
7th child	735	-	-	-	-	-	-	-	31	171	241	202	79	11	-
8th child and over	1,085	-	-	-	-	-	-	-	19	117	335	349	196	60	9
Not stated	956	1	52	3	4	13	12	20	159	303	266	145	29	1	-

- Quantity zero.

¹ Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 3. Fertility rates and birth rates by age of mother, live-birth order, and race of mother: United States, 1998

[Rates are live births per 1,000 women in specified age and racial group. Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

Live-birth order and race of mother	15-44 years ¹	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ²
			Total	15-17 years	18-19 years						
All races	65.6	1.0	51.1	30.4	82.0	111.2	115.9	87.4	37.4	7.3	0.4
1st child	26.4	1.0	39.9	27.0	59.2	50.8	42.5	24.6	8.3	1.5	0.1
2d child	21.4	0.0	9.3	3.1	18.6	38.8	40.6	31.8	12.1	2.0	0.1
3d child	10.8	*	1.6	0.3	3.6	15.5	20.9	18.4	8.8	1.5	0.1
4th child	4.2	*	0.2	0.0	0.5	4.5	7.8	7.5	4.3	0.9	0.0
5th child	1.5	*	0.0	*	0.1	1.2	2.7	2.8	1.9	0.5	0.0
6th and 7th child	0.9	*	0.0	*	0.0	0.3	1.3	1.8	1.4	0.5	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.5	0.6	0.3	0.0
White	64.6	0.6	45.4	25.9	74.6	107.2	119.1	90.5	37.8	7.2	0.4
1st child	26.1	0.6	36.4	23.4	55.8	51.0	44.8	25.7	8.4	1.6	0.1
2d child	21.5	0.0	7.8	2.3	15.9	38.0	42.5	33.4	12.3	2.0	0.1
3d child	10.7	*	1.2	0.2	2.6	13.8	21.1	19.4	9.0	1.5	0.1
4th child	3.9	*	0.1	0.0	0.3	3.4	7.4	7.6	4.3	0.9	0.0
5th child	1.3	*	0.0	*	0.0	0.7	2.2	2.7	1.8	0.5	0.0
6th and 7th child	0.8	*	0.0	*	*	0.2	0.9	1.5	1.3	0.5	0.0
8th child and over	0.2	*	*	*	*	0.0	0.1	0.3	0.5	0.3	0.0
Black	71.0	2.9	85.4	56.8	126.9	141.9	101.8	64.7	30.5	6.7	0.3
1st child	27.0	2.8	62.1	48.4	82.1	52.5	25.7	14.3	5.5	1.1	0.1
2d child	21.1	0.1	18.4	7.6	34.1	47.9	32.9	20.1	8.6	1.6	0.1
3d child	12.3	*	4.1	0.8	8.9	26.2	22.4	14.5	7.1	1.5	0.1
4th child	5.7	*	0.6	0.0	1.5	10.5	11.3	7.5	4.1	1.0	0.0
5th child	2.6	*	0.1	*	0.2	3.4	5.3	3.8	2.3	0.6	0.0
6th and 7th child	1.7	*	0.0	*	0.0	1.2	3.5	3.2	2.0	0.6	0.0
8th child and over	0.6	*	*	*	*	0.1	0.7	1.2	1.0	0.4	0.0
American Indian ³	70.7	1.6	72.1	44.4	118.4	139.3	102.2	66.3	30.2	6.4	*
1st child	25.0	1.6	55.1	39.3	81.7	50.1	20.3	9.5	3.3	0.5	*
2d child	19.3	*	14.3	4.6	30.5	50.2	29.0	15.1	5.8	0.9	*
3d child	12.6	*	2.3	0.5	5.5	26.9	25.4	14.8	6.4	1.3	*
4th child	6.7	*	0.3	*	0.7	8.6	14.7	11.4	5.1	1.1	*
5th child	3.5	*	*	*	*	2.4	7.4	6.9	3.9	0.9	*
6th and 7th child	2.8	*	*	*	*	1.0	4.8	6.7	4.0	1.0	*
8th child and over	0.8	*	*	*	*	*	0.7	2.0	1.7	0.7	*
Asian or Pacific Islander	64.0	0.4	23.1	13.8	38.3	68.8	110.4	105.1	52.8	12.0	0.9
1st child	29.4	0.4	18.6	12.2	29.0	41.1	57.8	39.9	14.7	2.9	0.2
2d child	21.4	*	3.5	1.4	7.1	18.7	34.2	41.7	20.6	4.0	0.2
3d child	8.2	*	0.8	0.2	1.7	5.8	11.8	15.2	10.8	2.5	0.1
4th child	2.7	*	0.1	*	0.3	2.1	3.9	4.6	3.6	1.2	0.1
5th child	1.0	*	*	*	*	0.7	1.4	1.7	1.3	0.5	*
6th and 7th child	0.8	*	*	*	*	0.4	1.1	1.3	1.1	0.4	0.1
8th child and over	0.4	*	*	*	*	*	0.2	0.7	0.7	0.4	0.2

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

0.0 Quantity more than zero but less than 0.05.

¹ Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.

² Rates computed by relating births to women aged 45-54 years to women aged 45-49 years.

³ Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 4. Total fertility rates and birth rates by age of mother: United States, 1970-98, and by age and race of mother: United States, 1980-98

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1970, 1980, and 1990, and estimated as of July 1 for all other years]

Year and race	Total fertility rate	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ¹
			Total	15-17 years	18-19 years						
All races²											
1998	2,058.5	1.0	51.1	30.4	82.0	111.2	115.9	87.4	37.4	7.3	0.4
1997	2,032.5	1.1	52.3	32.1	83.6	110.4	113.8	85.3	36.1	7.1	0.4
1996	2,027.0	1.2	54.4	33.8	86.0	110.4	113.1	83.9	35.3	6.8	0.3
1995	2,019.0	1.3	56.8	36.0	89.1	109.8	112.2	82.5	34.3	6.6	0.3
1994	2,036.0	1.4	58.9	37.6	91.5	111.1	113.9	81.5	33.7	6.4	0.3
1993	2,046.0	1.4	59.6	37.8	92.1	112.6	115.5	80.8	32.9	6.1	0.3
1992	2,065.0	1.4	60.7	37.8	94.5	114.6	117.4	80.2	32.5	5.9	0.3
1991	2,073.0	1.4	62.1	38.7	94.4	115.7	118.2	79.5	32.0	5.5	0.2
1990	2,081.0	1.4	59.9	37.5	88.6	116.5	120.2	80.8	31.7	5.5	0.2
1989	2,014.0	1.4	57.3	36.4	84.2	113.8	117.6	77.4	29.9	5.2	0.2
1988	1,934.0	1.3	53.0	33.6	79.9	110.2	114.4	74.8	28.1	4.8	0.2
1987	1,872.0	1.3	50.6	31.7	78.5	107.9	111.6	72.1	26.3	4.4	0.2
1986	1,837.5	1.3	50.2	30.5	79.6	107.4	109.8	70.1	24.4	4.1	0.2
1985	1,844.0	1.2	51.0	31.0	79.6	108.3	111.0	69.1	24.0	4.0	0.2
1984 ³	1,806.5	1.2	50.6	31.0	77.4	106.8	108.7	67.0	22.9	3.9	0.2
1983 ³	1,799.0	1.1	51.4	31.8	77.4	107.8	108.5	64.9	22.0	3.9	0.2
1982 ³	1,827.5	1.1	52.4	32.3	79.4	111.6	111.0	64.1	21.2	3.9	0.2
1981 ³	1,812.0	1.1	52.2	32.0	80.0	112.2	111.5	61.4	20.0	3.8	0.2
1980 ³	1,839.5	1.1	53.0	32.5	82.1	115.1	112.9	61.9	19.8	3.9	0.2
1979 ³	1,808.0	1.2	52.3	32.3	81.3	112.8	111.4	60.3	19.5	3.9	0.2
1978 ³	1,760.0	1.2	51.5	32.2	79.8	109.9	108.5	57.8	19.0	3.9	0.2
1977 ³	1,789.5	1.2	52.8	33.9	80.9	112.9	111.0	56.4	19.2	4.2	0.2
1976 ³	1,738.0	1.2	52.8	34.1	80.5	110.3	106.2	53.6	19.0	4.3	0.2
1975 ³	1,774.0	1.3	55.6	36.1	85.0	113.0	108.2	52.3	19.5	4.6	0.3
1974 ³	1,835.0	1.2	57.5	37.3	88.7	117.7	111.5	53.8	20.2	4.8	0.3
1973 ³	1,879.0	1.2	59.3	38.5	91.2	119.7	112.2	55.6	22.1	5.4	0.3
1972 ³	2,010.0	1.2	61.7	39.0	96.9	130.2	117.7	59.8	24.8	6.2	0.4
1971 ⁴	2,266.5	1.1	64.5	38.2	105.3	150.1	134.1	67.3	28.7	7.1	0.4
1970 ⁴	2,480.0	1.2	68.3	38.8	114.7	167.8	145.1	73.3	31.7	8.1	0.5
White											
1998	2,041.0	0.6	45.4	25.9	74.6	107.2	119.1	90.5	37.8	7.2	0.4
1997	2,009.0	0.7	46.3	27.1	75.9	106.7	116.6	87.8	36.4	6.9	0.4
1996	2,005.5	0.8	48.1	28.4	78.4	107.2	116.1	86.3	35.6	6.7	0.3
1995	1,989.0	0.8	50.1	30.0	81.2	106.3	114.8	84.6	34.5	6.4	0.3
1994	1,985.0	0.8	51.1	30.7	82.1	106.2	115.5	83.2	33.7	6.2	0.3
1993	1,982.0	0.8	51.1	30.3	82.1	106.9	116.6	82.1	32.7	5.9	0.3
1992	1,993.5	0.8	51.8	30.1	83.8	108.2	118.4	81.4	32.2	5.7	0.2
1991	1,995.5	0.8	52.8	30.7	83.5	109.0	118.8	80.5	31.8	5.2	0.2
1990	2,003.0	0.7	50.8	29.5	78.0	109.8	120.7	81.7	31.5	5.2	0.2
1989	1,931.0	0.7	47.9	28.1	72.9	106.9	117.8	78.1	29.7	4.9	0.2
1988	1,856.5	0.6	44.4	26.0	69.6	103.7	114.8	75.4	27.7	4.5	0.2
1987	1,804.5	0.6	42.5	24.6	68.9	102.3	112.3	73.0	25.9	4.1	0.2
1986	1,776.0	0.6	42.3	23.8	70.1	102.7	110.8	70.9	23.9	3.8	0.2
1985	1,787.0	0.6	43.3	24.4	70.4	104.1	112.3	69.9	23.3	3.7	0.2
1984 ³	1,748.5	0.6	42.9	24.3	68.4	102.7	109.8	67.7	22.2	3.6	0.2
1983 ³	1,740.5	0.6	43.9	25.0	68.8	103.8	109.4	65.3	21.3	3.6	0.2
1982 ³	1,767.0	0.6	45.0	25.5	70.8	107.7	111.9	64.0	20.4	3.6	0.2
1981 ³	1,748.0	0.5	44.9	25.4	71.5	108.3	112.3	61.0	19.0	3.4	0.2
1980 ³	1,773.0	0.6	45.4	25.5	73.2	111.1	113.8	61.2	18.8	3.5	0.2
Black											
1998	2,171.0	2.9	85.4	56.8	126.9	141.9	101.8	64.7	30.5	6.7	0.3
1997	2,154.0	3.3	88.2	60.8	130.1	139.0	99.5	64.3	29.7	6.5	0.3
1996	2,144.0	3.6	91.4	64.7	132.5	136.8	98.2	63.3	29.1	6.1	0.3
1995	2,175.0	4.2	96.1	69.7	137.1	137.1	98.6	64.0	28.7	6.0	0.3
1994	2,300.0	4.6	104.5	76.3	148.3	146.0	104.0	65.8	28.9	5.9	0.3
1993	2,384.5	4.6	108.6	79.8	151.9	152.6	108.4	67.3	29.2	5.9	0.3
1992	2,442.0	4.7	112.4	81.3	157.9	158.0	111.2	67.5	28.8	5.6	0.2
1991	2,480.0	4.8	115.5	84.1	158.6	160.9	113.1	67.7	28.3	5.5	0.2
1990	2,480.0	4.9	112.8	82.3	152.9	160.2	115.5	68.7	28.1	5.5	0.3
1989	2,432.5	5.1	111.5	81.9	151.9	156.8	114.4	66.3	26.7	5.4	0.3
1988	2,298.0	4.9	102.7	75.7	142.7	149.7	108.2	63.1	25.6	5.1	0.3
1987	2,198.0	4.8	97.6	72.1	135.8	142.7	104.3	60.6	24.6	4.8	0.2
1986	2,135.5	4.7	95.8	69.3	135.1	137.3	101.1	59.3	23.8	4.8	0.3
1985	2,109.0	4.5	95.4	69.3	132.4	135.0	100.2	57.9	23.9	4.6	0.3
1984 ³	2,070.5	4.4	94.1	69.2	128.1	132.2	98.4	56.7	23.3	4.8	0.2
1983 ³	2,066.0	4.1	93.9	69.6	127.1	131.9	98.4	56.2	23.3	5.1	0.3
1982 ³	2,106.5	4.0	94.3	69.7	128.9	135.4	101.3	57.5	23.3	5.1	0.4
1981 ³	2,117.5	4.0	94.5	69.3	131.0	136.5	102.3	57.4	23.1	5.4	0.3
1980 ³	2,176.5	4.3	97.8	72.5	135.1	140.0	103.9	59.9	23.5	5.6	0.3

See footnotes at end of table.

Table 4. Total fertility rates and birth rates by age of mother: United States, 1970-98, and by age and race of mother: United States, 1980-98 --Con.

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1970, 1980, and 1990, and estimated as of July 1 for all other years]

Year and race	Total fertility rate	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ¹
			Total	15-17 years	18-19 years						
American Indian⁵											
1998	2,090.5	1.6	72.1	44.4	118.4	139.3	102.2	66.3	30.2	6.4	*
1997	2,047.5	1.7	71.8	45.3	117.6	134.9	100.8	64.2	29.3	6.4	0.4
1996	2,030.0	1.7	73.9	46.4	122.3	133.9	98.5	63.2	28.5	6.3	*
1995	2,033.5	1.8	78.0	47.8	130.7	132.5	98.4	62.2	27.7	6.1	*
1994	2,080.0	1.9	80.8	51.3	130.3	134.2	104.1	61.2	27.5	5.9	0.4
1993	2,141.0	1.4	83.1	53.7	130.7	139.8	107.6	62.8	27.6	5.9	*
1992	2,190.0	1.6	84.4	53.8	132.6	145.5	109.4	63.0	28.0	6.1	*
1991	2,169.0	1.6	85.0	52.7	134.3	144.9	106.9	61.9	27.2	5.9	0.4
1990	2,183.0	1.6	81.1	48.5	129.3	148.7	110.3	61.5	27.5	5.9	*
1989	2,247.0	1.5	82.7	51.6	128.9	152.4	114.2	64.8	27.4	6.4	*
1988	2,153.5	1.7	77.5	49.7	121.1	145.2	110.9	64.5	25.6	5.3	*
1987	2,099.0	1.7	77.2	48.8	122.2	140.0	107.9	63.0	24.4	5.6	*
1986	2,082.0	1.8	78.1	48.7	125.3	138.8	107.9	60.7	23.8	5.3	*
1985	2,128.0	1.7	79.2	47.7	124.1	139.1	109.6	62.6	27.4	6.0	*
1984 ³	2,136.0	1.7	81.5	50.7	124.7	142.4	109.2	60.5	26.3	5.6	*
1983 ³	2,180.5	1.9	84.2	55.2	121.4	145.5	113.7	58.9	25.5	6.4	*
1982 ³	2,213.0	1.4	83.5	52.6	127.6	148.1	115.8	60.9	26.9	6.0	*
1981 ³	2,090.0	2.1	78.4	49.7	121.5	141.2	105.6	58.9	25.2	6.6	*
1980 ³	2,162.5	1.9	82.2	51.5	129.5	143.7	106.6	61.8	28.1	8.2	*
Asian or Pacific Islander											
1998	1,867.5	0.4	23.1	13.8	38.3	68.8	110.4	105.1	52.8	12.0	0.9
1997	1,925.5	0.5	23.7	14.3	39.3	70.5	113.2	110.3	54.1	11.9	0.9
1996	1,907.5	0.6	24.6	14.9	40.4	70.7	111.2	109.2	52.2	12.2	0.8
1995	1,924.0	0.7	26.1	15.4	43.4	72.4	113.4	106.9	52.4	12.1	0.8
1994	1,943.0	0.7	27.1	16.1	44.1	73.1	118.6	105.2	51.3	11.6	1.0
1993	1,935.5	0.6	27.0	16.0	43.3	73.3	119.9	103.9	50.2	11.3	0.9
1992	1,942.0	0.7	26.6	15.2	43.1	74.6	121.0	103.0	50.6	11.0	0.9
1991	1,956.0	0.8	27.4	16.1	43.1	75.2	123.2	103.3	49.0	11.2	1.1
1990	2,002.5	0.7	26.4	16.0	40.2	79.2	126.3	106.5	49.6	10.7	1.1
1989	1,947.5	0.6	25.6	15.0	40.4	78.8	124.0	102.3	47.0	10.2	1.0
1988	1,983.5	0.6	24.2	13.6	39.6	80.7	128.0	104.4	47.5	10.3	1.0
1987	1,886.0	0.6	22.4	12.6	37.0	79.7	122.7	97.0	44.2	9.5	1.1
1986	1,836.0	0.5	22.8	12.1	38.8	79.2	119.9	92.6	41.9	9.3	1.0
1985	1,885.0	0.4	23.8	12.5	40.8	83.6	123.0	93.6	42.7	8.7	1.2
1984 ³	1,892.0	0.5	24.2	12.6	40.7	86.7	124.3	92.4	40.6	8.7	1.0
1983 ³	1,943.5	0.5	26.1	12.9	44.5	94.0	126.2	93.3	39.4	8.2	1.0
1982 ³	2,015.5	0.4	29.4	14.0	50.8	98.9	130.9	94.4	39.2	8.8	1.1
1981 ³	1,976.0	0.3	28.5	13.4	49.5	96.4	129.1	93.4	38.0	8.6	0.9
1980 ³	1,953.5	0.3	26.2	12.0	46.2	93.3	127.4	96.0	38.3	8.5	0.7

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

¹ Beginning 1997, rates computed by relating births to women aged 45-54 years to women aged 45-49 years.

² For 1970-91 includes births to races not shown separately.

³ Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

⁴ Based on a 50-percent sample of births.

⁵ Includes births to Aleuts and Eskimos.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 5. Fertility rates and birth rates by live-birth order and race of mother: United States, 1980-98

[Rates are live births per 1,000 women aged 15-44 years, enumerated as of April 1 for 1980 and 1990, and estimated as of July 1 for all other years. Figures for live-birth order not stated are distributed]

Year and race of mother	Fertility rate	Live-birth order						
		1	2	3	4	5	6 and 7	8 and over
All races ¹								
1998	65.6	26.4	21.4	10.8	4.2	1.5	0.9	0.3
1997	65.0	26.5	21.1	10.6	4.1	1.5	0.9	0.3
1996	65.3	26.8	21.1	10.5	4.1	1.5	0.9	0.3
1995	65.6	27.3	21.1	10.5	4.0	1.5	0.9	0.3
1994	66.7	27.5	21.5	10.7	4.2	1.6	1.0	0.3
1993	67.6	27.5	21.9	11.0	4.3	1.6	1.0	0.3
1992	68.9	27.8	22.3	11.3	4.4	1.7	1.0	0.3
1991	69.6	28.3	22.4	11.4	4.5	1.7	1.0	0.3
1990	70.9	29.0	22.8	11.7	4.5	1.7	1.0	0.3
1989	69.2	28.4	22.4	11.3	4.3	1.6	0.9	0.3
1988	67.3	27.6	22.0	10.9	4.1	1.5	0.9	0.3
1987	65.8	27.2	21.6	10.5	3.9	1.4	0.8	0.3
1986	65.4	27.2	21.6	10.3	3.8	1.4	0.8	0.3
1985	66.3	27.6	22.0	10.4	3.8	1.4	0.8	0.3
1984 ²	65.5	27.4	21.7	10.1	3.7	1.4	0.9	0.3
1983 ²	65.7	27.8	21.5	10.1	3.7	1.4	0.9	0.3
1982 ²	67.3	28.6	22.0	10.2	3.8	1.4	0.9	0.3
1981 ²	67.3	29.0	21.6	10.1	3.8	1.5	0.9	0.4
1980 ²	68.4	29.5	21.8	10.3	3.9	1.5	1.0	0.4
White								
1998	64.6	26.1	21.5	10.7	3.9	1.3	0.8	0.2
1997	63.9	26.2	21.2	10.4	3.8	1.3	0.8	0.2
1996	64.3	26.6	21.2	10.4	3.8	1.3	0.8	0.2
1995	64.4	26.9	21.1	10.3	3.8	1.3	0.7	0.2
1994	64.9	27.0	21.4	10.4	3.8	1.3	0.8	0.2
1993	65.4	27.0	21.7	10.5	3.9	1.4	0.8	0.2
1992	66.5	27.3	22.0	10.8	4.0	1.4	0.8	0.2
1991	67.0	27.8	22.0	10.8	4.0	1.4	0.8	0.2
1990	68.3	28.4	22.4	11.1	4.0	1.4	0.8	0.2
1989	66.4	27.6	21.9	10.7	3.8	1.3	0.7	0.2
1988	64.5	26.8	21.6	10.4	3.6	1.2	0.7	0.2
1987	63.3	26.5	21.3	10.0	3.5	1.2	0.7	0.2
1986	63.1	26.6	21.3	9.8	3.4	1.2	0.7	0.2
1985	64.1	27.0	21.8	9.9	3.4	1.2	0.7	0.2
1984 ²	63.2	26.8	21.4	9.6	3.3	1.2	0.7	0.2
1983 ²	63.4	27.2	21.2	9.5	3.3	1.2	0.7	0.2
1982 ²	64.8	28.0	21.6	9.6	3.4	1.2	0.7	0.3
1981 ²	64.8	28.4	21.1	9.5	3.4	1.2	0.8	0.3
1980 ²	65.6	28.8	21.3	9.6	3.4	1.3	0.8	0.3
Black								
1998	71.0	27.0	21.1	12.3	5.7	2.6	1.7	0.6
1997	70.7	27.3	20.7	12.1	5.7	2.5	1.8	0.6
1996	70.7	27.6	20.5	12.0	5.6	2.6	1.8	0.6
1995	72.3	28.7	20.7	12.0	5.7	2.6	1.8	0.6
1994	76.9	29.8	22.2	13.1	6.3	2.9	2.0	0.6
1993	80.5	30.2	23.4	14.1	6.9	3.1	2.2	0.7
1992	83.2	30.6	24.3	15.0	7.2	3.3	2.2	0.6
1991	85.2	31.5	25.0	15.4	7.4	3.3	2.1	0.6
1990	86.8	32.4	25.6	15.6	7.4	3.2	2.0	0.6
1989	86.2	32.9	25.4	15.3	7.1	3.0	1.9	0.6
1988	82.6	31.8	24.6	14.4	6.6	2.8	1.8	0.5
1987	80.1	31.2	23.8	13.9	6.3	2.7	1.7	0.5
1986	78.9	31.0	23.4	13.5	6.1	2.6	1.7	0.5
1985	78.8	31.0	23.4	13.4	6.1	2.6	1.7	0.5
1984 ²	78.1	30.9	23.0	13.2	6.0	2.6	1.7	0.6
1983 ²	78.7	31.1	23.1	13.2	6.1	2.7	1.8	0.6
1982 ²	80.9	31.7	23.9	13.8	6.3	2.7	1.8	0.7
1981 ²	82.0	32.3	24.2	13.7	6.3	2.8	1.9	0.8
1980 ²	84.9	33.7	24.7	14.0	6.5	2.9	2.1	0.9

¹ Includes races other than white and black.

² Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 6. Live births, birth rates, and fertility rates by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1989-98

Measure and year	Hispanic							Non-Hispanic		
	All origins ¹	Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ²	White	Black
Number										
1998	3,941,553	734,661	516,011	57,349	13,226	98,226	49,849	3,158,975	2,361,462	593,127
1997	3,880,894	709,767	499,024	55,450	12,887	97,405	45,001	3,115,174	2,333,363	581,431
1996	3,891,494	701,339	489,666	54,863	12,613	97,888	46,309	3,133,484	2,358,989	578,099
1995	3,899,589	679,768	469,615	54,824	12,473	94,996	47,860	3,160,495	2,382,638	587,781
1994	3,952,767	665,026	454,536	57,240	11,889	93,485	47,876	3,245,115	2,438,855	619,198
1993	4,000,240	654,418	443,733	58,102	11,916	92,371	48,296	3,295,345	2,472,031	641,273
1992 ³	4,049,024	643,271	432,047	59,569	11,472	89,031	51,152	3,365,862	2,527,207	657,450
1991 ³	4,094,566	623,085	411,233	59,833	11,058	86,908	54,053	3,434,464	2,589,878	666,758
1990 ⁴	4,092,994	595,073	385,640	58,807	11,311	83,008	56,307	3,457,417	2,626,500	661,701
1989 ⁵	3,903,012	532,249	327,233	56,229	10,842	72,443	65,502	3,297,493	2,526,367	611,269
Birth rate ⁶										
1998	14.6	24.3	26.4	19.0	10.0	⁷ 23.2		13.4	12.3	18.2
1997	14.5	24.2	26.8	18.1	10.1	⁷ 22.4		13.3	12.2	18.1
1996	14.7	24.8	27.4	17.9	10.7	⁷ 23.4		13.5	12.4	18.3
1995	14.8	25.2	26.9	19.7	11.0	⁷ 25.3		13.7	12.6	18.8
1994	15.2	25.5	27.0	21.4	10.8	⁷ 25.7		14.0	12.8	20.0
1993	15.5	26.0	27.4	21.9	10.5	⁷ 26.9		14.4	13.1	21.1
1992 ⁸	15.9	26.5	27.8	23.2	10.1	⁷ 27.9		14.8	13.5	21.9
1991 ⁸	16.3	26.7	29.2	21.0	10.1	⁷ 26.5		15.2	13.9	22.5
1990 ⁴	16.7	26.7	28.7	21.6	10.9	⁷ 27.5		15.7	14.4	23.0
1989 ⁵	16.3	26.2	25.7	23.7	10.0	⁷ 28.3		15.4	14.2	22.8
Fertility rate ⁹										
1998	65.6	101.1	112.1	75.5	50.1	⁷ 90.2		60.7	57.7	73.0
1997	65.0	102.8	116.6	71.7	57.4	⁷ 87.6		60.1	57.0	72.4
1996	65.3	104.9	119.3	71.3	58.9	⁷ 90.2		60.3	57.3	72.5
1995	65.6	105.0	117.0	75.7	55.1	⁷ 94.5		60.8	57.6	74.5
1994	66.7	105.6	115.4	81.9	55.9	⁷ 97.7		62.0	58.3	79.0
1993	67.6	106.9	114.8	82.5	55.5	⁷ 105.0		63.1	59.0	82.7
1992 ⁸	68.9	108.6	116.0	89.9	50.3	⁷ 107.0		64.4	60.2	85.5
1991 ⁸	69.6	108.1	121.6	80.9	49.1	⁷ 99.3		65.4	61.0	87.6
1990 ⁴	71.0	107.7	118.9	82.9	52.6	⁷ 102.7		67.1	62.8	89.0
1989 ⁵	69.2	104.9	106.6	86.6	49.8	⁷ 95.8		65.7	60.5	84.8

¹ Includes origin not stated.² Includes races other than white and black.³ Excludes data for New Hampshire, which did not report Hispanic origin.⁴ Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.⁵ Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.⁶ Live births per 1,000 population in specified group.⁷ Includes Central and South American and other and unknown Hispanic.⁸ Rates are estimated for the United States based on birth data for 49 States and the District of Columbia. Births for New Hampshire that did not report Hispanic origin, are included in the rates for non-Hispanic women; see Technical notes.⁹ Live births per 1,000 women aged 15-44 years in specified group.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 7. Live births by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1998

[Live-birth order refers to number of children born alive to mother. Includes births with stated origin of mother only]

Live-birth order and origin of mother	All ages	Age of mother													
		Under 15 years	15-19 years					20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	
			Total	15 years	16 years	17 years	18 years								19 years
Hispanic															
Total	734,661	2,716	121,388	7,525	16,079	24,630	33,400	39,754	223,113	196,012	125,702	54,195	11,056	475	4
1st child	272,024	2,628	91,153	7,102	14,324	20,057	24,322	25,348	94,514	50,908	23,468	7,913	1,380	59	1
2d child	223,025	46	23,938	341	1,453	3,801	7,323	11,020	79,771	67,671	36,511	13,002	2,002	83	1
3d child	134,336	4	4,342	5	92	425	1,242	2,578	33,879	46,506	33,577	13,564	2,379	85	-
4th child	59,119	-	522	2	3	39	121	357	9,829	19,619	18,028	9,207	1,840	74	-
5th child	23,341	-	57	-	1	-	8	48	2,415	6,612	7,853	5,017	1,335	52	-
6th child	9,289	-	11	-	2	-	1	8	544	2,224	3,094	2,541	842	32	1
7th child	4,115	-	-	-	-	-	-	-	105	748	1,392	1,352	490	27	1
8th child and over	3,471	-	1	-	-	-	1	-	58	407	957	1,275	711	62	-
Not stated	5,941	38	1,364	75	204	308	382	395	1,998	1,317	822	324	77	1	-
Mexican															
Total	516,011	1,974	88,484	5,510	11,798	18,028	24,320	28,828	163,691	139,091	82,140	33,484	6,850	295	2
1st child	185,738	1,907	65,970	5,192	10,494	14,591	17,540	18,153	67,674	32,866	12,650	3,971	672	28	-
2d child	153,762	35	17,835	258	1,060	2,869	5,463	8,185	59,341	47,483	21,456	6,616	958	37	1
3d child	96,818	4	3,195	4	73	302	921	1,895	25,524	35,000	23,439	8,272	1,347	37	-
4th child	44,289	-	383	1	2	30	98	252	7,307	15,099	13,702	6,535	1,211	52	-
5th child	17,892	-	39	-	1	-	6	32	1,807	5,145	6,095	3,796	969	41	-
6th child	7,179	-	8	-	2	-	1	5	394	1,693	2,405	1,977	679	22	1
7th child	3,212	-	-	-	-	-	-	-	79	551	1,092	1,071	396	23	-
8th child and over	2,698	-	1	-	-	-	1	-	43	298	708	1,024	569	55	-
Not stated	4,423	28	1,053	55	166	236	290	306	1,522	956	593	222	49	-	-
Puerto Rican															
Total	57,349	267	12,286	813	1,639	2,567	3,391	3,876	17,930	13,643	8,801	3,662	724	35	1
1st child	22,526	258	9,032	766	1,438	2,061	2,412	2,355	6,847	3,597	2,019	646	120	6	1
2d child	17,443	4	2,483	34	168	409	776	1,096	6,303	4,572	2,814	1,085	173	9	-
3d child	9,715	-	529	-	13	57	143	316	3,076	3,022	2,016	881	181	10	-
4th child	4,151	-	75	1	1	6	10	57	1,045	1,417	1,012	505	92	5	-
5th child	1,619	-	3	-	-	-	1	2	305	549	447	249	65	1	-
6th child	639	-	1	-	-	-	-	1	85	191	202	130	29	1	-
7th child	307	-	-	-	-	-	-	-	16	93	106	73	19	-	-
8th child and over	280	-	-	-	-	-	-	-	6	51	106	75	39	3	-
Not stated	669	5	163	12	19	34	49	49	247	151	79	18	6	-	-
Cuban															
Total	13,226	25	886	58	128	174	229	297	2,536	3,761	3,771	1,926	307	13	1
1st child	5,739	25	727	57	113	147	197	213	1,497	1,792	1,212	420	63	3	-
2d child	4,794	-	142	1	14	24	31	72	778	1,402	1,612	760	96	4	-
3d child	1,920	-	13	-	-	3	1	9	199	446	686	494	78	4	-
4th child	517	-	1	-	-	-	-	1	44	79	181	166	46	-	-
5th child	131	-	1	-	-	-	-	1	12	18	45	42	13	-	-
6th child	58	-	-	-	-	-	-	-	2	13	18	20	5	-	-
7th child	19	-	-	-	-	-	-	-	-	1	4	7	5	1	1
8th child and over	22	-	-	-	-	-	-	-	1	3	7	10	1	-	-
Not stated	26	-	2	-	1	-	-	1	3	7	6	7	-	1	-
Central and South American															
Total	98,226	185	9,911	472	1,127	1,793	2,845	3,674	24,430	27,200	22,627	11,361	2,411	101	-
1st child	37,714	182	7,917	457	1,039	1,538	2,253	2,630	12,480	9,059	5,539	2,131	390	16	-
2d child	31,603	2	1,670	14	86	218	501	851	8,129	9,894	7,907	3,390	587	24	-
3d child	17,613	-	256	-	1	26	71	158	2,809	5,461	5,469	2,997	596	25	-
4th child	6,832	-	19	-	-	-	4	15	733	1,895	2,272	1,519	380	14	-
5th child	2,463	-	2	-	-	-	-	2	133	535	850	707	226	10	-
6th child	912	-	1	-	-	-	-	1	28	164	311	303	98	7	-
7th child	375	-	-	-	-	-	-	-	7	55	118	143	50	2	-
8th child and over	304	-	-	-	-	-	-	-	4	28	79	118	72	3	-
Not stated	410	1	46	1	1	11	16	17	107	109	82	53	12	-	-
Other and unknown															
Hispanic															
Total	49,849	265	9,821	672	1,387	2,068	2,615	3,079	14,526	12,317	8,363	3,762	764	31	-
1st child	20,307	256	7,507	630	1,240	1,720	1,920	1,997	6,016	3,594	2,048	745	135	6	-
2d child	15,423	5	1,808	34	125	281	552	816	5,220	4,320	2,722	1,151	188	9	-
3d child	8,270	-	349	1	5	37	106	200	2,271	2,577	1,967	920	177	9	-
4th child	3,330	-	44	-	-	3	9	32	700	1,129	861	482	111	3	-
5th child	1,236	-	12	-	-	-	1	11	158	365	416	223	62	-	-
6th child	501	-	1	-	-	-	-	1	35	163	158	111	31	2	-
7th child	202	-	-	-	-	-	-	-	3	48	72	58	20	1	-
8th child and over	167	-	-	-	-	-	-	-	4	27	57	48	30	1	-
Not stated	413	4	100	7	17	27	27	22	119	94	62	24	10	-	-

See footnotes at end of table.

Table 7. Live births by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1998 --Con.

[Live-birth order refers to number of children born alive to mother. Includes births with stated origin of mother only]

Live-birth order and origin of mother	All ages	Age of mother													
		Under 15 years	15-19 years					20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	
			Total	15 years	16 years	17 years	18 years								19 years
Non-Hispanic															
Total ¹	3,158,975	6,670	359,028	17,031	38,466	68,001	102,878	132,652	732,440	874,227	750,955	363,941	68,512	3,051	151
1st child	1,286,516	6,484	280,707	16,239	35,076	58,064	79,757	91,571	339,030	338,523	221,791	83,977	15,214	745	45
2d child	1,042,683	113	63,126	633	2,880	8,416	19,037	32,160	251,593	304,899	280,353	122,019	19,815	727	38
3d child	504,882	5	10,803	26	194	886	2,926	6,771	98,699	145,336	150,855	84,439	14,199	522	24
4th child	186,119	-	1,425	1	7	53	315	1,049	28,821	52,381	56,573	38,589	8,003	318	9
5th child	66,596	-	178	-	3	5	40	130	7,565	18,038	20,473	15,926	4,221	185	10
6th child	27,542	-	33	-	2	2	8	21	1,885	6,673	8,843	7,619	2,348	134	7
7th child	12,977	-	2	-	-	-	-	2	441	2,557	4,332	4,078	1,461	104	2
8th child and over	14,084	-	6	-	-	-	2	4	181	1,461	3,929	5,329	2,874	288	16
Not stated	17,576	68	2,748	132	304	575	793	944	4,225	4,359	3,806	1,965	377	28	-
White	2,361,462	2,132	219,169	7,767	20,464	40,388	64,472	86,078	511,101	678,227	603,639	291,202	53,480	2,388	124
1st child	972,642	2,092	178,863	7,532	19,245	36,047	52,766	63,273	252,410	275,688	181,840	68,682	12,413	615	39
2d child	802,093	19	33,820	174	1,002	3,689	9,958	18,997	178,567	243,149	230,935	99,142	15,841	585	35
3d child	374,714	1	4,313	5	51	278	1,134	2,845	60,270	108,103	122,106	68,513	10,975	411	22
4th child	128,132	-	400	1	1	11	83	304	13,678	34,394	42,975	30,394	6,030	254	7
5th child	40,854	-	33	-	-	3	7	23	2,632	9,578	13,729	11,661	3,072	140	9
6th child	15,531	-	9	-	-	1	3	5	455	2,818	5,192	5,253	1,701	97	6
7th child	6,936	-	-	-	-	-	-	-	88	858	2,244	2,643	1,030	71	2
8th child and over	7,829	-	3	-	-	-	1	2	53	396	1,678	3,373	2,129	193	4
Not stated	12,731	20	1,728	55	165	359	520	629	2,948	3,243	2,940	1,541	289	22	-
Black	593,127	4,204	124,076	8,420	16,021	24,542	34,089	41,004	184,263	135,158	90,827	45,096	9,172	323	8
1st child	224,263	4,074	89,556	7,912	14,049	19,443	23,714	24,438	67,338	33,802	19,888	8,078	1,469	56	2
2d child	174,821	86	26,614	424	1,727	4,330	8,252	11,881	62,010	43,299	28,017	12,609	2,127	57	2
3d child	102,228	4	5,964	18	121	553	1,650	3,622	34,057	29,634	20,194	10,316	1,999	59	1
4th child	47,480	-	942	-	4	36	215	687	13,679	14,959	10,458	6,061	1,346	35	-
5th child	21,337	-	127	-	3	2	29	93	4,475	7,151	5,366	3,333	851	34	-
6th child	9,773	-	21	-	2	1	5	13	1,271	3,204	2,916	1,842	496	23	-
7th child	4,799	-	2	-	-	-	-	2	300	1,419	1,634	1,102	322	20	-
8th child and over	4,753	-	3	-	-	-	1	2	107	889	1,750	1,468	499	34	3
Not stated	3,673	40	847	66	115	177	223	266	1,026	801	604	287	63	5	-

- Quantity zero.
¹ Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 8. Fertility rates and birth rates by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1998

[Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

Live-birth order and origin of mother	15-44 years ¹	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ²
			Total	15-17 years	18-19 years						
Hispanic											
Total	101.1	2.1	93.6	62.3	140.1	178.4	160.2	98.9	44.9	10.8	0.6
1st child	37.7	2.1	71.1	54.2	96.2	76.2	41.9	18.6	6.6	1.4	0.1
2d child	30.9	0.0	18.7	7.3	35.5	64.3	55.7	28.9	10.8	2.0	0.1
3d child	18.6	*	3.4	0.7	7.4	27.3	38.3	26.6	11.3	2.3	0.1
4th child	8.2	*	0.4	0.1	0.9	7.9	16.1	14.3	7.7	1.8	0.1
5th child	3.2	*	0.0	*	0.1	1.9	5.4	6.2	4.2	1.3	0.1
6th and 7th child	1.9	*	*	*	*	0.5	2.4	3.6	3.2	1.3	0.1
8th child and over	0.5	*	*	*	*	0.0	0.3	0.8	1.1	0.7	0.1
Mexican	112.1	2.2	102.7	67.0	159.1	197.6	173.5	103.7	48.4	10.9	0.6
1st child	40.7	2.2	77.5	58.1	108.0	82.4	41.3	16.1	5.8	1.1	0.1
2d child	33.7	0.0	20.9	8.0	41.3	72.3	59.6	27.3	9.6	1.5	0.1
3d child	21.2	*	3.8	0.7	8.5	31.1	43.9	29.8	12.0	2.2	0.1
4th child	9.7	*	0.5	0.1	1.1	8.9	19.0	17.4	9.5	1.9	0.1
5th child	3.9	*	0.0	*	0.1	2.2	6.5	7.8	5.5	1.6	0.1
6th and 7th child	2.3	*	*	*	*	0.6	2.8	4.4	4.4	1.7	0.1
8th child and over	0.6	*	*	*	*	0.1	0.4	0.9	1.5	0.9	0.1
Puerto Rican	75.5	1.9	81.2	55.1	120.7	164.2	104.4	67.6	26.7	7.2	0.4
1st child	30.0	1.9	60.5	47.5	80.3	63.6	27.8	15.7	4.7	1.2	*
2d child	23.2	*	16.6	6.8	31.5	58.5	35.4	21.8	7.9	1.7	*
3d child	12.9	*	3.5	0.8	7.7	28.6	23.4	15.6	6.5	1.8	*
4th child	5.5	*	0.5	*	1.1	9.7	11.0	7.8	3.7	0.9	*
5th child	2.2	*	*	*	*	2.8	4.2	3.5	1.8	0.7	*
6th and 7th child	1.3	*	*	*	*	0.9	2.2	2.4	1.5	0.5	*
8th child and over	0.4	*	*	*	*	*	0.4	0.8	0.5	0.4	*
Cuban	50.1	0.8	24.2	15.6	38.8	85.6	95.2	64.5	34.2	7.1	*
1st child	21.8	0.8	19.9	13.8	30.3	50.6	45.4	20.8	7.5	1.5	*
2d child	18.2	*	3.9	1.7	7.6	26.3	35.6	27.6	13.5	2.2	*
3d child	7.3	*	*	*	*	6.7	11.3	11.7	8.8	1.8	*
4th child	2.0	*	*	*	*	1.5	2.0	3.1	3.0	1.1	*
5th child	0.5	*	*	*	*	*	*	0.8	0.7	*	*
6th and 7th child	0.3	*	*	*	*	*	*	0.4	0.5	*	*
8th child and over	0.1	*	*	*	*	*	*	*	*	*	*
Other Hispanic ³	90.2	1.9	80.0	56.7	106.9	137.4	157.2	106.9	46.9	12.9	0.6
1st child	35.6	1.9	63.0	50.4	77.5	65.6	50.6	26.3	9.0	2.1	0.1
2d child	28.8	*	14.2	5.8	24.0	47.3	56.8	36.8	14.2	3.2	0.2
3d child	15.9	*	2.5	0.5	4.7	18.0	32.1	25.8	12.2	3.2	0.2
4th child	*	*	*	*	*	*	*	*	*	*	*
5th child	2.3	*	*	*	*	1.0	3.6	4.4	2.9	1.2	*
6th and 7th child	1.2	*	*	*	*	0.3	1.7	2.3	1.9	0.8	*
8th child and over	0.3	*	*	*	*	*	0.2	0.5	0.5	0.4	*

See footnotes at end of table.

Table 8. Fertility rates and birth rates by age of mother, live-birth order, Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1998 --Con.

[Live-birth order refers to number of children born alive to mother. Figures for live-birth order not stated are distributed]

Live-birth order and origin of mother	15-44 years ¹	Age of mother									
		10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ²
			Total	15-17 years	18-19 years						
Non-Hispanic⁴											
Total ⁵	60.7	0.8	44.3	25.4	72.8	99.9	109.3	85.7	36.5	7.0	0.4
1st child	24.8	0.8	34.9	22.7	53.3	46.5	42.5	25.5	8.5	1.6	0.1
2d child	20.1	0.0	7.9	2.5	15.9	34.5	38.3	32.2	12.3	2.0	0.1
3d child	9.8	*	1.3	0.2	3.0	13.5	18.2	17.3	8.5	1.5	0.1
4th child	3.6	*	0.2	0.0	0.4	4.0	6.6	6.5	3.9	0.8	0.0
5th child	1.3	*	0.0	*	0.1	1.0	2.3	2.3	1.6	0.4	0.0
6th and 7th child	0.8	*	0.0	*	0.0	0.3	1.2	1.5	1.2	0.4	0.0
8th child and over	0.3	*	*	*	*	0.0	0.2	0.5	0.5	0.3	0.0
White	57.7	0.3	35.2	18.4	60.6	90.7	109.7	88.0	36.4	6.7	0.4
1st child	23.9	0.3	29.0	17.0	47.0	45.0	44.8	26.6	8.6	1.6	0.1
2d child	19.7	0.0	5.5	1.3	11.7	31.9	39.5	33.8	12.5	2.0	0.1
3d child	9.2	*	0.7	0.1	1.6	10.8	17.6	17.9	8.6	1.4	0.1
4th child	3.2	*	0.1	*	0.2	2.5	5.6	6.3	3.8	0.8	0.0
5th child	1.0	*	0.0	*	0.0	0.5	1.6	2.0	1.5	0.4	0.0
6th and 7th child	0.6	*	*	*	*	0.1	0.6	1.1	1.0	0.3	0.0
8th child and over	0.2	*	*	*	*	0.0	0.1	0.3	0.4	0.3	0.0
Black	73.0	3.0	88.2	58.8	130.9	146.4	104.6	66.6	31.2	6.8	0.3
1st child	27.8	3.0	64.1	50.0	84.5	53.8	26.4	14.7	5.7	1.1	0.1
2d child	21.7	0.1	19.0	7.8	35.3	49.5	33.7	20.7	8.8	1.6	0.1
3d child	12.7	*	4.3	0.8	9.3	27.2	23.0	14.9	7.2	1.5	0.1
4th child	5.9	*	0.7	0.0	1.6	10.9	11.6	7.7	4.2	1.0	0.0
5th child	2.6	*	0.1	*	0.2	3.6	5.6	4.0	2.3	0.6	0.0
6th and 7th child	1.8	*	0.0	*	0.0	1.3	3.6	3.4	2.0	0.6	0.0
8th child and over	0.6	*	*	*	*	0.1	0.7	1.3	1.0	0.4	0.0

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator.
 0.0 Quantity more than zero but less than 0.05.
 1 Rates computed by relating total births, regardless of age of mother, to women aged 15-44 years.
 2 Rates computed by relating births to women aged 45-54 years to women aged 45-49 years.
 3 Includes Central and South American and other and unknown Hispanic.
 4 Includes origin not stated.
 5 Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 9. Total fertility rates, fertility rates, and birth rates by age and Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1989-98

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1990, and estimated as of July 1 for all other years]

Year and origin/race of mother	Total fertility rate	Fertility rate †	Age of mother									
			10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ²
				Total	15-17 years	18-19 years						
All origins												
1998	2,058.5	65.6	1.0	51.1	30.4	82.0	111.2	115.9	87.4	37.4	7.3	0.4
1997	2,032.5	65.0	1.1	52.3	32.1	83.6	110.4	113.8	85.3	36.1	7.1	0.4
1996	2,027.0	65.3	1.2	54.4	33.8	86.0	110.4	113.1	83.9	35.3	6.8	0.3
1995	2,019.0	65.6	1.3	56.8	36.0	89.1	109.8	112.2	82.5	34.3	6.6	0.3
1994	2,036.0	66.7	1.4	58.9	37.6	91.5	111.1	113.9	81.5	33.7	6.4	0.3
1993	2,046.0	67.6	1.4	59.6	37.8	92.1	112.6	115.5	80.8	32.9	6.1	0.3
1992	2,065.0	68.9	1.4	60.7	37.8	94.5	114.6	117.4	80.2	32.5	5.9	0.3
1991	2,073.0	69.6	1.4	62.1	38.7	94.4	115.7	118.2	79.5	32.0	5.5	0.2
1990	2,081.0	70.9	1.4	59.9	37.5	88.6	116.5	120.2	80.8	31.7	5.5	0.2
1989	2,014.0	69.2	1.4	57.3	36.4	84.2	113.8	117.6	77.4	29.9	5.2	0.2
Hispanic												
Total												
1998	2,947.5	101.1	2.1	93.6	62.3	140.1	178.4	160.2	98.9	44.9	10.8	0.6
1997	2,999.5	102.8	2.3	97.4	66.3	144.3	184.2	161.7	97.9	45.0	10.8	0.6
1996	3,047.5	104.9	2.6	101.8	69.0	151.1	189.5	161.0	98.1	45.1	10.8	0.6
1995	3,019.5	105.0	2.7	106.7	72.9	157.9	188.5	153.8	95.9	44.9	10.8	0.6
1994	3,014.0	105.6	2.7	107.7	74.0	158.0	188.2	153.2	95.4	44.3	10.7	0.6
1993	3,020.5	106.9	2.7	106.8	71.7	159.1	188.3	154.0	96.4	44.7	10.6	0.6
1992 ³	3,043.0	108.6	2.6	107.1	71.4	159.7	190.6	154.4	96.8	45.6	10.9	0.6
1991 ³	3,002.5	108.1	2.4	106.7	70.6	158.5	186.3	152.8	96.1	44.9	10.7	0.6
1990 ⁴	2,959.5	107.7	2.4	100.3	65.9	147.7	181.0	153.0	98.3	45.3	10.9	0.7
1989 ⁵	2,903.5	104.9	2.3	100.8	---	---	184.4	146.6	92.1	43.5	10.4	0.6
Mexican												
1998	3,198.0	112.1	2.2	102.7	67.0	159.1	197.6	173.5	103.7	48.4	10.9	0.6
1997	3,307.5	116.6	2.5	112.4	77.3	165.1	204.9	176.3	104.2	49.0	11.6	0.6
1996	3,353.5	119.3	2.8	120.7	83.4	174.3	206.3	176.9	103.7	47.6	12.0	0.7
1995	3,273.5	117.0	2.8	124.6	84.4	185.3	208.9	160.5	98.5	46.8	11.9	0.7
1994	3,211.5	115.4	2.8	116.2	78.0	175.0	202.6	165.2	96.9	46.2	11.7	0.7
1993	3,174.0	114.8	2.6	108.7	71.6	164.9	196.6	168.2	100.5	46.1	11.3	0.8
1992 ³	3,196.5	116.0	2.5	108.8	---	---	202.3	166.3	99.1	47.7	11.8	0.8
1991 ³	3,317.5	121.6	2.6	117.3	75.9	178.4	209.9	168.2	103.3	49.1	12.3	0.8
1990 ⁴	3,214.0	118.9	2.5	108.0	69.7	162.2	200.3	165.3	104.4	49.1	12.4	0.8
1989 ⁵	2,916.5	106.6	2.0	94.5	---	---	184.3	153.7	96.1	41.0	11.1	0.6
Puerto Rican												
1998	2,268.0	75.5	1.9	81.2	55.1	120.7	164.2	104.4	67.6	26.7	7.2	0.4
1997	2,164.0	71.7	1.8	74.9	48.9	120.0	154.0	109.3	59.1	27.0	6.2	0.5
1996	2,163.0	71.3	2.1	82.3	52.2	143.2	148.8	109.4	58.3	25.9	5.6	*
1995	2,245.5	75.7	3.0	89.0	61.2	139.2	151.5	107.2	64.8	27.7	5.6	0.3
1994	2,490.0	81.9	3.2	106.0	72.8	168.4	181.0	111.7	62.3	28.0	5.6	0.2
1993	2,523.5	82.5	3.1	110.0	73.4	181.0	193.1	108.4	56.3	27.1	6.2	0.5
1992 ³	2,644.5	89.9	3.5	110.4	---	---	204.9	106.6	66.7	30.0	6.5	0.3
1991 ³	2,276.0	80.9	2.5	102.7	75.2	143.0	149.4	107.5	61.4	25.7	5.7	0.3
1990 ⁴	2,301.0	82.9	2.9	101.6	71.6	141.6	150.1	109.9	62.8	26.2	6.2	0.5
1989 ⁵	2,421.0	86.6	3.8	112.7	---	---	171.0	98.0	65.2	26.9	6.3	0.3
Cuban												
1998	1,560.0	50.1	0.8	24.2	15.6	38.8	85.6	95.2	64.5	34.2	7.1	*
1997	1,814.5	57.4	1.0	38.3	25.3	53.4	82.7	123.5	75.7	35.1	6.3	0.3
1996	1,774.5	58.9	0.9	34.0	19.8	54.5	82.5	110.7	85.9	34.3	6.4	*
1995	1,705.5	55.1	*	29.2	16.6	51.2	77.0	110.6	88.0	29.8	6.0	*
1994	1,680.5	55.9	0.6	40.2	23.1	77.4	72.5	98.4	87.6	31.3	5.5	*
1993	1,632.5	55.5	*	33.0	20.4	49.7	68.9	102.0	86.9	31.0	4.7	*
1992 ³	1,485.5	50.3	1.0	26.3	---	---	51.6	98.4	86.2	28.9	4.7	0.0
1991 ³	1,385.5	49.1	*	27.7	17.5	41.3	61.2	88.8	68.2	26.7	4.0	*
1990 ⁴	1,459.5	52.6	*	30.3	18.2	46.1	64.6	95.4	67.6	28.2	4.9	*
1989 ⁵	1,479.0	49.8	0.5	25.1	---	---	64.2	101.8	73.7	27.2	3.0	0.3

See footnotes at end of table.

Table 9. Total fertility rates, fertility rates, and birth rates by age and Hispanic origin of mother, and by race for mothers of non-Hispanic origin: United States, 1989-98 --Con.

[Total fertility rates are sums of birth rates for 5-year age groups multiplied by 5. Birth rates are live births per 1,000 women in specified group, enumerated as of April 1 for 1990, and estimated as of July 1 for all other years]

Year and origin/race of mother	Total fertility rate	Fertility rate ¹	Age of mother									
			10-14 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years ²
				Total	15-17 years	18-19 years						
Other Hispanic⁶												
1998	2,719.0	90.2	1.9	80.0	56.7	106.9	137.4	157.2	106.9	46.9	12.9	0.6
1997	2,653.5	87.6	2.0	72.1	48.3	106.8	146.4	147.9	104.4	45.4	11.8	0.7
1996	2,762.0	90.2	2.4	69.8	46.6	103.1	166.5	146.3	105.3	50.4	11.0	0.7
1995	2,834.0	94.5	2.4	77.5	54.8	107.8	158.3	161.8	103.7	50.9	11.6	0.6
1994	2,855.5	97.7	2.6	87.9	66.4	112.4	162.0	147.4	109.3	49.4	11.9	0.6
1993	3,038.5	105.0	2.7	106.9	78.2	141.7	175.2	147.1	110.4	52.4	12.5	0.5
1992 ³	3,076.0	107.0	2.5	112.1	---	---	172.9	157.8	106.6	50.3	12.5	0.5
1991 ³	2,817.0	99.3	2.1	88.1	58.9	128.8	161.1	150.6	101.5	48.2	11.2	0.6
1990 ⁴	2,877.0	102.7	2.1	86.0	57.2	123.8	162.9	155.8	106.9	49.4	11.6	0.7
1989 ⁵	2,683.0	95.8	1.7	66.4	---	---	159.2	150.4	85.1	60.3	12.7	0.8
Non-Hispanic⁷												
Total⁸												
1998	1,919.5	60.7	0.8	44.3	25.4	72.8	99.9	109.3	85.7	36.5	7.0	0.4
1997	1,888.5	60.1	0.9	45.5	27.0	74.3	98.6	107.0	83.5	35.1	6.7	0.4
1996	1,881.0	60.3	1.0	47.3	28.7	76.2	98.4	106.5	82.0	34.2	6.5	0.3
1995	1,881.0	60.8	1.1	49.6	30.7	79.0	98.5	106.4	80.9	33.2	6.2	0.3
1994	1,905.0	62.0	1.2	52.0	32.5	81.8	100.4	108.6	79.9	32.6	6.0	0.3
1993	1,918.5	63.1	1.2	52.9	33.1	82.6	102.5	110.4	79.0	31.7	5.7	0.3
1992 ³	1,941.0	64.4	1.2	54.4	33.2	85.5	104.7	112.7	78.4	31.2	5.4	0.2
1991 ³	1,959.5	65.4	1.3	56.1	34.4	86.1	106.6	114.0	77.8	30.8	5.1	0.2
1990 ⁴	1,979.5	67.1	1.3	54.8	33.8	81.4	108.1	116.5	79.2	30.7	5.1	0.2
1989 ⁵	1,921.0	65.7	1.3	53.4	---	---	107.8	113.4	74.7	28.6	4.8	0.2
White												
1998	1,837.0	57.7	0.3	35.2	18.4	60.6	90.7	109.7	88.0	36.4	6.7	0.4
1997	1,801.0	57.0	0.4	36.0	19.4	61.9	89.8	107.2	85.2	34.9	6.4	0.3
1996	1,795.5	57.3	0.4	37.6	20.6	63.7	90.1	107.0	83.5	34.0	6.2	0.3
1995	1,786.5	57.6	0.4	39.3	22.0	66.1	90.0	106.5	82.0	32.9	5.9	0.3
1994	1,792.0	58.3	0.5	40.4	22.8	67.4	90.9	107.9	80.7	32.1	5.7	0.2
1993	1,792.5	59.0	0.5	40.7	22.7	67.7	92.1	109.2	79.4	31.1	5.3	0.2
1992 ³	1,810.5	60.2	0.5	41.7	22.7	69.8	93.9	111.5	78.7	30.5	5.1	0.2
1991 ³	1,826.5	61.0	0.5	43.4	23.6	70.5	95.7	112.7	77.9	30.2	4.7	0.2
1990 ⁴	1,850.5	62.8	0.5	42.5	23.2	66.6	97.5	115.3	79.4	30.0	4.7	0.2
1989 ⁵	1,770.0	60.5	0.4	39.9	---	---	94.7	111.7	75.0	27.8	4.3	0.2
Black												
1998	2,235.5	73.0	3.0	88.2	58.8	130.9	146.4	104.6	66.6	31.2	6.8	0.3
1997	2,210.5	72.4	3.4	90.8	62.6	134.0	143.0	101.9	65.8	30.3	6.6	0.3
1996	2,204.0	72.5	3.8	94.2	66.6	136.6	140.9	100.8	64.9	29.7	6.2	0.3
1995	2,245.0	74.5	4.3	99.3	72.1	141.9	141.7	102.0	65.9	29.4	6.1	0.3
1994	2,365.0	79.0	4.7	107.7	78.6	152.9	150.3	107.0	67.5	29.5	6.0	0.3
1993	2,454.5	82.7	4.7	112.2	82.5	156.7	157.4	111.5	69.0	29.8	6.0	0.3
1992 ³	2,514.0	85.5	4.8	116.0	83.9	162.9	163.0	114.6	69.1	29.4	5.7	0.2
1991 ³	2,551.0	87.6	4.9	118.9	86.7	163.1	166.1	116.3	69.3	28.9	5.6	0.2
1990 ⁴	2,547.5	89.0	5.0	116.2	84.9	157.5	165.1	118.4	70.2	28.7	5.6	0.3
1989 ⁵	2,424.0	84.8	5.2	111.9	---	---	156.3	113.8	65.7	26.3	5.3	0.3

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

--- Data not available.

0.0 Quantity more than zero but less than 0.05.

¹ Rates computed by relating total births, regardless of age of mother, to women 15-44 years.

² Beginning 1997, rates computed by relating births to women aged 45-54 years to women aged 45-49 years.

³ Excludes data for New Hampshire, which did not report Hispanic origin.

⁴ Excludes data for New Hampshire and Oklahoma, which did not report Hispanic origin.

⁵ Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

⁶ Includes Central and South American and other and unknown Hispanic.

⁷ Includes origin not stated.

⁸ Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 10. Number of births, birth rates, fertility rates, total fertility rates, and birth rates for teenagers 15-19 years by age of mother: United States, each State and territory, 1998

[By place of residence. Birth rates per 1,000 estimated population in each area; fertility rates per 1,000 women aged 15-44 years estimated in each area; total fertility rates are sums of birth rates for 5-year age groups multiplied by 5; birth rates by age are live births per 1,000 women in specified age group estimated in each area]

State	Number of births	Birth rate	Fertility rate	Total fertility rate	Teenage birth rate		
					15-19 years		
					Total	15-17 years	18-19 years
United States ¹	3,941,553	14.6	65.6	2,058.5	51.1	30.4	82.0
Alabama	62,074	14.3	63.2	1,958.0	65.5	40.7	100.4
Alaska	9,926	16.2	73.1	2,413.0	42.4	24.8	68.6
Arizona	78,243	16.8	78.2	2,442.5	70.5	45.2	108.2
Arkansas	36,865	14.5	67.5	2,086.5	70.8	41.4	114.0
California	521,661	16.0	70.7	2,184.5	53.5	33.4	83.4
Colorado	59,577	15.0	67.2	2,166.5	48.7	29.0	79.0
Connecticut	43,820	13.4	61.3	1,902.0	35.8	21.4	58.6
Delaware	10,578	14.2	61.2	1,913.0	53.9	33.9	81.7
District of Columbia	7,686	14.7	60.8	1,936.5	86.7	65.5	110.8
Florida	195,637	13.1	65.1	2,080.0	55.5	33.3	90.8
Georgia	122,368	16.0	67.2	2,102.0	65.4	40.3	102.5
Hawaii	17,583	14.7	69.6	2,238.0	45.7	29.5	67.3
Idaho	19,391	15.8	72.3	2,276.0	44.8	24.5	73.1
Illinois	182,588	15.2	68.3	2,137.5	53.2	32.7	85.0
Indiana	85,122	14.4	64.3	2,020.0	53.3	28.9	89.5
Iowa	37,282	13.0	61.4	1,957.5	35.2	18.6	60.3
Kansas	38,422	14.6	67.1	2,134.0	47.0	24.8	81.1
Kentucky	54,329	13.8	61.6	1,924.0	57.0	31.5	94.2
Louisiana	66,888	15.3	66.7	2,055.5	65.4	40.4	100.6
Maine	13,733	11.0	49.7	1,613.5	30.4	14.9	54.5
Maryland	71,972	14.0	60.1	1,891.0	43.1	26.4	69.2
Massachusetts	81,411	13.2	58.5	1,743.0	30.8	18.2	49.5
Michigan	133,666	13.6	60.4	1,906.0	42.6	23.9	70.9
Minnesota	65,202	13.8	61.8	1,976.0	30.6	16.5	52.7
Mississippi	42,939	15.6	68.3	2,056.0	73.0	47.2	110.3
Missouri	75,358	13.9	62.9	2,003.5	51.2	28.6	85.7
Montana	10,795	12.3	59.0	1,948.5	37.1	19.8	63.3
Nebraska	23,534	14.2	65.2	2,081.0	37.0	20.5	61.6
Nevada	28,699	16.4	77.9	2,510.0	65.7	38.2	109.5
New Hampshire	14,429	12.2	52.3	1,650.0	27.1	13.1	50.0
New Jersey	114,550	14.1	64.3	2,006.0	34.6	20.2	56.9
New Mexico	27,318	15.7	72.2	2,302.0	69.0	44.2	107.5
New York	258,207	14.2	63.9	1,963.5	38.5	22.4	62.4
North Carolina	111,688	14.8	66.6	2,090.5	61.0	36.2	98.5
North Dakota	7,932	12.4	58.3	1,846.0	30.4	16.1	52.5
Ohio	152,794	13.6	61.2	1,932.0	48.1	26.7	80.3
Oklahoma	49,461	14.8	69.0	2,160.5	61.6	35.0	102.6
Oregon	45,273	13.8	64.7	2,081.0	47.4	26.3	80.0
Pennsylvania	145,899	12.2	56.9	1,804.0	36.9	21.8	60.2
Rhode Island	12,599	12.7	57.5	1,773.0	41.0	24.4	65.8
South Carolina	53,877	14.0	61.3	1,897.5	60.4	39.6	89.8
South Dakota	10,288	13.9	65.1	2,091.0	38.5	19.6	66.0
Tennessee	77,396	14.3	63.1	1,991.5	64.3	37.7	103.4
Texas	342,283	17.3	76.2	2,377.5	70.9	45.2	109.3
Utah	45,165	21.5	91.4	2,712.0	40.9	22.2	65.6
Vermont	6,582	11.1	49.1	1,569.5	24.4	11.4	44.6
Virginia	94,351	13.9	59.1	1,825.5	43.5	24.3	70.7
Washington	79,663	14.0	62.3	1,993.5	41.7	23.2	69.6
West Virginia	20,747	11.5	53.7	1,660.5	49.2	26.2	81.5
Wisconsin	67,450	12.9	58.5	1,862.5	34.8	19.6	58.1
Wyoming	6,252	13.0	60.9	1,956.0	47.8	22.8	86.5
Puerto Rico	60,412	15.7	66.8	1,906.5	74.3	54.4	102.3
Virgin Islands	1,800	15.2	61.4	2,122.5	62.0	40.1	94.5
Guam	4,318	29.0	139.0	4,166.5	104.8	60.4	176.1
American Samoa	1,688	27.2	124.6	3,718.5	43.9	17.3	86.4
Northern Marianas	1,462	21.9	65.0	1,792.5	65.5	50.4	83.7

¹ Excludes data for the territories.

Table 11. Live births by race of mother: United States, each State and territory, 1998

[By place of residence]

State	Number				
	All races	White	Black	American Indian ¹	Asian or Pacific Islander
United States ²	3,941,553	3,118,727	609,902	40,272	172,652
Alabama	62,074	41,522	20,033	144	375
Alaska	9,926	6,628	401	2,407	490
Arizona	78,243	68,265	2,653	5,555	1,770
Arkansas	36,865	28,296	7,979	218	372
California	521,661	424,659	36,745	3,373	56,884
Colorado	59,577	54,323	2,870	651	1,733
Connecticut	43,820	36,837	5,461	112	1,410
Delaware	10,578	7,700	2,621	35	222
District of Columbia	7,686	2,043	5,469	8	166
Florida	195,637	146,219	44,387	910	4,121
Georgia	122,368	78,195	41,247	240	2,686
Hawaii	17,583	4,176	560	187	12,660
Idaho	19,391	18,773	82	315	221
Illinois	182,588	140,002	35,699	259	6,628
Indiana	85,122	74,646	9,262	112	1,102
Iowa	37,282	35,229	1,094	195	764
Kansas	38,422	34,296	2,789	394	943
Kentucky	54,329	48,840	4,862	92	535
Louisiana	66,888	38,128	27,452	325	983
Maine	13,733	13,368	91	104	170
Maryland	71,972	44,565	24,040	204	3,163
Massachusetts	81,411	69,494	7,872	138	3,907
Michigan	133,666	105,599	24,264	727	3,076
Minnesota	65,202	57,291	3,664	1,174	3,073
Mississippi	42,939	22,972	19,351	235	381
Missouri	75,358	62,510	11,399	275	1,174
Montana	10,795	9,467	44	1,177	107
Nebraska	23,534	21,443	1,236	405	450
Nevada	28,699	24,359	2,248	450	1,642
New Hampshire	14,429	14,073	134	41	181
New Jersey	114,550	85,029	21,463	173	7,885
New Mexico	27,318	23,004	509	3,419	386
New York	258,207	186,251	54,463	666	16,827
North Carolina	111,688	79,335	28,242	1,733	2,378
North Dakota	7,932	7,035	87	737	73
Ohio	152,794	127,289	22,796	293	2,416
Oklahoma	49,461	38,917	4,803	4,866	875
Oregon	45,273	41,610	966	752	1,945
Pennsylvania	145,899	121,436	20,760	368	3,335
Rhode Island	12,599	11,029	967	147	456
South Carolina	53,877	34,169	18,868	146	694
South Dakota	10,288	8,392	85	1,719	92
Tennessee	77,396	59,308	16,884	127	1,077
Texas	342,283	291,817	40,212	773	9,481
Utah	45,165	42,937	282	669	1,277
Vermont	6,582	6,497	24	16	45
Virginia	94,351	67,815	22,016	215	4,305
Washington	79,663	69,024	3,111	1,828	5,700
West Virginia	20,747	19,850	760	12	125
Wisconsin	67,450	58,184	6,541	881	1,844
Wyoming	6,252	5,881	54	270	47
Puerto Rico	60,412	55,814	4,581	---	---
Virgin Islands	1,800	357	1,396	45	2
Guam	4,318	348	46	4	3,920
American Samoa	1,688	10	-	-	1,678
Northern Marianas	1,462	29	-	-	1,433

- Quantity zero.

--- Data not available.

¹ Includes births to Aleuts and Eskimos.² Excludes data for the territories.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 12. Live births by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, each State and territory, 1998

[By place of residence]

State	All origins	Origin of mother									Not stated
		Hispanic						Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ¹	White	Black	
United States ²	3,941,553	734,661	516,011	57,349	13,226	98,226	49,849	3,158,975	2,361,462	593,127	47,917
Alabama	62,074	1,345	883	77	22	140	223	60,726	40,203	20,021	3
Alaska	9,926	593	238	47	5	48	255	9,280	6,148	386	53
Arizona	78,243	29,682	28,385	209	40	567	481	47,560	38,621	2,465	1,001
Arkansas	36,865	1,724	1,436	25	2	225	36	35,091	26,545	7,970	50
California	521,661	247,854	215,600	1,956	764	24,847	4,687	270,360	176,886	35,282	3,447
Colorado	59,577	14,654	9,921	184	29	426	4,094	44,902	39,936	2,761	21
Connecticut	43,820	6,224	417	4,170	74	1,249	314	35,273	28,845	4,990	2,323
Delaware	10,578	753	356	265	3	119	10	9,795	6,937	2,604	30
District of Columbia	7,686	730	44	5	2	619	60	6,920	1,314	5,435	36
Florida	195,637	39,540	8,646	7,487	9,240	13,041	1,126	155,920	107,754	43,483	177
Georgia	122,368	8,239	6,319	450	124	1,037	309	113,115	69,495	40,913	1,014
Hawaii	17,583	2,240	428	642	12	74	1,084	15,332	3,529	524	11
Idaho	19,391	2,428	2,159	21	6	64	178	16,679	16,091	80	284
Illinois	182,588	34,780	28,938	2,917	163	1,012	1,750	147,733	105,367	35,481	75
Indiana	85,122	3,770	2,935	301	18	337	179	81,038	70,642	9,222	314
Iowa	37,282	1,739	1,387	45	3	189	115	35,120	33,188	1,934	423
Kansas	38,422	3,968	3,344	83	21	186	334	34,084	30,013	2,759	370
Kentucky	54,329	751	507	84	32	103	25	53,536	48,095	4,845	42
Louisiana	66,888	1,327	480	83	65	135	564	65,401	36,756	27,385	160
Maine	13,733	131	29	21	1	9	71	13,012	12,674	78	590
Maryland	71,972	3,580	616	266	55	1,788	855	67,932	40,893	23,741	460
Massachusetts	81,411	8,684	351	4,469	68	3,390	406	72,404	62,073	6,322	323
Michigan	133,666	5,945	4,420	467	65	334	659	120,556	92,972	24,007	7,165
Minnesota	65,202	2,967	2,322	82	26	320	217	58,838	51,089	3,594	3,397
Mississippi	42,939	403	195	20	6	27	155	42,479	22,523	19,343	57
Missouri	75,358	1,970	1,439	75	35	224	197	73,333	60,554	11,367	55
Montana	10,795	336	161	16	3	10	146	10,238	8,951	38	221
Nebraska	23,534	2,192	1,729	18	10	243	192	20,829	18,753	1,227	513
Nevada	28,699	8,727	7,086	170	165	640	666	19,768	15,603	2,182	204
New Hampshire	14,429	256	61	74	2	23	96	13,664	13,332	116	509
New Jersey	114,550	20,493	2,707	7,090	887	9,450	359	93,643	66,244	19,424	414
New Mexico	27,318	13,714	4,575	54	41	116	8,928	13,595	9,453	468	9
New York	258,207	52,259	6,660	15,333	454	21,475	8,337	189,966	124,220	48,533	15,982
North Carolina	111,688	8,104	6,011	552	79	1,373	89	103,537	71,294	28,153	47
North Dakota	7,932	152	96	10	2	11	33	7,535	6,707	82	245
Ohio	152,794	3,470	1,674	1,234	50	315	197	148,711	123,800	22,286	613
Oklahoma	49,461	3,616	2,670	111	13	93	729	45,321	35,059	4,688	524
Oregon	45,273	6,501	6,049	70	26	253	103	38,704	35,138	949	68
Pennsylvania	145,899	6,897	998	4,670	83	495	651	138,162	114,265	20,272	840
Rhode Island	12,599	1,865	100	630	19	1,015	101	9,117	7,743	828	1,617
South Carolina	53,877	1,307	859	131	28	231	58	52,501	32,885	18,840	69
South Dakota	10,288	153	113	2	1	20	17	10,125	8,252	82	10
Tennessee	77,396	1,997	1,332	150	36	265	214	75,381	57,345	16,853	18
Texas	342,283	151,487	134,880	1,074	316	7,151	8,066	189,650	139,980	39,631	1,146
Utah	45,165	4,879	3,771	94	14	522	478	40,152	37,982	263	134
Vermont	6,582	37	11	9	4	7	6	6,377	6,297	20	168
Virginia	94,351	5,806	1,232	532	60	3,501	481	88,476	62,119	21,913	69
Washington	79,663	10,074	8,256	218	31	313	1,256	67,028	57,214	2,888	2,561
West Virginia	20,747	93	45	8	2	5	33	20,621	19,728	757	33
Wisconsin	67,450	3,641	2,692	637	17	173	122	63,791	54,636	6,490	18
Wyoming	6,252	584	448	11	2	16	107	5,664	5,319	52	4
Puerto Rico	60,412	---	---	---	---	---	---	---	---	---	60,407
Virgin Islands	1,800	337	10	230	-	34	63	1,406	107	1,257	57
Guam	4,318	44	25	4	1	5	9	4,257	307	45	17
American Samoa	1,688	---	---	---	---	---	---	---	---	---	1,688
Northern Marianas	1,462	---	---	---	---	---	---	---	---	---	1,462

- Quantity zero.

--- Data not available.

¹ Includes races other than white and black.² Excludes data for the territories.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 13. Total number of births, rates, and percent of births with selected demographic characteristics, by specified race of mother and place of birth of mother: United States, 1998

Characteristic	All races	White	Black	American Indian ¹	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
Number										
Births	3,941,553	3,118,727	609,902	40,272	172,652	28,058	8,893	6,025	31,170	98,506
Rate										
Birth rate ²	14.6	14.0	17.7	17.1	16.4	---	---	---	---	---
Fertility rate ³	65.6	64.6	71.0	70.7	64.0	---	---	---	---	---
Total fertility rate ⁴	2,058.5	2,041.0	2,171.0	2,090.5	1,867.5	---	---	---	---	---
Sex ratio ⁵	1,047	1,049	1,034	1,038	1,061	1,067	1,030	1,044	1,067	1,061
Percent										
All births										
Births to mothers under 20 years	12.5	11.1	21.5	20.9	5.4	0.9	2.4	18.8	6.2	5.8
4th- and higher-order births	10.5	9.7	14.9	19.5	7.7	2.4	4.3	14.7	7.2	9.2
Births to unmarried mothers	32.8	26.3	69.1	59.3	15.6	6.4	9.7	51.1	19.7	15.2
Mothers completing 12 years or more of school	78.1	78.8	73.1	67.3	87.1	88.6	97.6	81.5	93.1	84.1
Mothers born in the 50 States and DC	80.5	82.2	89.1	95.8	16.6	9.8	43.7	97.9	19.4	10.2
Mothers born in the 50 States and DC										
Births to mothers under 20 years	13.6	11.4	23.3	21.4	16.0	3.7	4.7	19.0	17.6	21.0
4th- and higher-order births	9.9	8.7	15.0	19.8	8.1	3.9	5.5	14.8	7.5	6.5
Births to unmarried mothers	33.8	25.3	72.2	60.5	33.8	11.1	15.7	51.5	15.7	39.0
Mothers completing 12 years or more of school	82.2	84.5	72.2	67.2	86.5	97.0	96.2	81.4	88.0	81.9
Mothers born outside the 50 States and DC										
Births to mothers under 20 years	8.1	9.6	6.8	9.3	3.2	0.6	0.5	10.5	3.5	4.1
4th- and higher-order births	12.8	14.1	13.3	11.4	7.6	2.2	3.4	6.5	7.1	9.5
Births to unmarried mothers	28.5	31.1	42.7	31.0	11.9	5.8	5.0	31.5	15.1	13.1
Mothers completing 12 years or more of school	61.0	51.7	81.2	70.4	87.1	87.7	98.6	86.8	94.2	84.3

--- Data not available.

¹ Includes births to Aleuts and Eskimos.² Rate per 1,000 population.³ Rate per 1,000 women aged 15-44 years.⁴ Rates are sums of birth rates for 5-year age groups multiplied by 5.⁵ Male live births per 1,000 female live births.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 14. Total number of births, rates, and percent of births with selected demographic characteristics, by Hispanic origin of mother and by race for mothers of non-Hispanic origin and by place of birth of mother: United States, 1998

Characteristic	All origins ¹	Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ²	White	Black
Number										
Births	3,941,553	734,661	516,011	57,349	13,226	98,226	49,849	3,158,975	2,361,462	593,127
Rate										
Birth rate ³	14.6	24.3	26.4	19.0	10.0	⁷ 23.2		13.2	12.1	18.1
Fertility rate ⁴	65.6	101.1	112.1	75.5	50.1	⁷ 90.2		59.8	56.7	72.6
Total fertility rate ⁵	2,058.5	2,947.5	3,198.0	2,268.0	1,560.0	⁷ 2,719.0		1,919.5	1,837.0	2,235.5
Sex ratio ⁶	1,047	1,040	1,037	1,044	1,105	1,042	1,050	1,049	1,052	1,034
Percent										
All births										
Births to mothers under 20 years	12.5	16.9	17.5	21.9	6.9	10.3	20.2	11.6	9.4	21.6
4th- and higher-order births	10.5	13.6	14.7	12.3	5.7	11.1	11.0	9.8	8.5	15.0
Births to unmarried mothers	32.8	41.6	39.6	59.5	24.8	42.0	45.3	30.9	21.9	69.3
Mothers completing 12 years or more of school	78.1	50.7	44.8	64.1	87.0	61.5	66.4	84.4	87.2	73.3
Mothers born in the 50 States and DC	80.5	39.9	39.7	63.8	39.7	10.1	73.3	89.9	94.9	90.3
Mothers born in the 50 States and DC										
Births to mothers under 20 years	13.6	25.4	26.4	23.7	12.1	21.8	24.0	12.4	9.7	23.3
4th- and higher-order births	9.9	11.2	11.8	11.1	4.9	5.0	10.8	9.8	8.4	15.1
Births to unmarried mothers	33.8	48.0	46.3	61.8	25.5	45.8	47.5	32.4	22.5	72.3
Mothers completing 12 years or more of school	82.2	64.5	62.7	64.3	86.1	78.4	67.9	84.0	87.0	72.2
Mothers born outside the 50 States and DC										
Births to mothers under 20 years	8.1	11.2	11.6	18.7	3.5	9.0	9.8	3.9	3.5	6.3
4th- and higher-order births	12.8	15.2	16.6	14.5	6.2	11.8	11.5	9.5	9.7	13.7
Births to unmarried mothers	28.5	37.2	35.1	55.2	24.4	41.6	37.7	16.6	10.7	40.7
Mothers completing 12 years or more of school	61.0	41.4	32.7	63.6	87.6	59.5	62.2	87.6	90.2	83.5

¹ Includes origin not stated.

² Includes races other than white and black.

³ Rate per 1,000 population.

⁴ Rate per 1,000 women aged 15-44 years.

⁵ Rates are sums of birth rates for 5-year age groups multiplied by 5.

⁶ Male live births per 1,000 female live births.

⁷ Includes Central and South American and other and unknown Hispanic.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 15. Live births by race of mother and observed and seasonally adjusted birth and fertility rates, by month: United States, 1998

[Rates on an annual basis per 1,000 population for specified month. Birth rates based on the total population. Fertility rates based on women aged 15-44 years]

Month	Number			Observed		Seasonally adjusted ¹	
	All races ²	White	Black	Birth rate	Fertility rate	Birth rate	Fertility rate
Total	3,941,553	3,118,727	609,902	14.6	65.6	...	...
January	319,340	249,256	52,573	14.0	62.7	14.6	65.5
February	298,711	235,123	47,346	14.5	64.9	14.7	66.1
March	329,436	261,164	50,651	14.4	64.6	14.7	65.1
April	319,758	255,541	46,886	14.4	64.8	14.6	65.7
May	330,519	264,348	48,622	14.4	64.8	14.5	65.1
June	327,091	260,351	49,363	14.7	66.2	14.6	65.4
July	348,651	276,912	53,193	15.2	68.3	14.5	65.2
August	344,736	272,586	53,750	15.0	67.5	14.4	64.9
September	343,384	272,190	52,859	15.4	69.5	14.6	66.0
October	332,790	263,742	50,972	14.5	65.2	14.5	65.5
November	313,241	245,744	49,975	14.0	63.4	14.6	65.6
December	333,896	261,770	53,712	14.5	65.4	14.7	66.2

... Category not applicable.

¹ The method of seasonal adjustment, developed by the U.S. Bureau of the Census, is described in *The X11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15 (1967 revision).

² Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 16. Live births by day of week and index of occurrence by method of delivery, day of week, and race of mother: United States, 1998

Day of week and race of mother	Average number of births	Index of occurrence ¹				
		Total ²	Vaginal	Method of delivery		
				Total	Primary	Repeat
All races ³	10,799	100.0	100.0	100.0	100.0	100.0
Sunday	7,829	72.5	77.6	54.0	63.4	37.9
Monday	10,997	101.8	100.4	107.1	98.6	121.5
Tuesday	12,393	114.8	112.7	122.1	118.8	127.9
Wednesday	12,051	111.6	109.9	117.6	115.3	121.6
Thursday	11,874	110.0	108.5	115.4	113.7	118.3
Friday	11,700	108.3	105.4	119.2	114.3	127.5
Saturday	8,726	80.8	85.4	64.3	75.6	45.1
White	8,544	100.0	100.0	100.0	100.0	100.0
Sunday	6,037	70.6	75.9	51.6	61.3	35.4
Monday	8,754	102.5	100.9	107.9	99.1	122.5
Tuesday	9,898	115.8	113.8	123.2	120.1	128.5
Wednesday	9,603	112.4	110.7	118.5	116.3	122.2
Thursday	9,468	110.8	109.3	116.3	114.4	119.4
Friday	9,290	108.7	105.6	120.3	115.1	129.1
Saturday	6,744	78.9	83.6	61.9	73.4	42.6
Black	1,671	100.0	100.0	100.0	100.0	100.0
Sunday	1,323	79.1	84.1	62.5	70.9	47.9
Monday	1,659	99.3	98.0	104.0	96.9	116.5
Tuesday	1,862	111.5	109.3	118.6	114.2	126.3
Wednesday	1,819	108.8	107.1	114.5	111.6	119.5
Thursday	1,784	106.8	105.3	112.1	111.2	113.6
Friday	1,780	106.5	104.1	114.5	110.9	120.9
Saturday	1,468	87.8	92.1	73.6	84.1	55.0

¹ Index is the ratio of the average number of births by a specified method of delivery on a given day of the week to the average daily number of births by a specified method of delivery for the year, multiplied by 100.

² Includes method of delivery not stated.

³ Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 17. Number, rate, and percent of births to unmarried women by age, race, and Hispanic origin of mother: United States, 1998

Measure and age of mother	All races ¹	White		Black		Hispanic ²
		Total	Non-Hispanic	Total	Non-Hispanic	
Number						
All ages	1,293,567	821,441	517,153	421,383	410,977	305,442
Under 15 years	9,137	4,514	2,044	4,270	4,186	2,516
15-19 years	380,868	245,832	157,517	121,458	118,851	88,529
15 years	23,176	13,759	7,080	8,543	8,366	6,742
16 years	49,061	30,952	17,687	16,183	15,811	13,384
17 years	79,320	51,875	32,716	24,542	24,025	19,251
18 years	107,542	70,512	46,769	33,382	32,663	23,736
19 years	121,769	78,734	53,265	38,808	37,986	25,416
20-24 years	460,367	291,677	185,985	151,903	148,401	106,020
25-29 years	243,280	153,310	92,542	79,344	77,193	61,079
30-34 years	124,624	77,883	47,449	40,927	39,611	30,725
35-39 years	61,087	38,905	25,491	19,367	18,755	13,403
40 years and over	14,204	9,320	6,125	4,114	3,980	3,170
Rate per 1,000 unmarried women in specified group						
15-44 years ³	44.3	37.5	27.4	73.3	---	90.1
15-19 years	41.5	34.0	25.7	83.4	---	73.9
15-17 years	27.0	21.8	15.3	56.5	---	53.0
18-19 years	64.5	53.5	42.0	123.5	---	107.8
20-24 years	72.3	60.5	45.2	131.0	---	135.0
25-29 years	58.4	50.9	35.4	90.3	---	136.0
30-34 years	39.1	34.9	24.7	51.7	---	85.4
35-39 years	19.0	17.0	12.8	24.7	---	40.1
40-44 years ⁴	4.6	4.0	3.0	6.1	---	12.0
Percent of births to unmarried women						
All ages	32.8	26.3	21.9	69.1	69.3	41.6
Under 15 years	96.6	94.0	95.9	99.6	99.6	92.6
15-19 years	78.5	72.2	71.9	95.7	95.8	72.9
15 years	93.5	90.3	91.2	99.3	99.4	89.6
16 years	89.1	84.9	86.4	98.6	98.7	83.2
17 years	84.9	79.9	81.0	97.8	97.9	78.2
18 years	78.2	72.0	72.5	95.7	95.8	71.1
19 years	69.9	62.4	61.9	92.5	92.6	63.9
20-24 years	47.7	39.6	36.4	80.3	80.5	47.5
25-29 years	22.5	17.4	13.6	57.0	57.1	31.2
30-34 years	14.0	10.6	7.9	43.6	43.6	24.4
35-39 years	14.4	11.1	8.8	41.5	41.6	24.7
40 years and over	16.7	13.6	10.9	41.8	41.9	27.5

--- Data not available.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.³ Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.⁴ Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

NOTES: For 48 States and the District of Columbia, marital status is reported on the birth certificate; for Michigan and New York, mother's marital status is inferred; see Technical notes. Rates cannot be computed for unmarried non-Hispanic black women because the necessary populations are not available.

Table 18. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980-98, and by age, race, and Hispanic origin of mother: United States, 1980-98

[Rates are live births to unmarried women per 1,000 unmarried women in specified group, estimated as of July 1]

Year and race and Hispanic origin	Age of Mother								
	15-44 years ¹	15-19 years		20-24 years	25-29 years	30-34 years	35-39 years	40-44 years ²	
		Total	15-17 years						18-19 years
All races ³									
1998 ⁴	44.3	41.5	27.0	64.5	72.3	58.4	39.1	19.0	4.6
1997 ⁴	44.0	42.2	28.2	65.2	71.0	56.2	39.0	19.0	4.6
1996 ⁴	44.8	42.9	29.0	65.9	70.7	56.8	41.1	20.1	4.8
1995 ⁴	45.1	44.4	30.5	67.6	70.3	56.1	39.6	19.5	4.7
1994 ⁴	46.9	46.4	32.0	70.1	72.2	59.0	40.1	19.8	4.7
1993 ⁴	45.3	44.5	30.6	66.9	69.2	57.1	38.5	19.0	4.4
1992 ⁴	45.2	44.6	30.4	67.3	68.5	56.5	37.9	18.8	4.1
1991 ⁴	45.2	44.8	30.9	65.7	68.0	56.5	38.1	18.0	3.8
1990 ⁴	43.8	42.5	29.6	60.7	65.1	56.0	37.6	17.3	3.6
1989 ⁴	41.6	40.1	28.7	56.0	61.2	52.8	34.9	16.0	3.4
1988 ⁴	38.5	36.4	26.4	51.5	56.0	48.5	32.0	15.0	3.2
1987 ⁴	36.0	33.8	24.5	48.9	52.6	44.5	29.6	13.5	2.9
1986 ⁴	34.2	32.3	22.8	48.0	49.3	42.2	27.2	12.2	2.7
1985 ⁴	32.8	31.4	22.4	45.9	46.5	39.9	25.2	11.6	2.5
1984 ^{4,5}	31.0	30.0	21.9	42.5	43.0	37.1	23.3	10.9	2.5
1983 ^{4,5}	30.3	29.5	22.0	40.7	41.8	35.5	22.4	10.2	2.6
1982 ^{4,5}	30.0	28.7	21.5	39.6	41.5	35.1	21.9	10.0	2.7
1981 ^{4,5}	29.5	27.9	20.9	39.0	41.1	34.5	20.8	9.8	2.6
1980 ^{4,5}	29.4	27.6	20.6	39.0	40.9	34.0	21.1	9.7	2.6
1980 ^{5,6}	28.4	27.5	20.7	38.7	39.7	31.4	18.5	8.4	2.3
1975 ^{5,6}	24.5	23.9	19.3	32.5	31.2	27.5	17.9	9.1	2.6
1970 ^{6,7}	26.4	22.4	17.1	32.9	38.4	37.0	27.1	13.6	3.5
White, total									
1998 ⁴	37.5	34.0	21.8	53.5	60.5	50.9	34.9	17.0	4.0
1997 ⁴	37.0	34.2	22.4	53.6	59.2	49.3	34.4	16.7	3.9
1996 ⁴	37.6	34.5	22.7	54.1	59.0	49.9	36.1	17.8	4.3
1995 ⁴	37.5	35.5	23.6	55.4	58.0	48.7	34.2	16.9	4.2
1994 ⁴	38.3	36.2	24.1	56.4	58.1	49.7	34.2	17.3	4.3
1993 ⁴	35.9	33.6	22.1	52.4	54.2	46.7	32.2	16.4	3.9
1992 ⁴	35.2	33.0	21.6	51.5	52.7	45.4	31.5	16.2	3.6
1991 ⁴	34.6	32.8	21.8	49.6	51.5	44.6	31.1	15.2	3.2
1990 ⁴	32.9	30.6	20.4	44.9	48.2	43.0	29.9	14.5	3.2
1989 ⁴	30.2	28.0	19.3	40.2	43.8	39.1	26.8	13.1	2.9
1988 ⁴	27.4	25.3	17.6	36.8	39.2	35.4	24.2	12.1	2.7
1987 ⁴	25.3	23.2	16.2	34.5	36.6	32.0	22.3	10.7	2.4
1986 ⁴	23.9	21.8	14.9	33.5	34.2	30.5	20.1	9.7	2.2
1985 ⁴	22.5	20.8	14.5	31.2	31.7	28.5	18.4	9.0	2.0
1984 ^{4,5}	20.6	19.3	13.7	27.9	28.5	25.5	16.8	8.4	2.0
1983 ^{4,5}	19.8	18.7	13.6	26.4	27.1	23.8	15.9	7.8	2.0
1982 ^{4,5}	19.3	18.0	13.1	25.3	26.5	23.1	15.3	7.4	2.1
1981 ^{4,5}	18.6	17.2	12.6	24.6	25.8	22.3	14.2	7.2	1.9
1980 ^{4,5}	18.1	16.5	12.0	24.1	25.1	21.5	14.1	7.1	1.8
White, non-Hispanic									
1998 ⁴	27.4	25.7	15.3	42.0	45.2	35.4	24.7	12.8	3.0
1997 ⁴	27.0	25.9	15.9	42.3	43.8	34.4	24.5	12.4	2.8
1996 ⁴	28.3	27.0	16.9	43.8	44.5	35.7	26.6	13.9	3.3
1995 ⁴	28.2	27.7	17.6	44.5	43.8	34.9	25.3	13.0	3.2
1994 ⁴	28.5	28.1	18.0	45.0	43.8	35.0	24.8	12.9	3.1
1993 ⁴	---	---	---	---	---	---	---	---	---
1992 ⁴	---	---	---	---	---	---	---	---	---
1991 ⁴	---	---	---	---	---	---	---	---	---
1990 ^{4,8}	24.4	25.0	16.2	37.0	36.4	30.3	20.5	6.1	---

See footnotes at end of table.

Table 18. Birth rates for unmarried women by age of mother: United States, 1970, 1975, and 1980-98, and by age, race, and Hispanic origin of mother: United States, 1980-98 --Con.

[Rates are live births to unmarried women per 1,000 unmarried women in specified group, estimated as of July 1]

Year and race	Age of Mother								
	15-44 years ¹	15-19 years		20-24 years	25-29 years	30-34 years	35-39 years	40-44 years ²	
		Total	15-17 years						18-19 years
Black, total									
1998 ⁴	73.3	83.4	56.5	123.5	131.0	90.3	51.7	24.7	6.1
1997 ⁴	73.4	86.4	60.6	127.2	127.8	85.2	52.3	24.7	6.5
1996 ⁴	74.4	89.2	64.0	129.2	125.8	84.5	54.5	25.5	6.1
1995 ⁴	75.9	92.8	68.6	131.2	127.7	84.8	54.3	25.6	6.0
1994 ⁴	82.1	100.9	75.1	141.6	138.1	93.6	57.2	26.3	5.9
1993 ⁴	84.0	102.4	76.8	141.6	142.2	94.5	57.3	25.9	5.8
1992 ⁴	86.5	105.9	78.0	147.8	144.3	98.2	57.7	25.8	5.4
1991 ⁴	89.5	108.5	80.4	148.7	147.5	100.9	60.1	25.6	5.4
1990 ⁴	90.5	106.0	78.8	143.7	144.8	105.3	61.5	25.5	5.1
1989 ⁴	90.7	104.5	78.9	140.9	142.4	102.9	60.5	24.9	5.0
1988 ⁴	86.5	96.1	73.5	130.5	133.6	97.2	57.4	24.1	5.0
1987 ⁴	82.6	90.9	69.9	123.0	126.1	91.6	53.1	22.4	4.7
1986 ⁴	79.0	88.5	67.0	121.1	118.0	84.6	50.0	20.6	4.4
1985 ⁴	77.0	87.6	66.8	117.9	113.1	79.3	47.5	20.4	4.3
1984 ^{4,5}	75.2	86.1	66.5	113.6	107.9	77.8	43.8	19.4	4.3
1983 ^{4,5}	76.2	85.5	66.8	111.9	107.2	79.7	43.8	19.4	4.8
1982 ^{4,5}	77.9	85.1	66.3	112.7	109.3	82.7	44.1	19.5	5.2
1981 ^{4,5}	79.4	85.0	65.9	114.2	110.7	83.1	45.5	19.6	5.6
1980 ^{4,5}	81.1	87.9	68.8	118.2	112.3	81.4	46.7	19.0	5.5
Hispanic⁹									
1998 ⁴	90.1	73.9	53.0	107.8	135.0	136.0	85.4	40.1	12.0
1997 ⁴	91.4	75.2	55.0	109.5	139.1	135.0	86.1	42.0	12.2
1996 ⁴	93.2	74.5	53.4	110.4	146.5	139.1	90.8	42.3	12.3
1995 ⁴	95.0	78.7	56.3	117.9	148.9	133.8	89.2	43.4	12.2
1994 ⁴	101.2	82.6	59.0	123.6	154.8	141.6	95.5	48.4	14.0
1993 ⁴	95.2	74.6	51.9	114.6	140.5	137.7	90.9	47.8	14.1
1992 ⁴	95.3	72.9	51.0	110.5	142.2	138.3	91.8	48.1	14.5
1991 ⁴	93.7	72.4	50.5	109.6	135.4	137.5	89.1	47.7	14.2
1990 ⁴	89.6	65.9	45.9	98.9	129.8	131.7	88.1	50.8	13.7

--- Data not available.

1 Rates computed by relating total births to unmarried mothers, regardless of age of mother, to unmarried women aged 15-44 years.

2 Rates computed by relating births to unmarried mothers aged 40 years and over to unmarried women aged 40-44 years.

3 Includes races other than white and black.

4 Data for States in which marital status was not reported have been inferred and included with data from the remaining States; see Technical notes.

5 Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

6 Births to unmarried women are estimated for the United States from data for registration areas in which marital status of mother was reported; see Technical notes.

7 Based on a 50-percent sample of births.

8 Rates for 1990 based on data for 48 States and the District of Columbia which reported Hispanic origin on the birth certificate. Rate shown for ages 35-39 years is based on births to unmarried women aged 35-44 years.

9 Includes all persons of Hispanic origin of any race.

NOTE: Rates cannot be computed for unmarried non-Hispanic black women because the necessary populations are not available.

Table 19. Number and percent of births to unmarried women by race and Hispanic origin of mother: United States, each State and territory, 1998

[By place of residence]

State	Births to unmarried women						Percent unmarried					
	All races ¹	White		Black		Hispanic ²	All races ¹	White		Black		Hispanic ²
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States ³	1,293,567	821,441	517,153	421,383	410,977	305,442	32.8	26.3	21.9	69.1	69.3	41.6
Alabama	21,147	7,165	6,870	13,891	13,883	310	34.1	17.3	17.1	69.3	69.3	23.0
Alaska	3,088	1,445	1,308	159	155	171	31.1	21.8	21.3	39.7	40.2	28.8
Arizona	30,011	24,253	9,635	1,670	1,544	14,751	38.4	35.5	24.9	62.9	62.6	49.7
Arkansas	12,911	6,818	6,231	5,937	5,931	587	35.0	24.1	23.5	74.4	74.4	34.0
California	170,866	137,920	37,840	22,760	21,990	100,868	32.8	32.5	21.4	61.9	62.3	40.7
Colorado	15,227	13,080	7,395	1,568	1,499	5,825	25.6	24.1	18.5	54.6	54.3	39.8
Connecticut	13,676	9,563	5,301	3,753	3,441	3,987	31.2	26.0	18.4	68.7	69.0	64.1
Delaware	3,924	1,991	1,623	1,902	1,896	362	37.1	25.9	23.4	72.6	72.8	48.1
District of Columbia	4,834	477	108	4,323	4,305	370	62.9	23.3	8.2	79.0	79.2	50.7
Florida	71,626	40,822	27,690	29,792	29,315	13,738	36.6	27.9	25.7	67.1	67.4	34.7
Georgia	44,270	16,223	13,529	27,676	27,526	2,664	36.2	20.7	19.5	67.1	67.3	32.3
Hawaii	5,544	648	512	124	112	1,016	31.5	15.5	14.5	22.1	21.4	45.4
Idaho	4,265	3,993	3,152	33	33	779	22.0	21.3	19.6	40.2	41.3	32.1
Illinois	62,211	33,832	20,255	27,802	27,652	13,708	34.1	24.2	19.2	77.9	77.9	39.4
Indiana	28,553	21,223	19,561	7,150	7,126	1,592	33.5	28.4	27.7	77.2	77.3	42.2
Iowa	10,155	9,074	8,270	791	746	713	27.2	25.8	24.9	72.3	72.1	41.0
Kansas	10,663	8,384	6,823	1,925	1,903	1,534	27.8	24.4	22.7	69.0	69.0	38.7
Kentucky	16,327	12,736	12,517	3,474	3,465	216	30.1	26.1	26.0	71.5	71.5	28.8
Louisiana	30,041	9,300	8,877	20,378	20,342	423	44.9	24.4	24.2	74.2	74.3	31.9
Maine	4,197	4,051	3,817	45	40	43	30.6	30.3	30.1	49.5	51.3	32.8
Maryland	24,734	9,544	8,153	14,837	14,661	1,355	34.4	21.4	19.9	61.7	61.8	37.8
Massachusetts	21,210	15,887	11,537	4,597	3,710	5,207	26.1	22.9	18.6	58.4	58.7	60.0
Michigan	45,372	26,544	21,758	18,124	17,964	2,496	33.9	25.1	23.4	74.7	74.8	42.0
Minnesota	16,723	12,644	10,964	2,411	2,365	1,418	25.6	22.1	21.5	65.8	65.8	47.8
Mississippi	19,502	4,683	4,557	14,615	14,613	125	45.4	20.4	20.2	75.5	75.5	31.0
Missouri	25,668	16,545	15,817	8,773	8,752	745	34.1	26.5	26.1	77.0	77.0	37.8
Montana	3,230	2,372	2,184	22	20	133	29.9	25.1	24.4	50.0	52.6	39.6
Nebraska	6,168	4,964	3,960	851	847	862	26.2	23.1	21.1	68.9	69.0	39.3
Nevada	10,033	7,905	4,299	1,487	1,449	3,597	35.0	32.5	27.6	66.1	66.4	41.2
New Hampshire	3,482	3,384	3,135	60	53	97	24.1	24.0	23.5	44.8	45.7	37.9
New Jersey	32,369	17,705	8,464	14,128	13,058	10,222	28.3	20.8	12.8	65.8	67.2	49.9
New Mexico	12,033	9,200	2,432	310	277	6,890	44.0	40.0	25.7	60.9	59.2	50.2
New York	90,089	51,174	21,687	36,133	32,048	30,276	34.9	27.5	17.5	66.3	66.0	57.9
North Carolina	36,614	16,535	13,269	18,851	18,810	3,302	32.8	20.8	18.6	66.7	66.8	40.7
North Dakota	2,143	1,573	1,479	25	23	45	27.0	22.4	22.1	28.7	28.0	29.6
Ohio	51,940	34,062	32,416	17,493	17,068	1,703	34.0	26.8	26.2	76.7	76.6	49.1
Oklahoma	16,433	10,607	9,290	3,321	3,247	1,285	33.2	27.3	26.5	69.1	69.3	35.5
Oregon	13,458	12,044	9,575	632	624	2,492	29.7	28.9	27.2	65.4	65.8	38.3
Pennsylvania	47,925	31,222	26,964	16,083	15,727	4,217	32.8	25.7	23.6	77.5	77.6	61.1
Rhode Island	4,269	3,371	1,984	642	555	1,066	33.9	30.6	25.6	66.4	67.0	57.2
South Carolina	20,907	7,538	7,096	13,182	13,168	464	38.8	22.1	21.6	69.9	69.9	35.5
South Dakota	3,296	1,947	1,888	32	32	65	32.0	23.2	22.9	37.6	39.0	42.5
Tennessee	26,999	14,313	13,584	12,455	12,436	749	34.9	24.1	23.7	73.8	73.8	37.5
Texas	107,742	81,188	27,943	25,343	24,945	53,199	31.5	27.8	20.0	63.0	62.9	35.1
Utah	7,740	7,007	5,115	139	133	1,883	17.1	16.3	13.5	49.3	50.6	38.6
Vermont	1,841	1,811	1,739	13	13	7	28.0	27.9	27.6	*	*	*
Virginia	28,124	13,658	11,603	13,995	13,945	2,114	29.8	20.1	18.7	63.6	63.6	36.4
Washington	22,211	18,254	14,018	1,693	1,592	3,859	27.9	26.4	24.5	54.4	55.1	38.3
West Virginia	6,715	6,108	6,067	583	581	30	32.4	30.8	30.8	76.7	76.8	32.3
Wisconsin	19,211	13,016	11,455	5,373	5,332	1,633	28.5	22.4	21.0	82.1	82.2	44.9
Wyoming	1,850	1,638	1,407	27	25	249	29.6	27.9	26.5	50.0	48.1	42.6
Puerto Rico	28,368	25,489	---	2,872	---	---	47.0	45.7	---	62.7	---	---
Virgin Islands	1,253	205	45	1,037	939	225	69.6	57.4	42.1	74.3	74.7	66.8
Guam	2,341	67	59	11	11	7	54.2	19.3	19.2	*	*	*
American Samoa	578	1	---	-	---	---	34.2	*	---	*	---	---
Northern Marianas	667	6	---	-	---	---	45.6	*	---	*	---	---

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

- Quantity zero.

--- Data not available.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.³ Excludes data for the territories.

Table 20. Birth rates by age and race of father: United States, 1980-98

[Rates are live births per 1,000 men in specified group, enumerated as of April 1 for 1980 and 1990 and estimated as of July 1 for all other years. Figures for age of father not stated are distributed]

Year and race of father	15-54 years ¹	Age of father								
		15-19 years ²	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55 years and over
All races ³										
1998	51.0	21.6	84.8	112.6	99.2	53.9	20.9	7.2	2.5	0.3
1997	50.4	22.2	83.4	108.5	95.7	52.1	20.6	7.1	2.5	0.3
1996	51.1	23.0	84.4	107.7	94.3	51.5	20.4	6.9	2.5	0.3
1995	52.0	24.3	86.0	107.2	93.3	51.0	20.3	7.1	2.6	0.3
1994	53.2	25.0	87.3	108.8	93.3	50.9	20.2	7.2	2.6	0.3
1993	54.4	24.8	87.1	110.8	93.5	51.1	20.2	7.3	2.7	0.4
1992	55.8	24.6	87.7	113.1	94.2	51.3	20.4	7.3	2.7	0.4
1991	57.1	24.8	88.0	114.7	95.1	51.8	20.2	7.5	2.7	0.4
1990	58.4	23.5	88.0	116.4	97.8	53.0	21.0	7.5	2.8	0.4
1989	57.2	21.9	85.4	114.3	94.8	51.3	20.4	7.4	2.7	0.6
1988	55.8	19.6	82.4	111.6	93.2	49.9	19.9	7.1	2.7	0.4
1987	55.0	18.3	80.5	109.9	91.2	48.6	19.0	6.9	2.6	0.4
1986	54.8	17.9	80.3	109.6	90.3	46.8	18.3	6.7	2.6	0.4
1985	55.6	18.0	81.2	112.3	91.1	47.3	18.1	6.6	2.5	0.4
1984 ⁴	55.0	17.8	80.7	111.4	89.9	46.0	17.8	6.3	2.4	0.4
1983 ⁴	55.1	18.2	82.6	113.0	89.1	45.2	17.4	6.4	2.3	0.4
1982 ⁴	56.4	18.6	86.5	117.3	90.3	44.5	17.5	6.4	2.3	0.4
1981 ⁴	56.3	18.4	88.4	119.1	88.7	43.3	17.0	6.2	2.3	0.4
1980 ⁴	57.0	18.8	92.0	123.1	91.0	42.8	17.1	6.1	2.2	0.3
White										
1998	48.3	18.0	77.5	110.9	99.1	52.5	19.4	6.4	2.2	0.3
1997	47.7	18.2	76.1	106.8	95.3	50.6	19.1	6.3	2.1	0.3
1996	48.4	18.8	77.2	106.4	94.0	50.2	19.0	6.2	2.1	0.2
1995	49.2	19.7	78.5	105.7	92.9	49.6	19.0	6.3	2.2	0.2
1994	50.0	19.8	78.5	106.4	92.5	49.3	18.9	6.3	2.2	0.3
1993	50.9	19.2	77.9	108.0	92.4	49.2	18.6	6.4	2.2	0.2
1992	52.2	18.9	78.2	110.1	93.2	49.3	18.8	6.4	2.2	0.3
1991	53.3	19.1	78.4	111.5	93.6	49.7	18.5	6.5	2.2	0.3
1990	54.6	18.1	78.3	113.2	96.1	50.9	19.2	6.5	2.2	0.3
1989	53.3	16.7	75.9	110.8	93.0	49.1	18.7	6.3	2.1	0.4
1988	52.2	14.8	73.7	108.3	91.2	47.6	18.1	6.1	2.1	0.3
1987	51.6	13.9	72.8	107.0	89.5	46.2	17.3	5.9	2.0	0.3
1986	51.7	13.8	73.3	107.0	88.7	44.4	16.6	5.7	2.0	0.3
1985	52.6	14.0	74.7	109.9	89.5	44.8	16.3	5.6	1.9	0.3
1984 ⁴	51.8	14.0	74.3	108.8	87.9	43.5	16.0	5.3	1.9	0.3
1983 ⁴	52.0	14.4	76.3	110.2	86.8	42.6	15.5	5.3	1.8	0.3
1982 ⁴	53.1	14.9	80.1	114.2	87.5	41.7	15.6	5.3	1.9	0.3
1981 ⁴	52.9	15.0	81.7	115.8	85.8	40.3	15.0	5.2	1.8	0.3
1980 ⁴	53.4	15.4	84.9	119.4	87.8	39.7	15.0	5.1	1.8	0.3
Black										
1998	68.1	43.3	136.8	134.4	94.3	54.9	26.7	11.9	5.3	1.0
1997	68.0	45.6	136.6	130.2	91.8	53.3	26.1	11.7	5.5	1.1
1996	68.3	47.2	138.0	127.2	89.3	52.3	25.7	11.6	5.5	1.1
1995	70.1	50.5	140.5	126.6	89.6	52.6	25.7	12.1	5.6	1.1
1994	74.9	54.6	150.5	131.9	92.9	54.2	26.4	13.0	6.0	1.1
1993	78.3	56.6	153.8	136.0	95.3	56.6	27.7	13.5	6.4	1.3
1992	81.0	57.4	158.0	140.1	96.8	56.9	28.4	13.9	6.2	1.4
1991	83.4	58.0	158.5	143.3	100.1	58.8	29.4	14.2	6.7	1.4
1990	84.9	55.2	158.2	144.9	103.2	60.4	31.1	15.0	7.1	1.4
1989	84.1	52.9	153.4	143.5	101.4	59.9	31.1	14.9	6.9	2.7
1988	80.7	48.1	144.1	137.9	100.0	58.0	30.6	14.3	6.9	1.4
1987	78.3	44.6	136.1	133.9	97.4	58.0	30.0	13.8	6.6	1.3
1986	77.2	42.6	131.4	131.6	97.4	58.0	29.1	13.5	6.7	1.3
1985	77.2	41.8	129.5	132.7	97.3	59.4	29.5	13.3	6.5	1.2
1984 ⁴	76.7	40.9	128.0	132.2	98.3	58.4	29.3	13.3	6.1	1.2
1983 ⁴	77.2	40.7	129.1	134.4	99.0	59.6	29.6	13.5	6.0	1.2
1982 ⁴	79.5	40.3	133.4	141.2	103.6	61.1	29.6	13.9	6.0	1.2
1981 ⁴	80.4	38.9	138.4	145.6	104.3	61.3	29.7	13.3	5.7	1.2
1980 ⁴	83.0	40.1	145.3	152.8	109.6	62.0	31.2	13.6	5.9	1.1

¹ Rates computed by relating total births, regardless of age of father, to men aged 15-54 years.

² Rates computed by relating births of fathers under 20 years of age to men aged 15-19 years.

³ Includes races other than white and black.

⁴ Based on 100 percent of births in selected States and on a 50-percent sample of births in all other States; see Technical notes.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all men (including Hispanic men) are classified only according to their race; see Technical notes.

Table 21. Live births by educational attainment, and percent of mothers completing 12 years or more and 16 years or more of school, by age and race and Hispanic origin of mother: United States, 1998

Age and race of mother	Total	Years of school completed by mother						Percent 12 years or more	Percent 16 years or more
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated		
All races ¹									
All ages	3,941,553	220,175	627,981	1,266,102	859,688	907,220	60,387	78.1	23.4
Under 15 years	9,462	7,226	1,930	-	-	-	306	-	-
15-19 years	484,895	40,539	255,263	157,085	23,469	-	8,539	37.9	-
15 years	24,777	7,923	16,163	-	-	-	691	-	-
16 years	55,033	7,035	45,555	1,282	-	-	1,161	2.4	-
17 years	93,421	7,293	70,027	14,089	313	-	1,699	15.7	-
18 years	137,567	8,583	65,914	56,645	4,142	-	2,283	44.9	-
19 years	174,097	9,705	57,604	85,069	19,014	-	2,705	60.7	-
20-24 years	965,122	59,000	195,708	423,593	222,605	49,613	14,603	73.2	5.2
25-29 years	1,083,010	53,115	101,186	341,622	287,684	284,171	15,232	85.5	26.6
30-34 years	889,365	35,933	48,999	222,470	211,046	358,152	12,765	90.3	40.9
35-39 years	424,890	18,830	20,678	102,106	96,496	179,773	7,007	90.5	43.0
40 years and over	84,809	5,532	4,217	19,226	18,388	35,511	1,935	88.2	42.8
White, total									
All ages	3,118,727	193,814	459,077	972,793	677,997	772,352	42,694	78.8	25.1
Under 15 years	4,801	3,655	994	-	-	-	152	-	-
15-19 years	340,694	33,532	175,469	110,209	15,790	-	5,694	37.6	-
15 years	15,233	5,185	9,630	-	-	-	418	-	-
16 years	36,439	5,481	29,342	853	-	-	763	2.4	-
17 years	64,951	6,280	47,719	9,583	223	-	1,146	15.4	-
18 years	97,971	7,752	46,719	39,168	2,811	-	1,521	43.5	-
19 years	126,100	8,834	42,059	60,605	12,756	-	1,846	59.0	-
20-24 years	736,664	54,858	148,106	318,400	166,183	38,765	10,352	72.1	5.3
25-29 years	880,688	48,475	79,388	270,295	230,804	240,819	10,907	85.3	27.7
30-34 years	737,532	32,038	37,328	178,073	172,422	308,541	9,130	90.5	42.4
35-39 years	349,799	16,579	14,924	81,030	78,124	154,086	5,056	90.9	44.7
40 years and over	68,549	4,677	2,868	14,786	14,674	30,141	1,403	88.8	44.9
White, non-Hispanic									
All ages	2,361,462	41,601	258,189	753,356	575,079	712,350	20,887	87.2	30.4
Under 15 years	2,132	1,724	363	-	-	-	45	-	-
15-19 years	219,169	12,459	110,348	81,760	12,070	-	2,532	43.3	-
15 years	7,767	2,560	5,043	-	-	-	164	-	-
16 years	20,464	2,412	17,187	557	-	-	308	2.8	-
17 years	40,388	2,430	30,731	6,569	152	-	506	16.9	-
18 years	64,472	2,622	30,311	28,786	2,029	-	724	48.3	-
19 years	86,078	2,435	27,076	45,848	9,889	-	830	65.4	-
20-24 years	511,101	11,307	84,569	241,572	135,277	33,964	4,412	81.1	6.7
25-29 years	678,227	8,058	37,380	209,180	196,774	221,351	5,484	93.2	32.9
30-34 years	603,639	4,793	16,456	142,127	149,392	285,993	4,878	96.5	47.8
35-39 years	291,202	2,484	7,599	66,628	68,699	143,006	2,786	96.5	49.6
40 years and over	55,992	776	1,474	12,089	12,867	28,036	750	95.9	50.8
Black, total									
All ages	609,902	16,426	144,252	234,052	137,671	65,610	11,891	73.1	11.0
Under 15 years	4,289	3,298	852	-	-	-	139	-	-
15-19 years	126,937	5,922	70,819	41,239	6,634	-	2,323	38.4	-
15 years	8,599	2,475	5,892	-	-	-	232	-	-
16 years	16,414	1,322	14,389	375	-	-	328	2.3	-
17 years	25,090	826	19,769	3,972	70	-	453	16.4	-
18 years	34,885	652	16,993	15,485	1,142	-	613	48.5	-
19 years	41,949	647	13,776	21,407	5,422	-	697	65.0	-
20-24 years	189,088	2,523	41,178	88,552	46,265	7,460	3,110	76.5	4.0
25-29 years	139,302	1,886	17,136	53,834	41,968	21,789	2,689	86.1	15.9
30-34 years	93,785	1,540	8,881	32,149	27,356	21,691	2,168	88.6	23.7
35-39 years	46,657	937	4,361	15,182	12,899	12,101	1,177	88.4	26.6
40 years and over	9,844	320	1,025	3,096	2,549	2,569	285	85.9	26.9

See footnotes at end of table.

Table 21. Live births by educational attainment, and percent of mothers completing 12 years or more and 16 years or more of school, by age and race of mother: United States, 1998 --Con.

Age and race of mother	Total	Years of school completed by mother						Percent 12 years or more	Percent 16 years or more
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated		
Black, non-Hispanic									
All ages	593,127	15,218	140,374	228,391	134,525	64,117	10,502	73.3	11.0
Under 15 years	4,204	3,252	821	-	-	-	131	-	-
15-19 years	124,076	5,719	69,264	40,453	6,490	-	2,150	38.5	-
15 years	8,420	2,430	5,766	-	-	-	224	-	-
16 years	16,021	1,284	14,069	366	-	-	302	2.3	-
17 years	24,542	790	19,379	3,887	69	-	417	16.4	-
18 years	34,089	618	16,599	15,198	1,115	-	559	48.7	-
19 years	41,004	597	13,451	21,002	5,306	-	648	65.2	-
20-24 years	184,263	2,243	40,059	86,689	45,175	7,295	2,802	76.7	4.0
25-29 years	135,158	1,580	16,512	52,377	40,978	21,331	2,380	86.4	16.1
30-34 years	90,827	1,313	8,515	31,182	26,774	21,184	1,859	89.0	23.8
35-39 years	45,096	825	4,221	14,677	12,614	11,800	959	88.6	26.7
40 years and over	9,503	286	982	3,013	2,494	2,507	221	86.3	27.0
Hispanic ²									
All ages	734,661	152,984	201,439	215,440	98,754	50,546	15,498	50.7	7.0
Under 15 years	2,716	1,965	658	-	-	-	93	-	-
15-19 years	121,388	21,142	65,440	28,406	3,746	-	2,654	27.1	-
15 years	7,525	2,636	4,662	-	-	-	227	-	-
16 years	16,079	3,083	12,293	300	-	-	403	1.9	-
17 years	24,630	3,855	17,093	3,062	72	-	548	13.0	-
18 years	33,400	5,138	16,406	10,411	787	-	658	34.2	-
19 years	39,754	6,430	14,986	14,633	2,887	-	818	45.0	-
20-24 years	223,113	43,717	63,536	75,949	30,602	4,576	4,733	50.9	2.1
25-29 years	196,012	40,628	42,086	59,819	32,604	16,929	3,946	56.9	8.8
30-34 years	125,702	27,431	20,975	34,858	21,424	18,395	2,619	60.7	14.9
35-39 years	54,195	14,179	7,344	13,827	8,716	8,962	1,167	59.4	16.9
40 years and over	11,535	3,922	1,400	2,581	1,662	1,684	286	52.7	15.0

- Quantity zero.

¹ Includes races other than white and black.² Includes all persons of Hispanic origin of any race.

Table 22. Number of live births and percent distribution by weight gain of mother during pregnancy and median weight gain, according to period of gestation, race and Hispanic origin of mother: Total of 49 reporting States and the District of Columbia, 1998

Period of gestation ¹ and race and Hispanic origin of mother	All births	Weight gain during pregnancy									Median weight gain in pounds
		Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated	
Number											
All gestation periods ²											
All races ³	3,419,892	354,491	336,238	440,076	576,052	441,365	400,595	213,799	373,720	283,556	...
White, total	2,694,068	253,864	253,423	348,561	465,053	364,338	327,116	175,901	298,892	206,920	...
White, non-Hispanic	2,184,576	196,210	198,566	285,431	386,210	308,247	275,964	149,549	254,242	130,157	...
Black, total	573,157	85,827	66,653	69,930	84,121	57,884	57,185	29,928	62,858	58,771	...
Black, non-Hispanic	557,845	84,284	65,085	68,039	81,938	55,963	55,533	28,913	61,001	57,089	...
Hispanic ⁴	486,807	55,677	53,310	60,739	74,897	53,141	48,671	25,008	42,808	72,556	...
Under 37 weeks											
All races ³	401,538	62,946	48,966	52,014	59,305	40,435	36,469	19,149	36,846	45,408	...
White, total	284,427	39,268	33,173	37,681	43,571	30,906	27,531	14,817	27,776	29,704	...
White, non-Hispanic	224,932	29,822	25,814	30,596	35,505	25,633	22,788	12,436	23,499	18,839	...
Black, total	100,650	21,260	13,657	11,977	13,199	7,912	7,574	3,644	8,006	13,421	...
Black, non-Hispanic	98,630	20,977	13,414	11,696	12,952	7,700	7,403	3,544	7,846	13,098	...
Hispanic ⁴	57,708	9,229	7,192	6,923	7,852	5,096	4,612	2,307	4,116	10,381	...
37-39 weeks											
All races ³	1,622,245	163,251	162,370	217,188	283,205	213,809	190,026	99,326	167,109	125,961	...
White, total	1,279,913	118,355	123,042	172,202	228,694	176,009	154,523	81,340	132,978	92,770	...
White, non-Hispanic	1,039,733	91,688	96,713	141,199	190,070	148,951	130,203	69,040	113,047	58,822	...
Black, total	266,817	37,768	31,190	33,795	40,755	28,166	27,387	14,190	28,596	24,970	...
Black, non-Hispanic	259,796	37,097	30,445	32,919	39,699	27,240	26,605	13,746	27,743	24,302	...
Hispanic ⁴	230,166	25,782	25,622	29,906	36,665	25,707	23,264	11,779	19,250	32,191	...
40 weeks and over											
All races ³	1,383,990	127,260	124,279	169,808	232,633	186,445	173,521	95,036	169,207	105,801	...
White, total	1,122,104	95,655	96,846	138,094	192,209	157,010	144,715	79,554	137,788	80,233	...
White, non-Hispanic	914,798	74,310	75,794	113,221	160,194	133,355	122,700	67,934	117,438	49,852	...
Black, total	203,526	26,513	21,666	24,013	30,025	21,715	22,119	12,046	26,157	19,272	...
Black, non-Hispanic	197,365	25,935	21,088	23,286	29,150	20,934	21,423	11,576	25,317	18,656	...
Hispanic ⁴	196,895	20,497	20,383	23,727	30,252	22,235	20,720	10,869	19,344	28,868	...
Percent distribution											
All gestation periods ²											
All races ³	100.0	11.3	10.7	14.0	18.4	14.1	12.8	6.8	11.9	...	30.5
White, total	100.0	10.2	10.2	14.0	18.7	14.6	13.2	7.1	12.0	...	30.7
White, non-Hispanic	100.0	9.6	9.7	13.9	18.8	15.0	13.4	7.3	12.4	...	30.8
Black, total	100.0	16.7	13.0	13.6	16.4	11.3	11.1	5.8	12.2	...	29.9
Black, non-Hispanic	100.0	16.8	13.0	13.6	16.4	11.2	11.1	5.8	12.2	...	29.8
Hispanic ⁴	100.0	13.4	12.9	14.7	18.1	12.8	11.7	6.0	10.3	...	30.0
Under 37 weeks											
All races ³	100.0	17.7	13.7	14.6	16.7	11.4	10.2	5.4	10.3	...	27.9
White, total	100.0	15.4	13.0	14.8	17.1	12.1	10.8	5.8	10.9	...	29.0
White, non-Hispanic	100.0	14.5	12.5	14.8	17.2	12.4	11.1	6.0	11.4	...	29.8
Black, total	100.0	24.4	15.7	13.7	15.1	9.1	8.7	4.2	9.2	...	25.4
Black, non-Hispanic	100.0	24.5	15.7	13.7	15.1	9.0	8.7	4.1	9.2	...	25.4
Hispanic ⁴	100.0	19.5	15.2	14.6	16.6	10.8	9.7	4.9	8.7	...	26.3
37-39 weeks											
All races ³	100.0	10.9	10.9	14.5	18.9	14.3	12.7	6.6	11.2	...	30.5
White, total	100.0	10.0	10.4	14.5	19.3	14.8	13.0	6.9	11.2	...	30.6
White, non-Hispanic	100.0	9.3	9.9	14.4	19.4	15.2	13.3	7.0	11.5	...	30.7
Black, total	100.0	15.6	12.9	14.0	16.9	11.6	11.3	5.9	11.8	...	30.0
Black, non-Hispanic	100.0	15.8	12.9	14.0	16.9	11.6	11.3	5.8	11.8	...	30.0
Hispanic ⁴	100.0	13.0	12.9	15.1	18.5	13.0	11.8	5.9	9.7	...	29.9
40 weeks and over											
All races ³	100.0	10.0	9.7	13.3	18.2	14.6	13.6	7.4	13.2	...	30.9
White, total	100.0	9.2	9.3	13.3	18.4	15.1	13.9	7.6	13.2	...	31.0
White, non-Hispanic	100.0	8.6	8.8	13.1	18.5	15.4	14.2	7.9	13.6	...	31.6
Black, total	100.0	14.4	11.8	13.0	16.3	11.8	12.0	6.5	14.2	...	30.4
Black, non-Hispanic	100.0	14.5	11.8	13.0	16.3	11.7	12.0	6.5	14.2	...	30.4
Hispanic ⁴	100.0	12.2	12.1	14.1	18.0	13.2	12.3	6.5	11.5	...	30.3

... Category not applicable.

¹ Expressed in completed weeks.² Includes births with period of gestation not stated.³ Includes races other than white and black and origin not stated.⁴ Includes all persons of Hispanic origin of any race.

NOTE: Excludes data for California, which did not require reporting of weight gain during pregnancy.

Table 23. Percent low birthweight by weight gain of mother during pregnancy, period of gestation, and race and Hispanic origin of mother: Total of 49 reporting States and the District of Columbia, 1998

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

Period of gestation ¹ and race and Hispanic origin of mother	Total	Weight gain during pregnancy								
		Less than 16 pounds	16-20 pounds	21-25 pounds	26-30 pounds	31-35 pounds	36-40 pounds	41-45 pounds	46 pounds or more	Not stated
All gestation periods ²										
All races ³	7.8	14.2	10.7	7.9	6.3	5.4	5.1	5.1	5.4	11.8
White, total	6.7	11.9	9.2	7.0	5.5	4.8	4.6	4.6	5.0	9.9
White, non-Hispanic	6.6	12.1	9.4	7.0	5.5	4.8	4.5	4.7	5.0	10.6
Black, total	13.1	21.4	16.4	12.9	10.8	9.1	8.2	7.7	7.3	18.8
Black, non-Hispanic	13.3	21.5	16.5	13.0	10.9	9.2	8.3	7.8	7.4	18.9
Hispanic, total ⁴	6.9	11.3	8.6	6.6	5.7	4.8	4.8	4.4	4.7	8.7
Mexican ⁴	6.3	10.1	7.4	6.0	5.1	4.2	4.3	4.0	4.3	8.0
Puerto Rican ⁴	9.7	17.0	13.1	9.3	8.4	7.3	6.7	5.7	5.8	15.4
Cuban ⁴	6.4	12.1	11.2	6.3	5.8	4.3	4.4	5.7	4.8	11.0
Central and South American ⁴	6.5	11.4	8.8	6.3	5.3	5.0	4.7	4.1	4.9	8.3
Other and unknown Hispanic ⁴	7.8	12.9	10.9	7.8	6.7	5.0	4.8	4.8	4.7	11.0
Under 37 weeks										
All races ³	44.0	57.4	49.1	42.7	38.6	36.3	34.9	35.8	35.7	52.9
White, total	41.9	54.6	47.3	41.1	37.4	35.4	34.2	35.4	35.7	50.2
White, non-Hispanic	43.1	56.6	49.1	42.5	38.4	36.4	35.2	36.2	36.7	54.5
Black, total	50.3	63.3	54.0	48.3	43.0	40.6	37.8	38.3	36.1	59.7
Black, non-Hispanic	50.4	63.4	54.1	48.5	43.1	40.7	37.8	38.5	36.2	59.7
Hispanic ⁴	37.1	47.8	40.8	34.7	32.6	30.0	29.4	29.7	29.5	41.9
37-39 weeks										
All races ³	4.2	6.6	5.6	4.5	3.7	3.2	3.1	3.1	3.2	5.2
White, total	3.6	5.6	4.8	3.9	3.1	2.8	2.8	2.8	2.9	4.3
White, non-Hispanic	3.5	5.7	4.8	3.9	3.1	2.8	2.7	2.8	2.8	4.4
Black, total	6.9	9.7	8.4	7.1	6.3	5.5	4.9	4.9	4.5	8.4
Black, non-Hispanic	6.9	9.7	8.5	7.2	6.4	5.6	5.0	5.0	4.5	8.5
Hispanic ⁴	3.9	5.6	4.9	4.1	3.5	3.0	3.1	2.7	3.1	4.3
40 weeks and over										
All races ³	1.5	2.7	2.2	1.7	1.4	1.1	1.0	0.9	1.0	1.9
White, total	1.2	2.2	1.8	1.4	1.1	0.9	0.8	0.8	0.9	1.5
White, non-Hispanic	1.2	2.2	1.8	1.4	1.1	0.9	0.8	0.8	0.8	1.4
Black, total	3.0	4.6	4.1	3.3	2.8	2.2	2.1	1.7	1.6	3.7
Black, non-Hispanic	3.0	4.6	4.1	3.3	2.8	2.3	2.1	1.8	1.6	3.8
Hispanic ⁴	1.5	2.2	1.9	1.6	1.3	1.2	1.2	0.9	1.0	1.7

¹ Expressed in completed weeks.² Includes births with period of gestation not stated.³ Includes races other than white and black and origin not stated.⁴ Includes all persons of Hispanic origin of any race.

NOTE: Excludes data for California, which did not require reporting of weight gain during pregnancy.

Table 24. Percent of births with selected medical or health characteristics, by specified race of mother, by place of birth of mother: United States, 1998

Characteristic	All races	White	Black	American Indian ¹	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
All Births										
Mother										
Prenatal care beginning in the first trimester	82.8	84.8	73.3	68.8	83.1	88.5	90.2	78.8	84.2	80.9
Late or no prenatal care	3.9	3.3	7.0	8.5	3.6	2.2	2.1	4.7	3.1	4.2
Smoker ²	12.9	14.0	9.5	20.2	3.1	0.8	4.8	16.8	3.3	2.4
Drinker ³	1.1	1.0	1.4	3.2	0.4	0.2	0.9	1.4	0.4	0.3
Weight gain of less than 16 lbs ⁴	11.3	10.2	16.7	15.3	9.6	5.9	11.0	9.8	7.9	10.8
Median weight gain ⁴	30.5	30.7	29.9	30.2	30.1	30.4	26.0	31.9	30.5	29.8
Cesarean delivery rate	21.2	21.0	22.4	18.6	19.4	19.3	15.6	16.2	22.8	18.9
Infant										
Preterm births ⁵	11.6	10.5	17.5	12.2	10.4	7.6	8.7	12.0	11.8	10.7
Birthweight										
Very low birthweight ⁶	1.4	1.1	3.1	1.2	1.1	0.7	0.8	1.5	1.3	1.1
Low birthweight ⁷	7.6	6.5	13.0	6.8	7.4	5.3	7.5	7.2	8.2	7.8
4,000 grams or more ⁸	10.1	11.2	5.4	12.4	5.9	6.3	4.7	9.5	6.1	5.6
5-minute Apgar score of less than 7 ⁹ ..	1.4	1.2	2.4	1.4	1.1	0.7	0.7	1.3	1.2	1.1
Births to mothers born in the 50 States and D.C.										
Mother										
Prenatal care beginning in the first trimester	84.2	86.8	73.0	68.7	82.4	91.4	91.8	78.8	81.6	79.0
Late or no prenatal care	3.4	2.6	7.0	8.5	3.9	1.4	1.6	4.7	3.8	5.1
Smoker ²	14.9	15.8	10.4	20.9	10.7	5.9	7.5	17.0	8.4	8.8
Drinker ³	1.2	1.1	1.5	3.3	1.0	*	*	1.4	0.9	0.9
Weight gain of less than 16 lbs ⁴	11.1	9.8	17.1	15.5	8.5	6.7	9.5	9.7	7.8	7.9
Median weight gain ⁴	30.6	30.8	29.9	30.2	30.7	30.3	27.7	31.8	30.8	30.9
Cesarean delivery rate	21.3	21.2	22.1	18.6	16.8	16.9	18.4	16.2	16.4	16.7
Infant										
Preterm births ⁵	11.8	10.5	17.9	12.2	11.2	9.5	10.6	12.1	11.5	11.2
Birthweight										
Very low birthweight ⁶	1.5	1.2	3.1	1.2	1.3	0.9	1.1	1.5	1.4	1.2
Low birthweight ⁷	7.8	6.6	13.4	6.8	7.7	7.6	8.0	7.2	8.4	7.5
4,000 grams or more ⁸	10.3	11.4	5.0	12.6	7.5	6.3	5.7	9.5	6.4	8.0
5-minute Apgar score of less than 7 ⁹ ..	1.5	1.3	2.4	1.4	1.3	*	1.0	1.4	1.1	1.4
Births to mothers born outside the 50 States and D.C.										
Mother										
Prenatal care beginning in the first trimester	77.1	75.7	76.2	71.4	83.3	88.3	88.9	77.4	84.8	81.1
Late or no prenatal care	5.8	6.3	6.4	9.9	3.5	2.2	2.5	*	2.9	4.1
Smoker ²	2.6	3.0	1.8	5.3	1.6	0.4	2.8	*	2.0	1.7
Drinker ³	0.5	0.5	0.4	*	0.3	*	1.0	*	0.2	0.3
Weight gain of less than 16 lbs ⁴	12.2	12.7	13.5	11.8	9.8	5.8	12.0	*	7.9	11.1
Median weight gain ⁴	30.0	29.9	30.1	30.1	29.9	30.4	25.6	33.0	30.4	29.3
Cesarean delivery rate	20.6	20.2	24.7	18.7	19.9	19.6	13.7	17.4	24.4	19.1
Infant										
Preterm births ⁵	10.8	10.6	13.9	12.1	10.2	7.4	7.3	*	11.9	10.6
Birthweight										
Very low birthweight ⁶	1.2	1.0	2.6	1.4	1.1	0.7	0.7	*	1.3	1.1
Low birthweight ⁷	6.5	5.9	9.6	7.3	7.3	5.1	7.1	*	8.2	7.8
4,000 grams or more ⁸	9.0	10.0	8.4	8.0	5.6	6.3	4.0	*	6.0	5.3
5-minute Apgar score of less than 7 ⁹ ..	1.2	1.1	1.9	*	1.0	0.6	*	*	1.2	1.1

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

¹ Includes births to Aleuts and Eskimos.

² Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not report tobacco use on the birth certificate.

³ Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.

⁴ Excludes data for California, which did not report weight gain on the birth certificate. Median weight shown in pounds.

⁵ Born prior to 37 completed weeks of gestation.

⁶ Birthweight of less than 1,500 grams (3 lb 4 oz).

⁷ Birthweight of less than 2,500 grams (5 lb 8 oz).

⁸ Equivalent to 8 lb 14 oz.

⁹ Excludes data for California and Texas, which did not report 5-minute Apgar score on the birth certificate.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 25. Percent of births with selected medical or health characteristics, by Hispanic origin of mother and by race for mothers of non-Hispanic origin and by place of birth of mother: United States, 1998

Characteristic	Origin of mother									
	All origins ¹	Hispanic					Non-Hispanic			
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ²	White	Black
All Births										
Mother										
Prenatal care beginning in the first trimester	82.8	74.3	72.8	76.9	91.8	78.0	74.8	84.8	87.9	73.3
Late or no prenatal care	3.9	6.3	6.8	5.1	1.2	4.9	6.0	3.4	2.4	7.0
Smoker ³	12.9	4.0	2.8	10.7	3.7	1.5	8.0	14.4	16.2	9.6
Drinker ⁴	1.1	0.6	0.5	0.9	0.5	0.4	1.3	1.2	1.1	1.4
Weight gain of less than 16 lbs ⁵	11.3	13.4	14.7	12.7	7.8	11.1	12.0	11.0	9.6	16.8
Median weight gain ⁵	30.5	30.0	28.6	30.5	32.2	30.3	30.4	30.6	30.8	29.8
Cesarean delivery rate	21.2	20.6	20.0	21.1	31.0	22.2	19.8	21.3	21.2	22.4
Infant										
Preterm births ⁶	11.6	11.4	11.0	13.9	11.4	11.6	12.1	11.6	10.2	17.6
Birthweight										
Very low birthweight ⁷	1.4	1.1	1.0	1.9	1.3	1.2	1.4	1.5	1.1	3.1
Low birthweight ⁸	7.6	6.4	6.0	9.7	6.5	6.5	7.6	7.8	6.6	13.2
4,000 grams or more ⁹	10.1	9.0	9.3	7.1	10.0	9.1	7.7	10.3	11.8	5.3
5-minute Apgar score of less than 7 ¹⁰ ...	1.4	1.2	1.2	1.4	0.7	1.0	1.2	1.5	1.3	2.4
Births to mothers born in the 50 States and D.C.										
Mother										
Prenatal care beginning in the first trimester	84.2	76.4	76.0	76.8	91.5	81.7	75.0	85.0	88.1	73.0
Late or no prenatal care	3.4	5.1	5.2	5.0	1.4	3.5	5.9	3.3	2.3	7.0
Smoker ³	14.9	7.1	5.4	12.1	5.1	4.7	10.0	15.5	16.7	10.4
Drinker ⁴	1.2	1.0	0.9	0.9	0.7	0.7	1.6	1.2	1.1	1.5
Weight gain of less than 16 lbs ⁵	11.1	12.4	12.9	12.1	7.8	8.2	12.3	11.0	9.6	17.1
Median weight gain ⁵	30.6	30.0	28.6	30.5	32.2	30.3	30.4	30.6	30.8	29.8
Cesarean delivery rate	21.3	20.7	20.7	20.8	27.0	20.5	19.6	21.4	21.3	22.2
Infant										
Preterm births ⁶	11.8	12.1	11.7	13.6	11.3	11.4	12.6	11.7	10.3	17.9
Birthweight										
Very low birthweight ⁷	1.5	1.3	1.2	1.8	1.3	1.4	1.4	1.5	1.1	3.1
Low birthweight ⁸	7.8	7.2	6.7	9.7	7.0	7.1	8.1	7.9	6.6	13.5
4,000 grams or more ⁹	10.3	8.1	8.4	7.2	8.9	8.4	7.1	10.5	11.9	5.0
5-minute Apgar score of less than 7 ¹⁰ ...	1.5	1.3	1.2	1.4	0.8	1.1	1.3	1.5	1.3	2.4
Births to mothers born outside the 50 States and D.C.										
Mother										
Prenatal care beginning in the first trimester	77.1	72.9	70.7	77.2	92.0	77.6	74.7	83.0	85.5	76.6
Late or no prenatal care	5.8	7.0	7.9	5.1	1.2	5.0	5.9	4.0	3.5	6.4
Smoker ³	2.6	1.6	0.9	8.3	2.8	1.2	1.9	3.8	6.9	1.6
Drinker ⁴	0.5	0.3	0.3	0.9	0.3	0.3	0.5	0.6	1.0	0.4
Weight gain of less than 16 lbs ⁵	12.2	14.3	16.2	13.7	7.8	11.5	11.0	10.1	8.5	13.9
Median weight gain ⁵	30.0	28.5	26.9	30.2	32.2	30.2	30.2	30.3	30.7	29.8
Cesarean delivery rate	20.6	20.5	19.6	21.8	33.7	22.4	20.5	20.7	19.7	24.6
Infant										
Preterm births ⁶	10.8	11.0	10.6	14.5	11.5	11.7	10.3	10.5	9.2	14.2
Birthweight										
Very low birthweight ⁷	1.2	1.0	0.9	1.9	1.3	1.2	1.0	1.4	1.1	2.8
Low birthweight ⁸	6.5	5.9	5.5	9.6	6.1	6.4	5.9	7.3	6.0	9.9
4,000 grams or more ⁹	9.0	9.7	10.0	6.9	10.8	9.2	9.4	8.1	11.2	8.2
5-minute Apgar score of less than 7 ¹⁰ ...	1.2	1.1	1.1	1.5	0.7	1.0	0.8	1.2	1.0	2.0

¹ Includes origin not stated.

² Includes races other than white and black.

³ Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not report tobacco use on the birth certificate.

⁴ Excludes data for California and South Dakota, which did not report alcohol use on the birth certificate.

⁵ Excludes data for California, which did not report weight gain on the birth certificate. Median weight gain shown in pounds.

⁶ Born prior to 37 completed weeks of gestation.

⁷ Birthweight of less than 1,500 grams (3 lb 4 oz).

⁸ Birthweight of less than 2,500 grams (5 lb 8 oz).

⁹ Equivalent to 8 lb 14 oz.

¹⁰ Excludes data for California and Texas, which did not report 5-minute Apgar score on the birth certificate.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 26. Live births to mothers with selected medical risk factors and rates by age of mother, by race of mother: United States, 1998

[Rates are number of live births with specified medical risk factor per 1,000 live births in specified group]

Medical risk factor and race of mother	All births ¹	Medical risk factor reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races ²										
Anemia	3,941,553	84,795	21.8	30.6	26.3	19.8	17.3	16.9	17.6	54,872
Cardiac disease	3,941,553	20,528	5.3	2.9	3.6	5.2	6.9	8.1	9.0	54,872
Acute or chronic lung disease	3,941,553	40,190	10.3	13.3	11.4	9.4	9.1	9.3	10.4	54,872
Diabetes	3,941,553	103,691	26.7	8.2	16.0	26.2	35.5	47.4	65.7	54,872
Genital herpes ³	3,599,270	32,969	9.3	6.4	8.3	9.0	10.5	12.3	12.1	53,169
Hydramnios/Oligohydramnios	3,941,553	51,296	13.2	14.5	13.5	12.4	12.4	14.0	17.3	54,872
Hemoglobinopathy	3,941,553	3,202	0.8	1.0	1.0	0.7	0.7	0.7	0.9	54,872
Hypertension, chronic	3,941,553	27,442	7.1	2.4	4.2	6.3	8.9	13.6	24.8	54,872
Hypertension, pregnancy-associated	3,941,553	146,320	37.6	43.4	37.6	36.8	34.5	38.0	48.0	54,872
Eclampsia	3,941,553	12,345	3.2	4.4	3.4	2.9	2.6	3.0	4.3	54,872
Incompetent cervix	3,941,553	10,704	2.8	1.2	2.0	2.8	3.5	4.3	4.6	54,872
Previous infant 4000+ grams	3,941,553	42,802	11.0	1.4	6.3	11.3	16.2	19.1	22.2	54,872
Previous preterm or small-for- gestational-age infant	3,941,553	47,429	12.2	4.9	12.5	12.6	13.6	15.2	15.9	54,872
Renal disease	3,941,553	11,141	2.9	3.0	3.1	2.9	2.7	2.4	2.5	54,872
Rh sensitization ⁴	3,903,131	25,783	6.7	5.3	6.1	6.9	7.5	7.6	6.8	56,374
Uterine bleeding ³	3,599,270	23,241	6.6	4.8	5.8	6.7	7.2	8.0	9.4	53,169
White										
Anemia	3,118,727	59,071	19.2	27.1	22.6	17.7	15.9	15.5	16.2	42,643
Cardiac disease	3,118,727	17,262	5.6	2.9	3.6	5.4	7.4	8.5	9.6	42,643
Acute or chronic lung disease	3,118,727	30,483	9.9	12.3	10.6	9.2	9.2	9.2	10.3	42,643
Diabetes	3,118,727	79,560	25.9	8.5	15.9	25.1	33.2	43.8	60.8	42,643
Genital herpes ³	2,826,910	25,912	9.3	5.6	7.4	8.8	11.0	13.4	13.9	41,352
Hydramnios/Oligohydramnios	3,118,727	38,537	12.5	13.3	12.9	11.9	11.8	13.3	16.6	42,643
Hemoglobinopathy	3,118,727	1,181	0.4	0.2	0.4	0.4	0.4	0.5	0.5	42,643
Hypertension, chronic	3,118,727	18,798	6.1	2.0	3.7	5.5	7.5	11.0	19.8	42,643
Hypertension, pregnancy-associated	3,118,727	116,590	37.9	43.1	38.5	37.7	34.6	37.5	46.8	42,643
Eclampsia	3,118,727	9,206	3.0	4.0	3.2	2.8	2.6	2.8	3.8	42,643
Incompetent cervix	3,118,727	7,418	2.4	1.2	1.6	2.3	3.0	3.9	4.7	42,643
Previous infant 4000+ grams	3,118,727	38,267	12.4	1.5	7.0	12.4	17.7	21.0	25.2	42,643
Previous preterm or small-for- gestational-age infant	3,118,727	36,471	11.9	4.4	11.9	12.2	13.1	14.9	15.9	42,643
Renal disease	3,118,727	9,351	3.0	3.4	3.3	3.1	2.9	2.6	2.6	42,643
Rh sensitization ⁴	3,084,431	23,264	7.7	6.3	6.9	7.8	8.4	8.5	7.8	43,982
Uterine bleeding ³	2,826,910	19,242	6.9	5.1	6.1	7.0	7.5	8.2	9.7	41,352
Black										
Anemia	609,902	20,792	34.4	38.1	38.9	32.6	27.6	27.1	25.9	6,330
Cardiac disease	609,902	2,617	4.3	2.9	3.7	4.7	5.5	6.9	8.4	6,330
Acute or chronic lung disease	609,902	8,414	13.9	16.0	15.0	12.8	11.6	12.0	12.9	6,330
Diabetes	609,902	15,146	25.1	7.1	14.9	28.4	43.7	58.3	77.7	6,330
Genital herpes ³	569,690	6,205	11.0	8.7	12.4	12.7	10.8	8.5	6.0	6,024
Hydramnios/Oligohydramnios	609,902	10,105	16.7	17.8	15.6	15.6	17.5	19.1	22.9	6,330
Hemoglobinopathy	609,902	1,886	3.1	3.1	3.4	3.1	2.9	2.4	3.6	6,330
Hypertension, chronic	609,902	7,579	12.6	3.4	6.2	12.4	21.5	36.0	63.1	6,330
Hypertension, pregnancy-associated	609,902	24,500	40.6	45.0	36.2	38.4	41.2	48.0	57.7	6,330
Eclampsia	609,902	2,602	4.3	5.4	3.9	4.0	3.8	4.3	7.1	6,330
Incompetent cervix	609,902	2,869	4.8	1.5	3.4	6.3	7.8	8.3	5.7	6,330
Previous infant 4000+ grams	609,902	2,951	4.9	1.1	3.5	6.3	8.2	9.3	8.9	6,330
Previous preterm or small-for- gestational-age infant	609,902	9,052	15.0	6.3	15.7	17.4	19.4	19.8	17.6	6,330
Renal disease	609,902	1,352	2.2	2.2	2.4	2.3	2.1	1.8	*	6,330
Rh sensitization ⁴	607,113	2,122	3.5	3.0	3.6	3.7	3.8	3.7	3.8	6,474
Uterine bleeding ³	569,690	2,852	5.1	4.0	4.6	5.3	6.0	6.9	6.8	6,024

¹ Total number of births to residents of areas reporting specified medical risk factor.² Includes races other than white and black.³ Texas does not report this risk factor.⁴ Kansas does not report this risk factor.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 27. Number and rate of live births to mothers with selected medical risk factors, complications of labor, and obstetric procedures, by specified race of mother: United States, 1998

[Rates are number of live births with specified risk factors, complications, or procedures per 1,000 live births in specified group]

Medical risk factor, complication, and obstetric procedure	All races	White	Black	American Indian ¹	Asian or Pacific Islander					
					Total	Chinese	Japanese	Hawaiian	Filipino	Other
Number										
Medical risk factors										
Anemia	84,795	59,071	20,792	1,940	2,992	265	139	205	453	1,930
Diabetes	103,691	79,560	15,146	1,885	7,100	1,228	239	178	1,327	4,128
Hypertension, pregnancy-associated	146,320	116,590	24,500	1,819	3,411	393	144	156	935	1,783
Uterine bleeding ²	23,241	19,242	2,852	279	868	120	69	61	157	461
Complications of labor and/or delivery										
Meconium, moderate/heavy	214,627	156,452	46,722	2,217	9,236	1,449	336	301	1,822	5,328
Premature rupture of membrane	104,453	79,701	18,944	1,507	4,301	610	248	190	747	2,506
Dysfunctional labor	106,709	85,116	15,677	1,343	4,573	784	260	189	844	2,496
Breech/Malpresentation	150,685	125,303	18,239	1,372	5,771	960	320	200	1,036	3,255
Cephalopelvic disproportion	75,406	61,677	9,231	663	3,835	643	158	97	826	2,111
Fetal distress ³	140,844	104,826	29,165	1,372	5,481	851	192	126	972	3,340
Obstetric procedures										
Amniocentesis	112,778	95,579	9,998	656	6,545	1,970	701	158	1,075	2,641
Electronic fetal monitoring	3,278,992	2,603,263	509,250	32,072	134,407	21,919	6,652	4,350	23,928	77,558
Induction of labor	751,389	630,676	91,037	7,620	22,056	3,415	1,203	772	3,440	13,226
Ultrasound	2,538,927	2,052,224	359,350	23,269	104,084	17,822	5,594	3,362	18,565	58,741
Stimulation of labor	694,303	560,376	98,086	6,140	29,701	5,261	1,403	595	4,594	17,848
Rate										
Medical risk factors										
Anemia	21.8	19.2	34.4	49.9	17.8	9.6	16.8	38.9	15.0	20.0
Diabetes	26.7	25.9	25.1	48.5	42.2	44.3	28.9	33.7	43.9	42.7
Hypertension, pregnancy-associated	37.6	37.9	40.6	46.8	20.3	14.2	17.4	29.6	30.9	18.5
Uterine bleeding ²	6.6	6.9	5.1	7.3	5.5	4.5	8.6	11.7	5.4	5.1
Complications of labor and/or delivery										
Meconium, moderate/heavy	55.1	50.8	77.2	57.0	54.4	52.0	39.0	53.4	59.4	55.0
Premature rupture of membrane	26.8	25.9	31.3	38.7	25.3	21.9	28.8	33.7	24.4	25.9
Dysfunctional labor	27.4	27.6	25.9	34.5	27.0	28.1	30.2	33.6	27.5	25.8
Breech/Malpresentation	38.7	40.7	30.1	35.3	34.0	34.5	37.2	35.5	33.8	33.6
Cephalopelvic disproportion	19.4	20.0	15.3	17.0	22.6	23.1	18.4	17.2	26.9	21.8
Fetal distress ³	39.7	37.6	51.7	36.0	34.2	32.0	22.9	22.7	32.9	37.1
Obstetric procedures										
Amniocentesis	28.9	30.9	16.5	16.8	38.5	70.7	82.0	28.4	35.1	27.2
Electronic fetal monitoring	839.8	842.6	840.2	821.2	791.6	786.7	778.3	781.8	780.9	798.2
Induction of labor	192.4	204.1	150.2	195.1	129.9	122.6	140.8	138.7	112.3	136.1
Ultrasound	650.3	664.2	592.9	595.8	613.0	639.7	654.5	604.2	605.9	604.5
Stimulation of labor	177.8	181.4	161.8	157.2	174.9	188.8	164.2	106.9	149.9	183.7

¹ Includes births to Aleuts and Eskimos.² Texas does not report this risk factor.³ Texas does not report this complication.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 28. Number and rate of live births to mothers with selected medical risk factors, complications of labor, and obstetric procedures, by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States, 1998

[Rates are number of live births with specified risk factors, complications or procedures per 1,000 live births in specified group]

Medical risk factor, complication, and obstetric procedure	All origins ¹	Origin of mother								
		Hispanic						Non-Hispanic		
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other and unknown Hispanic	Total ²	White	Black
Number										
Medical risk factors										
Anemia	84,795	15,800	10,156	1,802	183	1,485	2,174	67,746	42,722	20,335
Diabetes	103,691	19,411	13,010	1,941	278	2,827	1,355	82,792	59,490	14,631
Hypertension, pregnancy-associated	146,320	20,268	13,634	1,781	386	2,673	1,794	124,385	95,440	23,965
Uterine bleeding ³	23,241	2,605	1,563	363	49	407	223	20,190	16,366	2,753
Complications of labor and/or delivery										
Meconium, moderate/heavy	214,627	41,246	28,113	3,486	479	6,306	2,862	170,727	114,325	45,417
Premature rupture of membrane	104,453	14,181	8,835	1,663	281	1,991	1,411	88,562	64,493	18,491
Dysfunctional labor	106,709	16,272	9,284	1,928	546	2,741	1,773	88,571	67,699	15,174
Breech/Malpresentation	150,685	21,825	14,429	2,025	498	3,069	1,804	126,867	102,313	17,706
Cephalopelvic disproportion	75,406	10,681	7,486	799	183	1,453	760	63,909	50,570	9,011
Fetal distress ⁴	140,844	18,483	11,302	2,261	308	3,033	1,579	120,585	85,486	28,486
Obstetric procedures										
Amniocentesis	112,778	9,744	4,669	1,306	370	2,314	1,085	100,537	83,959	9,607
Electronic fetal monitoring	3,278,992	578,012	397,813	49,386	11,707	78,201	40,905	2,663,051	2,007,746	495,224
Induction of labor	751,389	94,233	62,493	8,645	2,397	11,943	8,755	646,713	529,565	88,727
Ultrasound	2,538,927	401,403	271,096	36,642	7,682	54,672	31,311	2,105,176	1,633,761	349,200
Stimulation of labor	694,303	119,436	79,996	11,923	2,187	16,762	8,568	566,227	436,522	95,032
Rate										
Medical risk factors										
Anemia	21.8	21.7	19.8	32.2	13.9	15.3	44.4	21.8	18.4	34.6
Diabetes	26.7	26.7	25.4	34.7	21.1	29.1	27.7	26.6	25.6	24.9
Hypertension, pregnancy-associated	37.6	27.9	26.6	31.9	29.3	27.5	36.6	39.9	41.0	40.8
Uterine bleeding ³	6.6	4.5	4.1	6.6	3.8	4.5	5.4	6.9	7.5	5.0
Complications of labor and/or delivery										
Meconium, moderate/heavy	55.1	56.5	54.7	62.1	36.3	64.6	58.2	54.7	49.1	77.2
Premature rupture of membrane	26.8	19.4	17.2	29.6	21.3	20.4	28.7	28.4	27.7	31.4
Dysfunctional labor	27.4	22.3	18.1	34.4	41.4	28.1	36.1	28.4	29.1	25.8
Breech/Malpresentation	38.7	29.9	28.1	36.1	37.8	31.5	36.7	40.7	43.9	30.1
Cephalopelvic disproportion	19.4	14.6	14.6	14.2	13.9	14.9	15.5	20.5	21.7	15.3
Fetal distress ⁴	39.7	32.0	29.9	41.1	23.9	33.6	38.4	41.2	39.1	51.9
Obstetric procedures										
Amniocentesis	28.9	13.3	9.1	23.2	28.0	23.6	22.0	32.1	35.9	16.3
Electronic fetal monitoring	839.8	790.6	773.2	876.9	886.7	799.1	830.7	851.5	859.0	840.0
Induction of labor	192.4	128.9	121.5	153.5	181.5	122.0	177.8	206.8	226.6	150.5
Ultrasound	650.3	549.0	526.9	650.6	581.8	558.7	635.8	673.1	699.0	592.3
Stimulation of labor	177.8	163.4	155.5	211.7	165.6	171.3	174.0	181.1	186.8	161.2

¹ Includes origin not stated.² Includes races other than white and black.³ Texas does not report this risk factor.⁴ Texas does not report this complication.

NOTE: Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 29. Number of live births by smoking status of mother, percent smokers, and percent distribution by average number of cigarettes smoked by mothers per day, according to age and race of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1998

Smoking status, smoking measure, and race of mother	Age of mother									
	All ages	Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-54 years
			Total	15-17 years	18-19 years					
Number										
All races¹										
Total	3,186,186	8,056	403,166	143,799	259,367	793,176	877,765	707,569	332,045	64,409
Smoker	404,520	612	70,938	21,949	48,989	128,652	98,568	64,880	34,560	6,310
Nonsmoker	2,732,416	7,350	326,496	119,889	206,607	652,708	765,713	631,254	291,956	56,939
Not stated	49,250	94	5,732	1,961	3,771	11,816	13,484	11,435	5,529	1,160
White										
Total	2,492,290	3,759	274,055	92,917	181,138	592,477	709,323	587,178	273,519	51,979
Smoker	343,042	473	60,779	18,594	42,185	110,234	84,630	54,007	27,911	5,008
Nonsmoker	2,109,916	3,233	209,062	72,933	136,129	473,014	613,655	523,796	241,112	46,044
Not stated	39,332	53	4,214	1,390	2,824	9,229	11,038	9,375	4,496	927
Black										
Total	548,653	4,003	115,957	45,921	70,036	171,505	124,996	82,730	40,880	8,582
Smoker	51,371	103	8,090	2,594	5,496	15,059	11,662	9,413	5,885	1,159
Nonsmoker	490,797	3,872	106,779	42,909	63,870	154,667	111,811	72,074	34,327	7,267
Not stated	6,485	28	1,088	418	670	1,779	1,523	1,243	668	156
Percent										
Smoker ¹	12.9	7.7	17.8	15.5	19.2	16.5	11.4	9.3	10.6	10.0
White	14.0	12.8	22.5	20.3	23.7	18.9	12.1	9.3	10.4	9.8
Black	9.5	2.6	7.0	5.7	7.9	8.9	9.4	11.6	14.6	13.8
Percent distribution										
All races¹										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	27.7	47.3	35.8	40.6	33.7	28.3	24.7	24.5	23.7	22.8
6-10 cigarettes	40.9	35.6	41.6	40.4	42.2	41.9	41.1	39.6	38.2	36.3
11-15 cigarettes	6.3	4.4	4.6	3.9	4.9	5.9	7.0	7.4	7.5	7.5
16-20 cigarettes	21.2	10.3	15.8	13.4	16.9	20.6	23.0	23.5	24.7	25.9
21-30 cigarettes	2.7	*	1.6	1.2	1.8	2.3	3.0	3.5	4.0	4.7
31-40 cigarettes	1.0	*	0.4	0.4	0.4	0.8	1.0	1.3	1.6	2.5
41 cigarettes or more	0.1	*	0.1	0.1	0.1	0.1	0.1	0.2	0.2	*
White										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	24.8	41.7	32.3	37.0	30.3	25.1	22.2	22.0	21.0	20.5
6-10 cigarettes	41.3	38.5	43.2	42.3	43.6	42.7	41.2	39.3	37.4	35.0
11-15 cigarettes	6.9	5.5	5.0	4.2	5.3	6.4	7.5	8.1	8.3	8.0
16-20 cigarettes	22.8	11.5	17.2	14.7	18.3	22.3	24.6	25.1	26.8	28.0
21-30 cigarettes	3.0	*	1.7	1.3	1.9	2.5	3.3	3.9	4.5	5.4
31-40 cigarettes	1.0	*	0.4	0.4	0.5	0.8	1.0	1.4	1.8	2.7
41 cigarettes or more	0.1	*	0.1	*	0.1	0.1	0.1	0.2	0.2	*
Black										
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1-5 cigarettes	44.7	69.7	58.5	63.0	56.3	49.2	40.9	37.4	35.8	32.5
6-10 cigarettes	38.3	23.2	31.3	28.1	32.8	36.5	40.7	41.7	42.0	41.1
11-15 cigarettes	3.1	*	2.1	2.1	2.2	2.5	3.3	3.8	3.9	5.7
16-20 cigarettes	11.9	*	7.3	5.9	7.9	10.2	12.9	14.7	15.4	17.5
21-30 cigarettes	1.2	*	0.5	*	0.5	1.0	1.3	1.4	1.8	*
31-40 cigarettes	0.7	*	*	*	*	0.5	0.8	0.8	1.0	*
41 cigarettes or more	0.1	*	*	*	*	*	*	*	*	*

* Figure does not meet standards of reliability or precision; based on fewer than 20 births in the numerator or denominator.
¹ Includes races other than white and black.

NOTE: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy. Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 30. Number of live births by smoking status of mother and percent of mothers who smoked cigarettes during pregnancy, by age and Hispanic origin of mother and by race for mothers of non-Hispanic origin: Total of 46 reporting States, the District of Columbia, and New York City, 1998

Origin of mother	Smoking status				Age of mother									
	Total births	Smoker	Non-smoker	Not stated	All ages	Under 15 years	15-19 years							
							Total	15-17 years	18-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years
All origins ¹	3,186,186	404,520	2,732,416	49,250	12.9	7.7	17.8	15.5	19.2	16.5	11.4	9.3	10.6	10.0
Hispanic	470,272	18,395	446,111	5,766	4.0	4.1	4.9	4.6	5.1	4.2	3.3	3.4	4.2	4.4
Mexican	296,175	8,210	284,890	3,075	2.8	3.8	3.5	3.3	3.6	2.9	2.3	2.4	3.1	3.3
Puerto Rican	52,615	5,533	46,040	1,042	10.7	*	10.5	9.5	11.2	11.3	10.4	10.2	11.8	10.6
Cuban	12,280	453	11,774	53	3.7	*	6.1	7.2	5.4	3.8	3.0	3.2	4.5	*
Central and South American	68,788	1,041	67,052	695	1.5	*	2.0	1.6	2.2	1.6	1.3	1.3	1.8	2.9
Other and unknown Hispanic	40,414	3,158	36,355	901	8.0	*	8.7	7.9	9.4	8.8	7.1	7.0	7.8	7.3
Non-Hispanic ²	2,686,387	381,797	2,264,752	39,838	14.4	8.8	21.1	18.6	22.4	19.2	12.7	10.0	11.3	10.6
White	2,013,456	321,934	1,660,891	30,631	16.2	21.4	29.8	28.6	30.4	23.5	13.9	10.2	11.2	10.6
Black	533,983	50,454	477,421	6,108	9.6	2.5	7.0	5.7	7.9	8.9	9.5	11.8	14.9	14.0

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

¹ Includes origin not stated.² Includes races other than white and black.

NOTES: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy. Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. In this table Hispanic women are classified only by place of origin; non-Hispanic women are classified by race. See Technical notes.

Table 31. Number of live births, percent of mothers who smoked cigarettes during pregnancy, and percent distribution of average number of cigarettes smoked by mothers per day, according to educational attainment and race and Hispanic origin of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1998

Smoking measure, and race and Hispanic origin of mother	Total	Years of school completed by mother					
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	Not Stated
All births							
All races ¹	3,186,186	148,228	502,784	1,040,555	700,923	744,939	48,757
White, total	2,492,290	126,212	352,375	786,621	551,216	642,007	33,859
White, non-Hispanic	2,013,456	36,437	225,437	646,829	485,489	601,054	18,210
Black, total	548,653	15,463	131,856	210,802	121,699	58,518	10,315
Black, non-Hispanic	533,983	14,309	128,350	205,702	119,001	57,221	9,400
Hispanic ²	470,272	90,726	128,176	139,097	64,434	36,117	11,722
Percent							
Smoker	12.9	11.7	25.5	16.8	9.6	2.2	12.8
White, total	14.0	12.1	29.3	19.3	10.6	2.3	13.6
White, non-Hispanic	16.2	35.4	42.0	22.4	11.6	2.4	19.3
Black, total	9.5	10.4	16.4	9.1	5.8	2.1	13.0
Black, non-Hispanic	9.6	10.9	16.5	9.2	5.9	2.1	13.0
Hispanic ²	4.0	2.6	6.2	3.9	3.1	1.1	4.0
Percent distribution							
All races ¹							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	68.6	62.6	68.4	67.9	70.4	75.4	70.2
11-20 cigarettes	27.6	31.2	27.4	28.4	26.4	22.4	25.8
21 cigarettes or more	3.8	6.2	4.2	3.7	3.2	2.2	4.1
White, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	66.1	60.4	64.9	65.7	68.6	74.6	67.3
11-20 cigarettes	29.7	32.9	30.4	30.3	27.9	23.0	28.3
21 cigarettes or more	4.1	6.6	4.7	4.0	3.4	2.3	4.4
White, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	65.3	56.7	63.5	65.2	68.2	74.4	66.3
11-20 cigarettes	30.5	35.9	31.6	30.8	28.3	23.2	29.2
21 cigarettes or more	4.3	7.4	4.9	4.0	3.5	2.4	4.6
Black, total							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	83.0	79.0	83.5	83.1	83.5	82.9	77.8
11-20 cigarettes	15.0	18.1	14.5	15.0	15.1	15.8	19.1
21 cigarettes or more	2.0	2.9	2.1	1.9	1.4	*	3.1
Black, non-Hispanic							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	83.1	79.0	83.5	83.1	83.4	82.7	77.4
11-20 cigarettes	15.0	18.0	14.4	15.0	15.1	15.9	19.5
21 cigarettes or more	2.0	3.0	2.1	1.9	1.4	*	3.1
Hispanic ²							
Smoker	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10 cigarettes or less	83.3	82.9	84.3	82.7	83.0	84.3	74.9
11-20 cigarettes	14.9	15.2	13.9	15.6	15.5	14.9	21.5
21 cigarettes or more	1.8	1.9	1.8	1.7	1.5	*	*

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

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.

NOTE: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy.

Table 32. Percent low birthweight by smoking status, age, and race and Hispanic origin of mother: Total of 46 reporting States, the District of Columbia, and New York City, 1998

[Low birthweight is defined as weight of less than 2,500 grams (5 lb 8 oz)]

Smoking status and race of mother	Age of mother									
	All ages	Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-54 years
			Total	15-17 years	18-19 years					
All races ¹										
Total	7.8	13.4	9.9	10.8	9.4	7.8	6.9	7.2	8.6	10.5
Smoker	12.0	14.1	11.6	12.2	11.4	10.5	11.0	13.6	16.9	19.1
Nonsmoker	7.2	13.3	9.5	10.5	8.9	7.3	6.3	6.5	7.6	9.5
Not stated	8.9	*	10.5	10.9	10.3	8.4	8.0	8.2	10.9	11.7
White, total										
Total	6.7	11.2	8.3	9.0	7.9	6.6	5.9	6.3	7.5	9.4
Smoker	10.7	13.0	10.9	11.4	10.7	9.8	9.7	11.6	14.3	16.3
Nonsmoker	6.0	10.8	7.5	8.4	7.0	5.8	5.4	5.7	6.7	8.6
Not stated	8.0	*	9.3	9.6	9.1	7.5	7.2	7.3	10.1	11.4
White, non-Hispanic										
Total	6.6	11.5	8.4	9.2	8.0	6.6	5.9	6.2	7.4	9.3
Smoker	10.6	12.9	10.9	11.3	10.7	9.7	9.5	11.4	14.2	16.4
Nonsmoker	5.8	10.9	7.3	8.3	6.8	5.6	5.3	5.6	6.5	8.5
Not stated	7.9	*	9.1	9.7	8.8	7.3	7.4	7.2	9.7	11.2
Black, total										
Total	13.1	15.7	13.8	14.5	13.4	12.1	12.2	13.8	16.0	17.5
Smoker	20.9	*	17.2	18.3	16.7	16.2	20.5	25.4	29.1	32.1
Nonsmoker	12.3	15.6	13.5	14.2	13.0	11.7	11.3	12.3	13.7	15.2
Not stated	15.2	*	16.0	15.9	16.1	13.1	15.1	15.5	18.8	15.6
Black, non-Hispanic										
Total	13.3	15.6	13.9	14.6	13.4	12.2	12.3	14.0	16.1	17.6
Smoker	21.0	*	17.3	18.4	16.8	16.3	20.6	25.6	29.3	31.9
Nonsmoker	12.4	15.5	13.6	14.3	13.1	11.8	11.4	12.4	13.7	15.3
Not stated	15.4	*	16.2	16.5	16.0	13.1	15.3	15.6	19.2	16.4
Hispanic ²										
Total	6.9	11.1	8.1	8.7	7.7	6.6	6.1	6.7	8.3	9.6
Smoker	12.8	*	11.6	12.2	11.3	11.2	13.1	15.0	17.1	16.0
Nonsmoker	6.6	10.9	7.8	8.5	7.4	6.3	5.8	6.3	7.8	9.2
Not stated	8.6	*	9.8	9.5	9.9	8.6	7.1	8.0	11.5	11.4

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

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.

NOTE: Excludes data for California, Indiana, New York State (but includes New York City), and South Dakota, which did not require reporting of tobacco use during pregnancy.

Table 33. Live births by month of pregnancy prenatal care began and percent of mothers beginning care in the first trimester and percent with late or no care, by age and race and Hispanic origin of mother: United States, 1998

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began									Percent	
		1st trimester			2d trimester		Late or no care			Not stated	1st trimester	Late or no care
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care				
All races ¹	3,941,553	3,174,194	2,447,530	726,664	508,373	149,645	103,482	46,163	109,341	82.8	3.9	
Under 15 years	9,462	4,329	2,629	1,700	3,286	1,443	1,030	413	404	47.8	15.9	
15-19 years	484,895	321,931	217,163	104,768	114,400	33,538	23,964	9,574	15,026	68.5	7.1	
15 years	24,777	13,579	8,558	5,021	7,615	2,665	1,935	730	918	56.9	11.2	
16 years	55,033	33,044	21,259	11,785	15,376	4,709	3,349	1,360	1,904	62.2	8.9	
17 years	93,421	60,530	39,934	20,596	23,204	6,772	4,841	1,931	2,915	66.9	7.5	
18 years	137,567	93,187	63,017	30,170	31,372	8,918	6,389	2,529	4,090	69.8	6.7	
19 years	174,097	121,591	84,395	37,196	36,833	10,474	7,450	3,024	5,199	72.0	6.2	
20-24 years	965,122	727,391	533,672	193,719	163,042	46,862	33,272	13,590	27,827	77.6	5.0	
25-29 years	1,083,010	911,612	720,837	190,775	111,604	32,374	22,249	10,125	27,420	86.4	3.1	
30-34 years	889,365	774,029	625,993	148,036	70,935	21,280	13,973	7,307	23,121	89.4	2.5	
35-39 years	424,890	365,259	292,782	72,477	36,032	11,140	7,095	4,045	12,459	88.6	2.7	
40 years and over	84,809	69,643	54,454	15,189	9,074	3,008	1,899	1,109	3,084	85.2	3.7	
White, total	3,118,727	2,581,679	2,009,201	572,478	362,420	99,608	71,460	28,148	75,020	84.8	3.3	
Under 15 years	4,801	2,454	1,491	963	1,495	667	459	208	185	53.2	14.4	
15-19 years	340,694	234,662	159,246	75,416	75,391	21,261	15,610	5,651	9,380	70.8	6.4	
15 years	15,233	8,907	5,677	3,230	4,327	1,490	1,091	399	509	60.5	10.1	
16 years	36,439	23,025	14,958	8,067	9,479	2,810	2,049	761	1,125	65.2	8.0	
17 years	64,951	43,611	28,955	14,656	15,176	4,314	3,163	1,151	1,850	69.1	6.8	
18 years	97,971	68,495	46,518	21,977	21,112	5,811	4,286	1,525	2,553	71.8	6.1	
19 years	126,100	90,624	63,138	27,486	25,297	6,836	5,021	1,815	3,343	73.8	5.6	
20-24 years	736,664	569,391	420,126	149,265	116,619	31,692	23,171	8,521	18,962	79.3	4.4	
25-29 years	880,688	756,688	602,540	154,148	82,562	22,341	15,981	6,360	19,097	87.8	2.6	
30-34 years	737,532	654,105	532,679	121,426	52,901	14,182	9,877	4,305	16,344	90.7	2.0	
35-39 years	349,799	306,850	247,740	59,110	26,728	7,395	4,998	2,397	8,826	90.0	2.2	
40 years and over	68,549	57,529	45,379	12,150	6,724	2,070	1,364	706	2,226	86.7	3.1	
White, non-Hispanic	2,361,462	2,035,753	1,614,399	421,354	223,984	55,044	39,644	15,400	46,681	87.9	2.4	
Under 15 years	2,132	1,118	679	439	660	294	215	79	60	54.0	14.2	
15-19 years	219,169	158,579	108,593	49,986	44,768	10,961	8,214	2,747	4,861	74.0	5.1	
15 years	7,767	4,769	3,022	1,747	2,095	696	513	183	207	63.1	9.2	
16 years	20,464	13,540	8,868	4,672	5,028	1,396	1,042	354	500	67.8	7.0	
17 years	40,388	28,510	18,993	9,517	8,794	2,166	1,605	561	918	72.2	5.5	
18 years	64,472	47,088	32,199	14,889	13,027	3,005	2,277	728	1,352	74.6	4.8	
19 years	86,078	64,672	45,511	19,161	15,824	3,698	2,777	921	1,884	76.8	4.4	
20-24 years	511,101	413,228	309,780	103,448	70,564	16,627	12,354	4,273	10,682	82.6	3.3	
25-29 years	678,227	603,733	489,557	114,176	50,263	12,277	8,793	3,484	11,954	90.6	1.8	
30-34 years	603,639	549,417	453,688	95,729	34,408	8,549	5,844	2,705	11,265	92.7	1.4	
35-39 years	291,202	261,412	213,526	47,886	18,609	4,917	3,303	1,614	6,264	91.7	1.7	
40 years and over	55,992	48,266	38,576	9,690	4,712	1,419	921	498	1,595	88.7	2.6	
Black, total	609,902	428,102	314,811	113,291	115,158	40,793	24,904	15,889	25,849	73.3	7.0	
Under 15 years	4,289	1,752	1,065	687	1,639	703	513	190	195	42.8	17.2	
15-19 years	126,937	77,158	51,485	25,673	34,124	10,717	7,169	3,548	4,938	63.2	8.8	
15 years	8,599	4,220	2,606	1,614	2,976	1,037	742	295	366	51.3	12.6	
16 years	16,414	8,888	5,647	3,241	5,174	1,670	1,129	541	682	56.5	10.6	
17 years	25,090	14,999	9,779	5,220	7,019	2,128	1,428	700	944	62.1	8.8	
18 years	34,885	21,837	14,677	7,160	8,982	2,715	1,803	912	1,351	65.1	8.1	
19 years	41,949	27,214	18,776	8,438	9,973	3,167	2,067	1,100	1,595	67.4	7.8	
20-24 years	189,088	130,722	94,500	36,222	38,409	12,739	8,208	4,531	7,218	71.9	7.0	
25-29 years	139,302	104,856	80,119	24,737	20,965	7,662	4,420	3,242	5,819	78.6	5.7	
30-34 years	93,785	71,848	55,734	16,114	12,057	5,300	2,740	2,560	4,580	80.5	5.9	
35-39 years	46,657	34,810	26,747	8,063	6,395	2,935	1,480	1,455	2,517	78.9	6.6	
40 years and over	9,844	6,956	5,161	1,795	1,569	737	374	363	582	75.1	8.0	

See footnotes at end of table.

Table 33. Live births by month of pregnancy prenatal care began and percent of mothers beginning care in the first trimester and percent with late or no care, by age and race and Hispanic origin of mother: United States, 1998 --Con.

Age and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began								Percent		
		1st trimester			2d trimester		Late or no care			Not stated	1st trimester	Late or no care
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care				
Black, non-Hispanic	593,127	416,966	306,711	110,255	112,080	39,683	24,081	15,602	24,398	73.3	7.0	
Under 15 years	4,204	1,719	1,045	674	1,615	684	500	184	186	42.8	17.0	
15-19 years	124,076	75,480	50,367	25,113	33,408	10,468	6,977	3,491	4,720	63.2	8.8	
15 years	8,420	4,122	2,536	1,586	2,924	1,014	724	290	360	51.1	12.6	
16 years	16,021	8,674	5,507	3,167	5,062	1,633	1,099	534	652	56.4	10.6	
17 years	24,542	14,689	9,574	5,115	6,882	2,066	1,383	683	905	62.1	8.7	
18 years	34,089	21,374	14,373	7,001	8,787	2,651	1,754	897	1,277	65.1	8.1	
19 years	41,004	26,621	18,377	8,244	9,753	3,104	2,017	1,087	1,526	67.4	7.9	
20-24 years	184,263	127,620	92,258	35,362	37,408	12,425	7,986	4,439	6,810	71.9	7.0	
25-29 years	135,158	101,986	78,001	23,985	20,282	7,405	4,225	3,180	5,485	78.6	5.7	
30-34 years	90,827	69,726	54,133	15,593	11,665	5,140	2,619	2,521	4,296	80.6	5.9	
35-39 years	45,096	33,700	25,909	7,791	6,193	2,844	1,410	1,434	2,359	78.9	6.7	
40 years and over	9,503	6,735	4,998	1,737	1,509	717	364	353	542	75.2	8.0	
Hispanic ²	734,661	526,798	378,969	147,829	137,846	44,492	31,944	12,548	25,525	74.3	6.3	
Under 15 years	2,716	1,350	815	535	857	388	257	131	121	52.0	15.0	
15-19 years	121,388	75,940	50,574	25,366	30,725	10,357	7,454	2,903	4,366	64.9	8.9	
15 years	7,525	4,187	2,704	1,483	2,256	795	579	216	287	57.8	11.0	
16 years	16,079	9,540	6,131	3,409	4,499	1,428	1,019	409	612	61.7	9.2	
17 years	24,630	15,143	9,985	5,158	6,419	2,166	1,577	589	902	63.8	9.1	
18 years	33,400	21,335	14,258	7,077	8,084	2,818	2,023	795	1,163	66.2	8.7	
19 years	39,754	25,735	17,496	8,239	9,467	3,150	2,256	894	1,402	67.1	8.2	
20-24 years	223,113	154,217	108,857	45,360	45,948	15,091	10,862	4,229	7,857	71.6	7.0	
25-29 years	196,012	147,404	108,383	39,021	32,134	10,044	7,224	2,820	6,430	77.8	5.3	
30-34 years	125,702	97,547	72,951	24,596	18,277	5,589	4,038	1,551	4,289	80.3	4.6	
35-39 years	54,195	41,829	31,207	10,622	7,949	2,417	1,686	731	2,000	80.1	4.6	
40 years and over	11,535	8,511	6,182	2,329	1,956	606	423	183	462	76.9	5.5	

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.

Table 34. Percent of mothers beginning prenatal care in the first trimester and percent of mothers with late or no prenatal care by race and Hispanic origin of mother: United States, each State and territory, 1998

[By place of residence]

State	Percent beginning care in first trimester						Percent late ¹ or no care					
	All races ²	White		Black		Hispanic ³	All races ²	White		Black		Hispanic ³
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States ⁴	82.8	84.8	87.9	73.3	73.3	74.3	3.9	3.3	2.4	7.0	7.0	6.3
Alabama	82.4	88.3	89.1	70.1	70.1	62.9	3.9	2.3	2.1	7.1	7.1	11.3
Alaska	81.4	83.5	83.7	82.3	82.6	81.3	4.5	3.7	3.7	5.1	*	3.6
Arizona	75.1	76.0	84.7	73.5	73.9	64.7	7.2	6.9	3.4	7.4	7.3	11.5
Arkansas	77.8	80.7	82.0	67.6	67.6	61.6	5.1	4.3	3.6	8.3	8.3	14.0
California	82.4	82.4	88.2	79.5	79.5	78.1	3.6	3.7	2.4	4.5	4.5	4.6
Colorado	82.2	82.7	87.9	75.9	76.2	68.3	4.3	4.1	2.6	6.5	6.4	8.4
Connecticut	88.0	89.3	91.3	79.0	79.4	78.2	3.0	2.8	2.4	4.6	4.5	5.3
Delaware	83.4	86.4	88.2	74.2	74.3	69.7	3.6	2.7	2.3	6.1	6.1	6.6
District of Columbia	72.0	84.8	91.0	66.9	66.9	69.5	10.2	5.0	3.5	12.3	12.3	8.2
Florida	83.6	86.9	88.6	72.8	72.7	81.9	3.5	2.6	2.1	6.5	6.6	4.0
Georgia	86.4	90.0	91.4	79.4	79.4	78.2	2.8	1.9	1.5	4.4	4.4	5.7
Hawaii	85.4	90.2	90.9	91.5	91.9	83.5	3.1	2.1	2.0	*	*	3.7
Idaho	78.7	79.1	81.7	69.1	68.4	61.5	4.4	4.3	3.5	*	*	9.8
Illinois	82.7	85.7	89.7	70.1	70.0	73.7	3.9	2.8	1.9	8.2	8.3	5.6
Indiana	79.9	81.6	82.6	65.3	65.3	64.7	4.0	3.5	3.2	8.4	8.4	8.4
Iowa	87.3	87.9	88.6	74.8	74.4	73.0	2.4	2.2	2.0	6.3	6.5	6.5
Kansas	85.8	86.7	89.2	76.1	76.0	68.1	2.8	2.5	1.9	5.7	5.8	7.6
Kentucky	86.4	87.3	87.5	78.0	78.1	73.8	2.5	2.3	2.3	4.2	4.2	6.0
Louisiana	82.2	89.4	89.6	72.1	72.1	85.3	3.9	1.8	1.8	7.0	7.0	2.8
Maine	88.9	89.1	89.3	85.6	85.7	77.9	1.7	1.7	1.6	*	*	*
Maryland	87.8	91.5	92.3	80.3	80.3	82.3	3.0	1.8	1.7	5.2	5.2	3.8
Massachusetts	89.5	90.9	92.3	80.1	80.0	79.2	2.4	2.0	1.7	5.6	5.8	4.7
Michigan	84.3	87.1	88.4	71.1	71.1	72.8	3.4	2.4	2.1	7.9	7.8	6.0
Minnesota	84.5	87.1	87.9	66.7	66.6	63.8	2.9	2.2	2.0	7.9	8.0	8.5
Mississippi	80.6	89.3	89.6	70.2	70.2	73.8	4.0	1.7	1.6	6.7	6.7	7.4
Missouri	86.1	88.2	88.6	74.5	74.5	77.7	2.9	2.1	2.0	6.9	6.9	5.4
Montana	82.3	84.8	84.9	77.3	73.7	78.6	3.2	2.4	2.3	*	*	*
Nebraska	83.9	84.9	86.9	71.0	70.9	68.8	3.2	2.9	2.4	6.7	6.7	7.6
Nevada	74.6	75.3	82.5	66.3	66.5	62.2	7.0	6.8	4.0	9.5	9.4	11.8
New Hampshire	89.7	89.8	90.0	76.9	78.6	78.4	1.9	1.9	1.8	*	*	*
New Jersey	81.6	85.5	89.6	65.1	64.8	71.0	4.6	3.0	2.1	11.1	11.5	6.3
New Mexico	67.6	69.1	75.1	58.5	59.4	64.8	8.5	7.9	5.7	11.1	11.3	9.4
New York	81.2	84.4	88.2	70.8	71.0	72.1	4.8	3.7	2.7	8.5	8.5	6.9
North Carolina	84.5	88.1	90.3	75.2	75.2	68.5	2.9	2.0	1.5	5.4	5.4	6.6
North Dakota	85.6	87.3	87.7	78.8	78.8	73.6	2.5	1.9	1.6	*	*	*
Ohio	85.5	87.6	87.9	73.3	73.3	77.4	4.2	3.1	3.0	10.4	10.1	5.7
Oklahoma	78.6	80.7	81.8	69.7	69.6	68.3	5.1	4.5	4.0	7.5	7.6	9.5
Oregon	80.2	80.4	82.8	79.4	79.6	67.2	3.8	3.7	3.2	4.1	4.0	6.7
Pennsylvania	84.8	87.3	88.2	70.8	70.8	72.4	3.5	2.7	2.5	8.4	8.4	5.7
Rhode Island	89.7	90.9	92.1	79.3	79.9	82.4	1.5	1.3	1.1	3.9	3.2	2.0
South Carolina	81.4	87.2	88.0	71.0	71.0	65.9	4.2	2.3	2.1	7.5	7.5	8.2
South Dakota	82.7	86.6	86.8	75.3	76.8	74.3	3.2	1.8	1.7	*	*	*
Tennessee	84.1	87.3	88.1	72.7	72.7	64.8	3.6	2.5	2.2	7.7	7.7	11.7
Texas	79.3	79.6	86.9	75.7	75.8	72.7	5.3	5.2	2.7	6.1	6.1	7.6
Utah	82.1	82.9	85.3	64.7	63.6	64.9	4.1	3.7	3.0	10.7	11.5	9.2
Vermont	87.4	87.5	87.6	*	*	85.3	2.0	2.0	2.0	*	*	*
Virginia	85.2	88.8	90.2	74.4	74.5	73.2	3.3	2.3	2.0	6.1	6.1	5.8
Washington	83.0	83.6	85.8	77.1	77.3	71.0	3.2	2.9	2.4	5.0	4.9	6.0
West Virginia	83.7	84.2	84.2	70.2	70.1	84.0	2.6	2.5	2.5	5.5	5.5	*
Wisconsin	84.3	87.0	88.0	67.5	67.4	71.9	3.4	2.7	2.4	8.7	8.7	6.9
Wyoming	81.3	82.2	83.4	67.3	68.0	70.2	4.1	3.8	3.4	*	*	7.9
Puerto Rico	78.8	79.4	---	70.5	---	---	3.1	2.9	---	5.5	---	---
Virgin Islands	59.3	60.5	76.6	58.6	57.9	55.0	12.8	11.3	*	13.3	13.4	11.8
Guam	63.0	86.0	86.8	81.8	81.4	83.7	12.7	*	*	*	*	*
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	26.3	*	---	*	---	---	34.7	*	---	*	---	---

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

--- Data not available.

¹ Care beginning in 3rd trimester.² Includes races other than white and black and origin not stated.³ Includes all persons of Hispanic origin of any race.⁴ Excludes data for the territories.

NOTE: Data on prenatal care are not available for American Samoa. Data on month prenatal care began for the Northern Marianas are substantially incomplete; see Table I in the Technical notes.

Table 35. Live births by month of pregnancy prenatal care began, number of prenatal visits, and median number of visits, by race and Hispanic origin of mother: United States, 1998

Number of prenatal visits and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began							Not stated
		1st trimester			2d trimester		Late or no care		
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	
All races ¹	3,941,553	3,174,194	2,447,530	726,664	508,373	149,645	103,482	46,163	109,341
No visits	46,163	...	...	...	...	46,163	...	46,163	...
1-2 visits	40,129	10,169	6,759	3,410	9,555	18,590	18,590	...	1,815
3-4 visits	81,456	23,484	13,592	9,892	29,224	26,300	26,300	...	2,448
5-6 visits	173,204	73,036	43,023	30,013	70,857	25,585	25,585	...	3,726
7-8 visits	322,025	193,674	120,072	73,602	108,180	15,267	15,267	...	4,904
9-10 visits	744,757	585,338	394,745	190,593	141,672	8,584	8,584	...	9,163
11-12 visits	1,015,918	926,001	715,554	210,447	80,158	3,459	3,459	...	6,300
13-14 visits	661,925	627,752	522,544	105,208	29,593	1,489	1,489	...	3,091
15-16 visits	470,439	447,895	385,947	61,948	19,322	1,097	1,097	...	2,125
17-18 visits	98,254	93,993	80,638	13,355	3,541	227	227	...	493
19 visits or more	145,813	138,506	122,566	15,940	6,065	414	414	...	828
Not stated	141,470	54,346	42,090	12,256	10,206	2,470	2,470	...	74,448
Median number of visits	12.3	12.6	12.8	11.7	9.6	5.4	5.4	...	10.3
White, total	3,118,727	2,581,679	2,009,201	572,478	362,420	99,608	71,460	28,148	75,020
No visits	28,148	...	...	...	...	28,148	...	28,148	...
1-2 visits	24,852	6,430	4,395	2,035	5,391	11,936	11,936	...	1,095
3-4 visits	52,685	15,177	8,840	6,337	18,141	17,812	17,812	...	1,555
5-6 visits	119,865	51,610	30,524	21,086	47,797	17,899	17,899	...	2,559
7-8 visits	242,719	150,669	94,359	56,310	77,587	10,939	10,939	...	3,524
9-10 visits	584,906	468,943	319,499	149,444	103,085	6,167	6,167	...	6,711
11-12 visits	834,184	766,559	596,766	169,793	60,071	2,623	2,623	...	4,931
13-14 visits	551,155	525,128	438,628	86,500	22,431	1,143	1,143	...	2,453
15-16 visits	381,674	364,992	316,003	48,989	14,257	825	825	...	1,600
17-18 visits	81,358	78,124	67,359	10,765	2,652	179	179	...	403
19 visits or more	118,371	113,168	100,847	12,321	4,264	308	308	...	631
Not stated	98,810	40,879	31,981	8,898	6,744	1,629	1,629	...	49,558
Median number of visits	12.4	12.7	12.9	11.8	9.8	5.6	5.6	...	10.5
White, non-Hispanic	2,361,462	2,035,753	1,614,399	421,354	223,984	55,044	39,644	15,400	46,681
No visits	15,400	...	...	...	...	15,400	...	15,400	...
1-2 visits	13,544	3,715	2,599	1,116	2,879	6,342	6,342	...	608
3-4 visits	29,612	9,310	5,616	3,694	9,966	9,391	9,391	...	945
5-6 visits	73,330	34,735	21,264	13,471	27,389	9,637	9,637	...	1,569
7-8 visits	165,698	110,470	70,953	39,517	46,575	6,329	6,329	...	2,324
9-10 visits	423,393	351,294	245,321	105,973	63,744	3,694	3,694	...	4,661
11-12 visits	664,928	618,680	488,542	130,138	40,777	1,732	1,732	...	3,739
13-14 visits	449,153	430,696	362,310	68,386	15,774	787	787	...	1,896
15-16 visits	302,682	291,899	255,652	36,247	8,976	553	553	...	1,254
17-18 visits	66,862	64,502	56,073	8,429	1,924	116	116	...	320
19 visits or more	97,241	93,714	84,189	9,525	2,836	208	208	...	483
Not stated	59,619	26,738	21,880	4,858	3,144	855	855	...	28,882
Median number of visits	12.5	12.7	12.9	11.9	10.0	5.7	5.7	...	10.6
Black, total	609,902	428,102	314,811	113,291	115,158	40,793	24,904	15,889	25,849
No visits	15,889	...	...	...	...	15,889	...	15,889	...
1-2 visits	12,665	3,131	1,983	1,148	3,571	5,375	5,375	...	588
3-4 visits	22,996	6,680	3,792	2,888	9,000	6,600	6,600	...	716
5-6 visits	41,540	16,653	9,768	6,885	18,069	5,909	5,909	...	909
7-8 visits	58,547	30,704	18,353	12,351	23,531	3,274	3,274	...	1,038
9-10 visits	117,402	83,508	53,716	29,792	30,227	1,865	1,865	...	1,802
11-12 visits	127,800	110,504	81,582	28,922	15,707	621	621	...	968
13-14 visits	78,877	72,560	58,984	13,576	5,618	242	242	...	457
15-16 visits	66,274	61,439	51,518	9,921	4,231	205	205	...	399
17-18 visits	12,686	11,861	9,852	2,009	721	35	35	...	69
19 visits or more	21,864	20,085	17,110	2,975	1,543	83	83	...	153
Not stated	33,362	10,977	8,153	2,824	2,940	695	695	...	18,750
Median number of visits	11.8	12.5	12.7	11.2	9.2	5.0	5.0	...	9.6

See footnotes at end of table.

Table 35. Live births by month of pregnancy prenatal care began, number of prenatal visits, and median number of visits, by race and Hispanic origin of mother: United States, 1998 --Con.

Number of prenatal visits and race and Hispanic origin of mother	All births	Month of pregnancy prenatal care began							Not stated
		1st trimester			2d trimester		Late or no care		
		Total	1st and 2d months	3d month	4th-6th months	Total	7th-9th months	No care	
Black, non-Hispanic	593,127	416,966	306,711	110,255	112,080	39,683	24,081	15,602	24,398
No visits	15,602	...	...	...	...	15,602	...	15,602	...
1-2 visits	12,396	3,075	1,944	1,131	3,499	5,252	5,252	...	570
3-4 visits	22,458	6,548	3,713	2,835	8,809	6,417	6,417	...	684
5-6 visits	40,400	16,230	9,508	6,722	17,603	5,707	5,707	...	860
7-8 visits	56,687	29,752	17,803	11,949	22,843	3,129	3,129	...	963
9-10 visits	113,495	80,717	51,823	28,894	29,331	1,772	1,772	...	1,675
11-12 visits	124,274	107,504	79,317	28,187	15,290	591	591	...	889
13-14 visits	77,067	70,948	57,735	13,213	5,465	232	232	...	422
15-16 visits	64,904	60,189	50,482	9,707	4,135	196	196	...	384
17-18 visits	12,411	11,611	9,648	1,963	703	33	33	...	64
19 visits or more	21,456	19,703	16,786	2,917	1,521	82	82	...	150
Not stated	31,977	10,689	7,952	2,737	2,881	670	670	...	17,737
Median number of visits	11.8	12.5	12.8	11.2	9.2	5.0	5.0	...	9.6
Hispanic ²	734,661	526,798	378,969	147,829	137,846	44,492	31,944	12,548	25,525
No visits	12,548	...	...	...	...	12,548	...	12,548	...
1-2 visits	11,305	2,699	1,785	914	2,528	5,604	5,604	...	474
3-4 visits	23,141	5,844	3,224	2,620	8,211	8,481	8,481	...	605
5-6 visits	46,590	16,828	9,243	7,585	20,501	8,288	8,288	...	973
7-8 visits	76,117	39,427	22,837	16,590	30,860	4,659	4,659	...	1,171
9-10 visits	158,317	114,571	71,719	42,852	39,206	2,483	2,483	...	2,057
11-12 visits	162,319	141,206	102,813	38,393	19,061	886	886	...	1,166
13-14 visits	97,640	90,218	72,759	17,459	6,534	348	348	...	540
15-16 visits	76,397	70,553	58,103	12,450	5,248	272	272	...	324
17-18 visits	13,915	13,064	10,823	2,241	715	64	64	...	72
19 visits or more	20,377	18,717	15,985	2,732	1,418	101	101	...	141
Not stated	35,995	13,671	9,678	3,993	3,564	758	758	...	18,002
Median number of visits	11.6	12.4	12.7	11.1	9.4	5.4	5.4	...	10.0

... Category not applicable.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.

Table 36. Live births to mothers with selected obstetric procedures and rates by age of mother, by race of mother: United States, 1998

[Rates are number of live births with specified procedure per 1,000 live births in specified group]

Obstetric procedure and race of mother	All births	Obstetric procedure reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races ¹										
Amniocentesis	3,941,553	112,778	28.9	7.5	9.0	12.9	24.5	121.0	168.0	37,033
Electronic fetal monitoring	3,941,553	3,278,992	839.8	849.4	845.3	842.0	836.2	824.3	808.1	37,033
Induction of labor	3,941,553	751,389	192.4	173.9	188.8	200.8	196.8	191.8	192.5	37,033
Stimulation of labor	3,941,553	694,303	177.8	189.0	183.5	180.2	173.0	161.3	150.4	37,033
Tocolysis	3,941,553	89,120	22.8	24.8	23.7	22.5	21.6	21.8	22.9	37,033
Ultrasound	3,941,553	2,538,927	650.3	625.5	639.9	658.2	661.2	659.8	647.6	37,033
White										
Amniocentesis	3,118,727	95,579	30.9	7.9	9.1	13.1	25.3	127.3	179.4	29,171
Electronic fetal monitoring	3,118,727	2,603,263	842.6	851.6	847.5	845.3	840.2	827.9	811.0	29,171
Induction of labor	3,118,727	630,676	204.1	186.8	201.9	212.1	206.7	201.1	200.9	29,171
Stimulation of labor	3,118,727	560,376	181.4	196.1	188.5	183.4	175.7	164.1	154.4	29,171
Tocolysis	3,118,727	71,229	23.1	25.8	24.2	22.8	21.7	21.5	22.7	29,171
Ultrasound	3,118,727	2,052,224	664.2	644.1	654.8	671.0	672.2	671.4	658.3	29,171
Black										
Amniocentesis	609,902	9,998	16.5	6.3	8.6	12.0	18.7	69.9	93.9	3,778
Electronic fetal monitoring	609,902	509,250	840.2	850.1	845.9	838.1	829.0	823.3	815.5	3,778
Induction of labor	609,902	91,037	150.2	144.1	147.3	154.9	154.3	153.5	164.8	3,778
Stimulation of labor	609,902	98,086	161.8	173.8	167.7	159.8	150.4	140.8	127.9	3,778
Tocolysis	609,902	13,103	21.6	21.5	21.7	21.0	21.5	23.5	23.5	3,778
Ultrasound	609,902	359,350	592.9	580.8	590.8	599.9	602.6	594.6	592.7	3,778

¹ Includes races other than white and black.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

Table 37. Live births to mothers with selected complications of labor and/or delivery and rates by age of mother, by race of mother: United States, 1998

[Rates are number of live births with specified complication per 1,000 live births in specified group]

Complication and race of mother	All births ¹	Complication reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races ²										
Febrile	3,941,553	59,633	15.3	18.3	15.6	15.6	14.6	12.6	11.6	47,091
Meconium, moderate/heavy	3,941,553	214,627	55.1	59.6	55.3	53.5	53.6	56.0	59.0	47,091
Premature rupture of membrane	3,941,553	104,453	26.8	27.7	25.5	26.1	27.0	29.2	32.4	47,091
Abruptio placenta	3,941,553	21,834	5.6	5.3	5.1	5.2	5.8	6.9	8.9	47,091
Placenta previa	3,941,553	12,408	3.2	1.1	1.8	2.9	4.3	6.3	8.5	47,091
Other excessive bleeding	3,941,553	23,198	6.0	5.4	5.6	5.9	6.1	6.9	8.1	47,091
Seizures during labor	3,941,553	1,359	0.3	0.8	0.4	0.2	0.2	0.3	0.3	47,091
Precipitous labor	3,941,553	79,933	20.5	14.5	19.2	20.7	22.8	24.4	25.1	47,091
Prolonged labor	3,941,553	31,922	8.2	8.7	8.3	8.2	8.0	7.8	8.5	47,091
Dysfunctional labor	3,941,553	106,709	27.4	26.1	26.0	28.0	28.2	28.4	31.0	47,091
Breech/Malpresentation	3,941,553	150,685	38.7	29.4	31.9	38.6	44.2	49.8	57.8	47,091
Cephalopelvic disproportion	3,941,553	75,406	19.4	18.0	17.5	20.3	20.5	20.0	20.7	47,091
Cord prolapse	3,941,553	7,833	2.0	1.6	1.8	1.9	2.2	2.6	2.9	47,091
Anesthetic complication ³	3,599,270	2,091	0.6	0.4	0.5	0.6	0.7	0.7	0.7	49,580
Fetal distress ³	3,599,270	140,844	39.7	43.7	38.5	37.7	38.9	42.6	48.7	49,580
White										
Febrile	3,118,727	45,045	14.6	17.4	15.1	15.0	14.0	11.8	10.9	37,880
Meconium, moderate/heavy	3,118,727	156,452	50.8	53.4	50.8	49.5	49.9	52.3	56.0	37,880
Premature rupture of membrane	3,118,727	79,701	25.9	26.0	24.4	25.4	26.2	28.2	31.6	37,880
Abruptio placenta	3,118,727	16,590	5.4	5.2	4.9	5.0	5.5	6.6	8.7	37,880
Placenta previa	3,118,727	9,696	3.1	1.1	1.8	2.7	4.2	6.0	7.9	37,880
Other excessive bleeding	3,118,727	18,511	6.0	5.7	5.7	5.9	6.0	6.7	8.1	37,880
Seizures during labor	3,118,727	947	0.3	0.7	0.4	0.2	0.2	0.3	0.3	37,880
Precipitous labor	3,118,727	62,200	20.2	13.3	18.2	20.2	22.8	24.5	25.5	37,880
Prolonged labor	3,118,727	25,930	8.4	9.0	8.7	8.4	8.1	8.0	8.7	37,880
Dysfunctional labor	3,118,727	85,116	27.6	26.1	26.3	28.3	28.2	28.2	31.1	37,880
Breech/Malpresentation	3,118,727	125,303	40.7	32.2	33.6	40.3	45.6	50.8	58.9	37,880
Cephalopelvic disproportion	3,118,727	61,677	20.0	18.7	18.6	21.1	20.7	20.1	20.8	37,880
Cord prolapse	3,118,727	6,103	2.0	1.5	1.8	1.9	2.1	2.6	2.8	37,880
Anesthetic complication ³	2,826,910	1,674	0.6	0.5	0.5	0.6	0.7	0.7	0.7	39,967
Fetal distress ³	2,826,910	104,826	37.6	40.7	36.6	36.0	36.8	40.6	46.6	39,967
Black										
Febrile	609,902	10,035	16.6	20.3	16.4	15.8	14.7	13.7	12.8	4,861
Meconium, moderate/heavy	609,902	46,722	77.2	76.3	73.1	78.0	81.8	84.3	82.6	4,861
Premature rupture of membrane	609,902	18,944	31.3	31.2	28.9	30.4	33.8	37.3	39.5	4,861
Abruptio placenta	609,902	4,176	6.9	5.9	6.3	6.7	8.1	9.3	11.9	4,861
Placenta previa	609,902	1,791	3.0	1.1	1.9	3.4	4.7	6.6	9.9	4,861
Other excessive bleeding	609,902	2,794	4.6	3.8	4.4	4.4	4.9	7.4	6.9	4,861
Seizures during labor	609,902	346	0.6	1.0	0.5	0.4	0.4	*	*	4,861
Precipitous labor	609,902	13,208	21.8	16.8	22.1	24.1	23.4	24.2	24.1	4,861
Prolonged labor	609,902	3,970	6.6	7.4	6.5	6.4	6.2	5.7	6.9	4,861
Dysfunctional labor	609,902	15,677	25.9	25.7	24.5	25.8	27.6	28.5	29.2	4,861
Breech/Malpresentation	609,902	18,239	30.1	22.4	25.7	31.3	37.7	46.6	53.5	4,861
Cephalopelvic disproportion	609,902	9,231	15.3	16.5	13.7	15.0	16.7	15.7	17.2	4,861
Cord prolapse	609,902	1,334	2.2	1.8	1.8	2.4	2.9	2.9	3.1	4,861
Anesthetic complication ³	569,690	320	0.6	0.4	0.5	0.5	0.7	1.0	*	5,216
Fetal distress ³	569,690	29,165	51.7	52.4	47.1	49.9	56.6	60.6	65.1	5,216

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

¹ Total number of births to residents of areas reporting specified complication.² Includes races other than white and black.³ Texas does not report this complication.

NOTE: Race and Hispanic origin are reported separately on the birth certificate. Persons of Hispanic origin may be of any race. Data for persons of Hispanic origin are included in the data for each race group according to the mother's reported race; see Technical notes.

Table 38. Live births by attendant, place of delivery, and race and Hispanic origin of mother: United States, 1998

Place of delivery and race and Hispanic origin of mother	All births	Physician			Midwife			Other	Unspecified
		Total	Doctor of medicine	Doctor of osteopathy	Total	Certified nurse midwife	Other midwife		
All races ¹									
Total	3,941,553	3,625,043	3,468,219	156,824	293,386	277,811	15,575	21,852	1,272
In hospital ²	3,903,770	3,619,406	3,463,660	155,746	272,261	268,288	3,973	11,516	587
Not in hospital	37,049	5,517	4,453	1,064	20,897	9,322	11,575	10,101	534
Freestanding birthing center	10,693	1,767	1,121	646	8,714	6,175	2,539	206	6
Clinic or doctor's office	857	336	265	71	233	144	89	282	6
Residence	23,232	2,664	2,349	315	11,634	2,840	8,794	8,538	396
Other	2,267	750	718	32	316	163	153	1,075	126
Not specified	734	120	106	14	228	201	27	235	151
White, total									
Total	3,118,727	2,871,663	2,736,866	134,797	229,429	215,104	14,325	16,753	882
In hospital ²	3,085,755	2,867,476	2,733,707	133,769	209,329	206,250	3,079	8,523	427
Not in hospital	32,307	4,080	3,064	1,016	19,880	8,661	11,219	8,007	340
Freestanding birthing center	10,090	1,699	1,057	642	8,202	5,746	2,456	184	5
Clinic or doctor's office	733	268	202	66	222	136	86	240	3
Residence	20,019	1,730	1,446	284	11,178	2,644	8,534	6,846	265
Other	1,465	383	359	24	278	135	143	737	67
Not specified	665	107	95	12	220	193	27	223	115
White, non-Hispanic									
Total	2,361,462	2,189,411	2,078,392	111,019	158,883	147,004	11,879	12,579	589
In hospital ²	2,334,394	2,185,841	2,075,821	110,020	142,388	139,851	2,537	5,822	343
Not in hospital	26,541	3,477	2,489	988	16,301	6,984	9,317	6,548	215
Freestanding birthing center	7,425	1,529	892	637	5,754	4,459	1,295	140	2
Clinic or doctor's office	637	238	176	62	165	86	79	231	3
Residence	17,499	1,450	1,181	269	10,176	2,365	7,811	5,693	180
Other	980	260	240	20	206	74	132	484	30
Not specified	527	93	82	11	194	169	25	209	31
Black, total									
Total	609,902	559,799	543,140	16,659	46,043	45,158	885	3,754	306
In hospital ²	606,286	558,639	542,013	16,626	45,425	44,688	737	2,093	129
Not in hospital	3,559	1,152	1,119	33	610	462	148	1,652	145
Freestanding birthing center	395	23	21	2	357	303	54	14	1
Clinic or doctor's office	53	30	29	1	5	5	-	15	3
Residence	2,505	813	789	24	225	133	92	1,370	97
Other	606	286	280	6	23	21	2	253	44
Not specified	57	8	8	-	8	8	-	9	32
Black, non-Hispanic									
Total	593,127	545,774	529,866	15,908	43,425	42,558	867	3,644	284
In hospital ²	589,660	544,648	528,773	15,875	42,847	42,121	726	2,036	129
Not in hospital	3,425	1,118	1,085	33	570	429	141	1,600	137
Freestanding birthing center	371	23	21	2	334	283	51	13	1
Clinic or doctor's office	53	30	29	1	5	5	-	15	3
Residence	2,418	788	764	24	211	123	88	1,327	92
Other	583	277	271	6	20	18	2	245	41
Not specified	42	8	8	-	8	8	-	8	18
Hispanic ³									
Total	734,661	661,440	638,798	22,642	69,347	67,103	2,244	3,734	140
In hospital ²	729,638	660,892	638,277	22,615	66,040	65,536	504	2,653	53
Not in hospital	5,001	543	517	26	3,300	1,562	1,738	1,076	82
Freestanding birthing center	2,654	167	163	4	2,440	1,279	1,161	44	3
Clinic or doctor's office	93	29	25	4	56	50	6	8	-
Residence	1,827	236	222	14	742	183	559	794	55
Other	427	111	107	4	62	50	12	230	24
Not specified	22	5	4	1	7	5	2	5	5

- Quantity zero.

¹ Includes races other than white and black and origin not stated.² Includes births occurring en route to or on arrival at hospital.³ Includes all persons of Hispanic origin of any race.

Table 39. Live births by method of delivery and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by race and Hispanic origin of mother: United States, 1989-98

Year and race and Hispanic origin of mother	Births by method of delivery						Cesarean delivery rate		Rate of vaginal birth after previous cesarean ³	
	All births	Vaginal		Cesarean			Not stated	Total ¹		Primary ²
		Total	After previous cesarean	Total	Primary	Repeat				
All races⁴										
1998	3,941,553	3,078,537	108,903	825,870	519,975	305,895	37,146	21.2	14.9	26.3
1997	3,880,894	3,046,621	112,145	799,033	502,526	296,507	35,240	20.8	14.6	27.4
1996	3,891,494	3,061,092	116,045	797,119	503,724	293,395	33,283	20.7	14.6	28.3
1995	3,899,589	3,063,724	112,439	806,722	510,104	296,618	29,143	20.8	14.7	27.5
1994	3,952,767	3,087,576	110,341	830,517	520,647	309,870	34,674	21.2	14.9	26.3
1993	4,000,240	3,098,796	103,581	861,987	539,251	322,736	39,457	21.8	15.3	24.3
1992	4,065,014	3,100,710	97,549	888,622	554,662	333,960	75,682	22.3	15.6	22.6
1991	4,110,907	3,100,891	90,690	905,077	569,195	335,882	104,939	22.6	15.9	21.3
1990 ⁵	4,110,563	3,111,421	84,299	914,096	575,066	339,030	85,046	22.7	16.0	19.9
1989 ⁶	3,798,734	2,793,463	71,019	826,955	521,873	305,082	178,316	22.8	16.1	18.9
White, total										
1998	3,118,727	2,440,113	86,495	649,987	406,439	243,548	28,627	21.0	14.7	26.2
1997	3,072,640	2,415,236	89,522	630,613	393,603	237,010	26,791	20.7	14.5	27.4
1996	3,093,057	2,434,079	93,783	631,409	395,851	235,558	27,569	20.6	14.5	28.5
1995	3,098,885	2,435,191	90,940	639,818	401,098	238,720	23,876	20.8	14.6	27.6
1994	3,121,004	2,435,965	88,471	656,400	407,946	248,454	28,639	21.2	14.8	26.3
1993	3,149,833	2,435,229	82,995	682,355	423,540	258,815	32,249	21.9	15.3	24.3
1992	3,201,678	2,434,959	77,977	705,841	437,398	268,443	60,878	22.5	15.7	22.5
1991	3,241,273	2,434,900	72,564	723,088	452,534	270,554	83,285	22.9	16.1	21.1
1990 ⁵	3,252,473	2,453,857	67,191	732,713	458,656	274,057	65,903	23.0	16.1	19.7
1989 ⁶	3,022,537	2,212,843	56,851	667,114	418,177	248,937	142,580	23.2	16.2	18.6
White, non-Hispanic										
1998	2,361,462	1,842,420	67,787	495,550	315,138	180,412	23,492	21.2	15.1	27.3
1997	2,333,363	1,829,213	70,284	481,982	305,605	176,377	22,168	20.9	14.8	28.5
1996	2,358,989	1,851,058	73,973	485,530	308,482	177,048	22,401	20.8	14.8	29.5
1995	2,382,638	1,867,024	72,124	496,103	313,933	182,170	19,511	21.0	14.9	28.4
1994	2,438,855	1,896,609	71,597	518,021	324,236	193,785	24,225	21.5	15.1	27.0
1993	2,472,031	1,902,433	67,536	542,013	338,236	203,777	27,585	22.2	15.6	24.9
1992 ⁸	2,527,207	1,916,414	63,828	566,788	352,470	214,318	44,005	22.8	16.0	22.9
1991 ⁸	2,589,878	1,941,726	60,174	587,802	368,721	219,081	60,350	23.2	16.4	21.5
1990 ^{5,9}	2,626,500	1,972,754	55,952	603,467	378,508	224,959	50,279	23.4	16.5	19.9
1989 ^{6,10}	2,526,367	1,806,753	47,559	556,585	349,858	206,727	163,029	23.6	16.6	18.7
Black, total										
1998	609,902	470,088	17,062	135,727	86,438	49,289	4,087	22.4	16.0	25.7
1997	599,913	466,001	16,986	130,142	83,025	47,117	3,770	21.8	15.6	26.5
1996	594,781	462,378	16,866	128,357	82,646	45,711	4,046	21.7	15.6	27.0
1995	603,139	468,984	16,224	130,482	84,441	46,041	3,673	21.8	15.7	26.1
1994	636,391	493,879	16,970	138,067	88,636	49,431	4,445	21.8	15.7	25.6
1993	658,875	509,816	16,179	143,452	91,677	51,775	5,607	22.0	15.7	23.8
1992	673,633	514,929	15,382	146,480	93,165	53,315	12,224	22.1	15.7	22.4
1991	682,602	519,047	14,213	145,583	92,645	52,938	17,972	21.9	15.5	21.2
1990 ⁵	679,236	516,581	13,496	146,472	93,476	52,996	16,183	22.1	15.7	20.3
1989 ⁶	611,147	452,291	11,104	127,907	82,695	45,212	30,319	22.0	15.8	19.7
Black, non-Hispanic										
1998	593,127	457,186	16,510	131,999	84,169	47,830	3,942	22.4	16.0	25.7
1997	581,431	451,744	16,353	126,138	80,599	45,539	3,549	21.8	15.6	26.4
1996	578,099	449,544	16,322	124,836	80,457	44,379	3,719	21.7	15.7	26.9
1995	587,781	457,104	15,721	127,171	82,395	44,776	3,506	21.8	15.7	26.0
1994	619,198	480,551	16,478	134,526	86,411	48,115	4,121	21.9	15.7	25.5
1993	641,273	496,333	15,675	139,702	89,315	50,387	5,238	22.0	15.7	23.7
1992 ⁸	657,450	502,669	14,950	143,153	91,086	52,067	11,628	22.2	15.7	22.3
1991 ⁸	666,758	507,522	13,847	142,417	90,664	51,753	16,819	21.9	15.5	21.1
1990 ^{5,9}	661,701	503,720	13,157	142,838	91,175	51,663	15,143	22.1	15.7	20.3
1989 ^{6,10}	611,269	440,310	10,726	125,290	81,177	44,113	45,669	22.2	15.9	19.6

See footnotes at end of table.

Table 39. Live births by method of delivery and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by race and Hispanic origin of mother: United States, 1989-98 --Con.

Year and race and Hispanic origin of mother	Births by method of delivery							Cesarean delivery rate		Rate of vaginal birth after previous cesarean ³
	All births	Vaginal		Cesarean			Not stated	Total ¹	Primary ²	
		Total	After previous cesarean	Total	Primary	Repeat				
Hispanic ⁷										
1998	734,661	580,143	17,803	150,317	88,763	61,554	4,201	20.6	13.6	22.4
1997	709,767	563,114	17,942	142,907	84,410	58,497	3,746	20.2	13.4	23.5
1996	701,339	558,105	18,491	139,554	83,392	56,162	3,680	20.0	13.4	24.8
1995	679,768	539,731	17,396	136,640	82,662	53,978	3,397	20.2	13.7	24.4
1994	665,026	525,928	16,206	135,569	81,961	53,608	3,529	20.5	13.9	23.2
1993	654,418	514,493	14,586	136,279	82,576	53,703	3,646	20.9	14.2	21.4
1992 ⁸	643,271	494,338	13,111	133,369	81,211	52,158	15,564	21.2	14.4	20.1
1991 ⁸	623,085	472,126	11,615	129,752	80,228	49,524	21,207	21.6	14.8	19.0
1990 ^{5, 9}	595,073	458,242	10,395	122,969	76,027	46,942	13,862	21.2	14.5	18.1
1989 ^{6, 10}	532,249	385,462	8,549	105,268	64,905	40,363	41,519	21.5	14.7	17.5

¹ Percent of all live births by cesarean delivery.² Number of primary cesareans per 100 live births to women who have not had a previous cesarean.³ Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.⁴ Includes races other than white and black and origin not stated.⁵ Excludes data for Oklahoma, which did not report method of delivery on the birth certificate.⁶ Excludes data for Louisiana, Maryland, Nebraska, Nevada, and Oklahoma, which did not report method of delivery on the birth certificate.⁷ Includes all persons of Hispanic origin of any race.⁸ Excludes data for New Hampshire which did not report Hispanic origin.⁹ Excludes data for New Hampshire and Oklahoma which did not report Hispanic origin.¹⁰ Excludes data for Louisiana, New Hampshire, and Oklahoma, which did not report Hispanic origin.

Table 40. Live births by method of delivery, and rates of cesarean delivery and vaginal birth after previous cesarean delivery, by age and race and Hispanic origin of mother: United States, 1998

Age and race and Hispanic origin of mother	Births by method of delivery						Cesarean delivery rate		Rate of vaginal birth after previous cesarean ³	
	All births	Vaginal		Cesarean			Not stated	Total ¹		Primary ²
		Total	After previous cesarean	Total	Primary	Repeat				
All races ⁴	3,941,553	3,078,537	108,903	825,870	519,975	305,895	37,146	21.2	14.9	26.3
Under 20 years	494,357	418,743	3,614	71,195	63,425	7,770	4,419	14.5	13.3	31.7
20-24 years	965,122	789,395	20,742	166,403	114,822	51,581	9,324	17.4	13.0	28.7
25-29 years	1,083,010	847,952	31,292	224,878	140,031	84,847	10,180	21.0	14.6	26.9
30-34 years	889,365	666,110	32,966	215,010	121,144	93,866	8,245	24.4	16.1	26.0
35-39 years	424,890	300,150	17,228	120,604	64,451	56,153	4,136	28.7	18.6	23.5
40-54 years	84,809	56,187	3,061	27,780	16,102	11,678	842	33.1	23.3	20.8
White, total	3,118,727	2,440,113	86,495	649,987	406,439	243,548	28,627	21.0	14.7	26.2
Under 20 years	345,495	294,036	2,174	48,452	43,524	4,928	3,007	14.1	13.0	30.6
20-24 years	736,664	604,682	14,991	125,070	87,234	37,836	6,912	17.1	12.9	28.4
25-29 years	880,688	691,236	24,889	181,313	113,175	68,138	8,139	20.8	14.5	26.8
30-34 years	737,532	555,115	27,408	175,776	98,335	77,441	6,641	24.0	15.7	26.1
35-39 years	349,799	249,156	14,466	97,363	51,490	45,873	3,280	28.1	18.0	24.0
40-54 years	68,549	45,888	2,567	22,013	12,681	9,332	648	32.4	22.6	21.6
White, non-Hispanic	2,361,462	1,842,420	67,787	495,550	315,138	180,412	23,492	21.2	15.1	27.3
Under 20 years	221,301	187,475	1,287	31,520	28,770	2,750	2,306	14.4	13.4	31.9
20-24 years	511,101	418,333	10,234	87,174	62,220	24,954	5,594	17.2	13.2	29.1
25-29 years	678,227	532,733	18,854	138,657	89,758	48,899	6,837	20.7	14.9	27.8
30-34 years	603,639	456,854	22,735	141,278	81,273	60,005	5,507	23.6	15.8	27.5
35-39 years	291,202	209,283	12,451	79,175	42,683	36,492	2,744	27.4	17.8	25.4
40-54 years	55,992	37,742	2,226	17,746	10,434	7,312	504	32.0	22.7	23.3
Black, total	609,902	470,088	17,062	135,727	86,438	49,289	4,087	22.4	16.0	25.7
Under 20 years	131,226	109,684	1,312	20,758	18,091	2,667	784	15.9	14.3	33.0
20-24 years	189,088	151,617	5,057	36,110	23,663	12,447	1,361	19.2	13.9	28.9
25-29 years	139,302	105,613	5,002	32,754	19,024	13,730	935	23.7	15.9	26.7
30-34 years	93,785	66,272	3,684	26,873	14,926	11,947	640	28.9	19.3	23.6
35-39 years	46,657	30,754	1,715	15,614	8,589	7,025	289	33.7	22.8	19.6
40-54 years	9,844	6,148	292	3,618	2,145	1,473	78	37.0	26.8	16.5
Black, non-Hispanic	593,127	457,186	16,510	131,999	84,169	47,830	3,942	22.4	16.0	25.7
Under 20 years	128,280	107,166	1,281	20,350	17,718	2,632	764	16.0	14.3	32.7
20-24 years	184,263	147,727	4,915	35,222	23,040	12,182	1,314	19.3	13.9	28.7
25-29 years	135,158	102,471	4,833	31,779	18,477	13,302	908	23.7	15.9	26.7
30-34 years	90,827	64,160	3,548	26,054	14,530	11,524	613	28.9	19.3	23.5
35-39 years	45,096	29,703	1,649	15,121	8,342	6,779	272	33.7	22.9	19.6
40-54 years	9,503	5,959	284	3,473	2,062	1,411	71	36.8	26.7	16.8
Hispanic ⁵	734,661	580,143	17,803	150,317	88,763	61,554	4,201	20.6	13.6	22.4
Under 20 years	124,104	106,475	898	16,896	14,736	2,160	733	13.7	12.2	29.4
20-24 years	223,113	184,168	4,692	37,683	24,909	12,774	1,262	17.0	12.2	26.9
25-29 years	196,012	153,363	5,819	41,594	22,658	18,936	1,055	21.3	13.3	23.5
30-34 years	125,702	92,030	4,316	32,915	16,082	16,833	757	26.3	15.5	20.4
35-39 years	54,195	36,690	1,779	17,179	8,257	8,922	326	31.9	19.1	16.6
40-54 years	11,535	7,417	299	4,050	2,121	1,929	68	35.3	23.0	13.4

¹ Percent of all live births by cesarean delivery.² Number of primary cesareans per 100 live births to women who have not had a previous cesarean.³ Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.⁴ Includes races other than white and black and origin not stated.⁵ Includes all persons of Hispanic origin of any race.

Table 41. Rates of cesarean delivery and vaginal birth after previous cesarean delivery by race and Hispanic origin of mother: United States, each State and territory, 1998

[By place of residence]

State	Cesarean delivery rate ¹						Rate of vaginal births after previous cesarean ²					
	All races ³	White		Black		Hispanic ⁴	All races ³	White		Black		Hispanic ⁴
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States ⁵	21.2	21.0	21.2	22.4	22.4	20.6	26.3	26.2	27.3	25.7	25.7	22.4
Alabama	24.0	24.7	24.8	22.8	22.8	20.7	21.6	21.1	20.8	22.6	22.6	29.2
Alaska	14.7	16.5	16.4	18.0	17.9	17.6	35.2	29.5	29.6	*	*	29.2
Arizona	17.0	17.2	18.3	20.1	20.1	15.6	23.9	22.2	23.7	23.0	23.7	20.5
Arkansas	24.9	24.7	25.0	26.1	26.1	20.8	19.5	19.1	18.5	20.3	20.3	29.5
California	21.7	21.6	22.5	24.8	24.9	20.9	18.4	18.4	19.8	16.2	16.0	17.4
Colorado	16.4	16.4	16.7	16.9	17.1	15.7	34.9	34.9	34.4	33.5	33.5	36.0
Connecticut	20.1	20.1	20.4	20.6	20.7	18.7	31.8	32.3	32.8	29.0	28.7	31.6
Delaware	23.2	22.7	23.3	24.8	24.8	18.2	30.8	32.0	30.0	28.7	28.7	49.5
District of Columbia ...	20.8	17.8	21.3	22.1	22.0	12.2	25.6	24.5	*	25.4	25.3	*
Florida	22.4	22.9	22.1	21.2	21.1	24.9	22.8	22.7	25.0	22.8	23.1	17.0
Georgia	20.8	20.7	21.3	21.5	21.5	15.1	23.3	23.6	23.3	22.5	22.4	24.8
Hawaii	15.6	16.8	16.4	18.7	19.1	17.1	39.7	33.3	33.8	*	*	37.4
Idaho	15.7	15.6	15.5	*	*	16.5	36.4	36.7	36.1	*	*	39.4
Illinois	19.4	19.4	20.3	19.5	19.5	16.9	31.6	32.2	31.9	28.5	28.5	33.4
Indiana	20.0	20.0	20.0	19.9	19.9	20.3	27.6	27.5	27.8	28.9	28.7	24.2
Iowa	19.6	19.7	19.7	19.9	20.3	19.8	30.8	30.7	30.9	34.1	34.1	27.5
Kansas	18.6	18.5	18.7	20.6	20.8	17.2	23.8	23.8	23.3	24.6	24.4	28.5
Kentucky	22.8	22.9	22.9	22.6	22.7	17.9	22.9	22.6	22.5	25.0	25.1	30.7
Louisiana	26.0	26.8	26.8	25.1	25.2	26.4	13.1	10.8	10.8	16.6	16.6	*
Maine	19.7	19.8	19.8	23.1	26.9	22.1	30.3	30.0	30.2	*	*	*
Maryland	21.3	20.7	21.0	22.5	22.6	17.9	30.3	30.2	30.2	30.4	30.4	30.8
Massachusetts	20.9	21.1	21.5	21.6	22.0	17.9	32.8	32.6	32.4	30.9	31.8	33.3
Michigan	20.6	20.6	20.7	20.6	20.7	19.3	25.8	25.6	25.4	27.0	26.9	26.6
Minnesota	18.0	18.4	18.5	17.2	17.1	17.4	29.4	29.1	29.0	37.6	38.0	31.8
Mississippi	27.0	27.9	28.0	26.0	26.0	24.9	15.0	14.2	14.2	15.8	15.7	*
Missouri	20.6	20.7	20.8	20.0	20.0	19.3	29.6	29.4	29.5	30.5	30.6	24.9
Montana	18.9	18.6	18.5	*	*	21.7	31.8	32.6	33.3	*	*	*
Nebraska	20.6	20.7	21.0	21.8	21.9	18.3	28.0	28.4	27.8	20.7	20.9	33.9
Nevada	21.4	20.8	22.1	25.7	25.9	18.6	19.8	20.2	19.6	18.1	18.1	21.5
New Hampshire	18.5	18.5	18.6	17.2	17.2	18.0	38.5	38.3	38.0	*	*	*
New Jersey	25.4	25.5	25.4	25.5	25.0	26.3	33.4	32.4	33.3	37.1	38.8	28.4
New Mexico	16.4	16.8	17.7	20.5	20.8	16.1	35.2	33.5	35.2	40.4	40.0	32.7
New York	22.9	22.9	23.5	23.5	23.5	22.0	32.0	32.5	32.3	30.8	30.6	30.7
North Carolina	21.5	21.3	21.8	22.3	22.3	16.6	27.2	27.3	27.0	27.0	27.0	30.2
North Dakota	19.4	19.2	18.9	23.0	24.4	30.3	30.6	30.1	30.4	*	*	*
Ohio	18.9	18.9	18.9	19.0	19.0	17.9	34.2	33.9	33.8	35.6	35.6	35.3
Oklahoma	22.8	22.6	22.8	24.2	24.1	20.2	22.0	22.4	21.7	23.6	24.5	29.2
Oregon	17.8	17.6	17.9	21.6	21.4	16.6	36.0	36.1	35.2	33.0	33.3	40.6
Pennsylvania	19.6	19.8	19.9	19.3	19.4	18.1	34.3	33.2	33.1	39.7	39.6	35.9
Rhode Island	19.5	19.9	21.3	19.4	19.7	16.7	30.9	31.0	29.1	27.4	27.5	34.8
South Carolina	23.4	23.5	23.6	23.4	23.4	19.4	21.5	21.9	21.6	20.7	20.7	31.3
South Dakota	21.5	21.5	21.5	29.8	28.4	27.0	21.6	22.6	22.3	*	*	*
Tennessee	22.6	22.5	22.7	23.0	23.0	18.3	22.6	21.8	21.6	25.0	25.1	26.8
Texas	23.5	23.3	24.1	25.1	25.2	22.7	18.2	18.1	19.4	17.4	17.5	17.0
Utah	16.0	15.9	15.9	23.8	24.7	16.4	33.5	33.3	32.7	*	*	37.3
Vermont	16.5	16.5	16.7	*	*	*	40.6	40.4	39.9	*	*	*
Virginia	21.2	20.8	21.1	22.5	22.5	17.9	30.7	30.6	30.1	30.0	30.1	37.2
Washington	17.9	17.7	17.8	22.7	22.5	17.2	33.4	33.6	32.5	24.1	24.4	38.6
West Virginia	24.1	24.1	24.1	23.3	23.4	21.5	23.1	22.9	22.9	26.7	26.7	*
Wisconsin	16.0	16.5	16.5	14.1	14.1	15.4	33.8	34.1	34.0	28.5	28.4	35.7
Wyoming	18.6	18.4	18.2	*	*	19.5	31.0	31.3	32.2	*	*	*
Puerto Rico	35.1	35.4	---	30.7	---	---	7.4	7.3	---	9.0	---	---
Virgin Islands	22.7	27.0	29.1	21.5	21.1	24.9	16.7	*	*	18.2	*	*
Guam	14.7	20.8	20.6	*	*	*	35.3	*	*	*	*	*
American Samoa	---	---	---	---	---	---	---	---	---	---	---	---
Northern Marianas	17.1	*	---	*	---	---	*	*	---	*	---	---

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

--- Data not available.

¹ Percent of all live births by cesarean delivery.² Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.³ Includes races other than white and black and origin not stated.⁴ Includes all persons of Hispanic origin of any race.⁵ Excludes data for the territories.

NOTE: Data on method of delivery for the Northern Marianas are substantially incomplete; see Table I in the Technical notes.

Table 42. Rates of cesarean delivery and vaginal birth after previous cesarean delivery, by selected maternal medical risk factors and complications of labor and/or delivery: United States, 1998

Medical risk factor and complication	All births to mothers with specified condition and/or procedure	Cesarean delivery rate		Rate of vaginal birth after previous cesarean ³
		Total ¹	Primary ²	
Medical risk factors				
Anemia	84,795	21.9	15.3	30.2
Cardiac disease	20,528	25.1	18.2	30.7
Acute or chronic lung disease	40,190	24.4	17.6	30.2
Diabetes	103,691	36.1	25.9	19.2
Genital herpes ⁴	32,969	33.9	28.1	30.5
Hydramnios/Oligohydramnios	51,296	36.4	31.0	24.1
Hemoglobinopathy	3,202	24.8	18.5	31.3
Hypertension, chronic	27,442	40.2	30.9	17.6
Hypertension, pregnancy-associated	146,320	36.1	31.1	20.2
Eclampsia	12,345	48.8	44.6	17.9
Incompetent cervix	10,704	32.9	26.4	27.4
Renal disease	11,141	25.4	18.2	26.3
Rh sensitization ⁵	25,783	21.2	14.6	30.3
Uterine bleeding ⁴	23,241	31.2	24.6	25.7
Complications of labor and/or delivery				
Febrile	59,633	30.2	28.4	47.1
Meconium, moderate/heavy	214,627	20.4	17.4	45.9
Premature rupture of membrane	104,453	25.4	22.4	40.7
Abruptio placenta	21,834	59.0	54.6	17.8
Placenta previa	12,408	81.5	77.5	4.1
Other excessive bleeding ⁶	23,198	30.3	24.0	30.0
Seizures during labor	1,359	53.9	51.6	23.1
Precipitous labor (less than 3 hours)	79,933	2.4	1.6	78.4
Prolonged labor (more than 20 hours)	31,922	35.0	33.5	46.1
Dysfunctional labor	106,709	64.9	62.5	16.7
Breech/Malpresentation	150,685	84.2	82.6	5.5
Cephalopelvic disproportion	75,406	96.2	95.8	1.6
Cord prolapse	7,833	67.2	64.9	12.6
Anesthetic complication	2,091	43.8	36.4	19.2
Fetal distress	140,844	55.7	53.0	21.6

¹ Percent of all live births by cesarean delivery.² Number of primary cesareans per 100 live births to women who have not had a previous cesarean.³ Number of vaginal births after previous cesarean delivery per 100 live births to women with a previous cesarean delivery.⁴ Texas does not report this risk factor.⁵ Kansas does not report this risk factor.⁶ Texas does not report this complication.

Table 43. Live births by birthweight and percent very low and low birthweight, by period of gestation and race and Hispanic origin of mother: United States, 1998

Birthweight ¹ and race and Hispanic origin of mother	All births	Period of gestation ²										
		Preterm					Term			Postterm		Not stated
		Total under 37 weeks	Under 28 weeks	28-31 weeks	32-35 weeks	36 weeks	Total 37-41 weeks	37-39 weeks	40 weeks	41 weeks	42 weeks and over	
Number												
All races ³	3,941,553	452,275	29,037	47,486	212,210	163,542	3,156,116	1,859,198	853,416	443,502	292,766	40,396
Less than 500 grams	5,950	5,755	5,524	217	11	3	16	13	3	-	-	179
500-999 grams	22,471	21,836	16,104	5,044	627	61	194	125	48	21	23	418
1,000-1,499 grams	28,555	26,536	3,968	15,087	6,921	560	1,357	988	244	125	222	440
1,500-1,999 grams	58,921	48,671	977	11,194	31,469	5,031	8,718	7,184	987	547	805	727
2,000-2,499 grams	182,311	92,678	667	4,105	60,004	27,902	82,348	67,528	10,165	4,655	5,338	1,947
2,500-2,999 grams	649,658	118,357	1,069	4,243	53,651	59,394	490,289	362,438	88,946	38,905	34,760	6,252
3,000-3,499 grams	1,457,401	90,571	-	4,944	37,703	47,924	1,245,928	772,698	321,039	152,191	106,916	13,986
3,500-3,999 grams	1,135,572	37,552	-	2,542	17,137	17,873	985,558	501,222	314,083	170,253	101,907	10,555
4,000-4,499 grams	335,087	7,696	-	-	3,794	3,902	288,932	125,210	99,968	63,754	35,252	3,207
4,500-4,999 grams	54,809	1,265	-	-	586	679	46,346	18,686	16,004	11,656	6,633	565
5,000 grams or more	6,200	202	-	-	100	102	5,150	2,350	1,612	1,188	748	100
Not stated	4,618	1,156	728	110	207	111	1,280	756	317	207	162	2,020
Percent												
Very low birthweight ⁴	1.4	12.0	90.4	43.0	3.6	0.4	0.0	0.1	0.0	0.0	0.1	2.7
Low birthweight ⁵	7.6	43.3	96.2	75.2	46.7	20.5	2.9	4.1	1.3	1.2	2.2	9.7
Number												
White, total	3,118,727	324,284	17,020	31,415	152,717	123,132	2,529,526	1,470,983	693,703	364,840	234,996	29,921
Less than 500 grams	3,271	3,156	3,020	128	6	2	9	7	2	-	-	106
500-999 grams	13,676	13,238	9,593	3,184	427	34	141	90	34	17	19	278
1,000-1,499 grams	18,878	17,541	2,413	10,040	4,701	387	902	663	151	88	138	297
1,500-1,999 grams	40,733	33,898	541	7,781	22,107	3,469	5,838	4,843	653	342	521	476
2,000-2,499 grams	126,666	65,723	398	2,565	43,114	19,646	56,001	46,062	6,850	3,089	3,644	1,298
2,500-2,999 grams	465,221	86,235	605	2,496	38,852	44,282	350,263	259,390	62,985	27,888	24,531	4,192
3,000-3,499 grams	1,140,245	67,407	-	3,283	26,941	37,183	979,405	607,113	252,155	120,137	83,134	10,299
3,500-3,999 grams	958,560	28,989	-	1,860	12,890	14,239	835,568	424,057	266,497	145,014	85,469	8,534
4,000-4,499 grams	294,288	6,159	-	-	2,978	3,181	254,587	109,766	88,337	56,484	30,858	2,684
4,500-4,999 grams	48,671	1,011	-	-	469	542	41,300	16,381	14,372	10,547	5,883	477
5,000 grams or more	5,348	152	-	-	73	79	4,452	1,992	1,406	1,054	662	82
Not stated	3,170	775	450	78	159	88	1,060	619	261	180	137	1,198
Percent												
Very low birthweight ⁴	1.1	10.5	90.7	42.6	3.4	0.3	0.0	0.1	0.0	0.0	0.1	2.4
Low birthweight ⁵	6.5	41.3	96.3	75.6	46.1	19.1	2.5	3.5	1.1	1.0	1.8	8.5
Number												
White, non-Hispanic	2,361,462	240,300	12,523	23,219	111,691	92,867	1,930,558	1,118,994	530,325	281,239	176,615	13,989
Less than 500 grams	2,426	2,370	2,276	87	5	2	8	6	2	-	-	48
500-999 grams	10,205	9,966	7,140	2,472	330	24	93	62	19	12	9	137
1,000-1,499 grams	14,486	13,586	1,727	7,872	3,698	289	648	484	108	56	95	157
1,500-1,999 grams	31,418	26,359	367	6,016	17,279	2,697	4,426	3,718	463	245	380	253
2,000-2,499 grams	96,061	50,799	271	1,823	33,475	15,230	41,948	34,678	5,016	2,254	2,666	648
2,500-2,999 grams	341,150	64,852	403	1,597	28,764	34,088	256,673	191,480	45,044	20,149	17,735	1,890
3,000-3,499 grams	843,988	47,309	-	2,075	17,619	27,615	731,314	455,126	186,684	89,504	60,808	4,557
3,500-3,999 grams	740,782	19,434	-	1,223	8,087	10,124	652,240	330,486	208,279	113,475	65,095	4,013
4,000-4,499 grams	235,239	4,233	-	-	1,949	2,284	205,274	87,810	71,634	45,830	24,440	1,292
4,500-4,999 grams	39,319	714	-	-	317	397	33,610	13,139	11,760	8,711	4,757	238
5,000 grams or more	4,146	102	-	-	47	55	3,479	1,524	1,101	854	525	40
Not stated	2,242	576	339	54	121	62	845	481	215	149	105	716
Percent												
Very low birthweight ⁴	1.1	10.8	91.5	45.0	3.6	0.3	0.0	0.0	0.0	0.0	0.1	2.6
Low birthweight ⁵	6.6	43.0	96.7	78.9	49.1	19.7	2.4	3.5	1.1	0.9	1.8	9.4

See footnotes at end of table.

Table 43. Live births by birthweight and percent very low and low birthweight, by period of gestation and race and Hispanic origin of mother: United States, 1998 --Con.

Birthweight ¹ and race and Hispanic origin of mother	All births	Period of gestation ²										Not stated
		Preterm					Term			Postterm		
		Total under 37 weeks	Under 28 weeks	28-31 weeks	32-35 weeks	36 weeks	Total 37-41 weeks	37-39 weeks	40 weeks	41 weeks	42 weeks and over	
Number												
Black, total	609,902	105,773	10,899	13,988	48,954	31,932	455,212	282,824	114,888	57,500	43,931	4,986
Less than 500 grams	2,425	2,365	2,280	82	3	-	6	5	1	-	-	54
500-999 grams	7,909	7,753	5,908	1,665	157	23	45	29	12	4	4	107
1,000-1,499 grams	8,427	7,868	1,396	4,453	1,876	143	387	276	79	32	74	98
1,500-1,999 grams	15,369	12,550	396	2,935	7,955	1,264	2,419	1,952	297	170	239	161
2,000-2,499 grams	45,354	22,395	248	1,351	14,092	6,704	21,103	17,074	2,750	1,279	1,440	416
2,500-2,999 grams	141,095	25,941	419	1,511	12,087	11,924	105,757	77,670	19,557	8,530	8,303	1,094
3,000-3,499 grams	230,862	18,503	-	1,418	8,676	8,409	192,488	119,100	49,669	23,719	18,259	1,612
3,500-3,999 grams	124,959	6,722	-	552	3,335	2,835	105,325	54,141	33,305	17,879	12,045	867
4,000-4,499 grams	27,965	1,137	-	-	628	509	23,615	10,630	7,927	5,058	2,992	221
4,500-4,999 grams	4,168	187	-	-	96	91	3,441	1,613	1,107	721	507	33
5,000 grams or more	584	38	-	-	19	19	486	248	147	91	51	9
Not stated	785	314	252	21	30	11	140	86	37	17	17	314
Percent												
Very low birthweight ⁴	3.1	17.1	90.0	44.4	4.2	0.5	0.1	0.1	0.1	0.1	0.2	5.5
Low birthweight ⁵	13.0	50.2	96.1	75.1	49.2	25.5	5.3	6.8	2.7	2.6	4.0	17.9
Number												
Black, non-Hispanic	593,127	103,588	10,683	13,742	47,976	31,187	442,230	275,194	111,396	55,640	42,606	4,703
Less than 500 grams	2,380	2,322	2,237	82	3	-	6	5	1	-	-	52
500-999 grams	7,741	7,591	5,781	1,634	154	22	45	29	12	4	4	101
1,000-1,499 grams	8,304	7,758	1,375	4,393	1,850	140	381	272	78	31	73	92
1,500-1,999 grams	15,120	12,344	386	2,876	7,837	1,245	2,387	1,926	294	167	235	154
2,000-2,499 grams	44,467	21,957	244	1,323	13,834	6,556	20,695	16,755	2,682	1,258	1,411	404
2,500-2,999 grams	137,883	25,378	411	1,486	11,823	11,658	103,334	75,907	19,113	8,314	8,113	1,058
3,000-3,499 grams	224,378	18,051	-	1,389	8,468	8,194	187,046	115,788	48,287	22,971	17,750	1,531
3,500-3,999 grams	120,741	6,553	-	539	3,253	2,761	101,793	52,384	32,136	17,273	11,602	793
4,000-4,499 grams	26,839	1,103	-	-	611	492	22,662	10,261	7,570	4,831	2,869	205
4,500-4,999 grams	3,980	184	-	-	94	90	3,281	1,544	1,047	690	483	32
5,000 grams or more	557	37	-	-	19	18	464	239	140	85	50	6
Not stated	737	310	249	20	30	11	136	84	36	16	16	275
Percent												
Very low birthweight ⁴	3.1	17.1	90.0	44.5	4.2	0.5	0.1	0.1	0.1	0.1	0.2	5.5
Low birthweight ⁵	13.2	50.3	96.1	75.1	49.4	25.5	5.3	6.9	2.8	2.6	4.0	18.1
Number												
Hispanic ⁶	734,661	82,282	4,332	8,052	40,264	29,634	580,496	342,311	157,931	80,254	56,900	14,983
Less than 500 grams	773	724	684	38	2	-	1	1	-	-	-	48
500-999 grams	3,383	3,196	2,378	708	99	11	46	26	15	5	8	133
1,000-1,499 grams	4,260	3,838	665	2,084	988	101	248	173	43	32	42	132
1,500-1,999 grams	9,018	7,286	177	1,710	4,654	745	1,385	1,099	189	97	142	205
2,000-2,499 grams	29,861	14,492	121	740	9,314	4,317	13,792	11,165	1,811	816	968	609
2,500-2,999 grams	121,614	20,931	205	898	9,910	9,918	91,746	66,552	17,579	7,615	6,731	2,206
3,000-3,499 grams	288,934	19,888	-	1,214	9,284	9,390	241,668	148,197	63,760	29,711	21,892	5,486
3,500-3,999 grams	209,923	9,461	-	633	4,769	4,059	176,345	90,400	55,907	30,038	19,789	4,328
4,000-4,499 grams	56,227	1,926	-	-	1,026	900	46,870	21,012	15,816	10,042	6,113	1,318
4,500-4,999 grams	8,846	296	-	-	152	144	7,261	3,095	2,481	1,685	1,059	230
5,000 grams or more	1,153	51	-	-	27	24	937	462	289	186	126	39
Not stated	669	193	102	27	39	25	197	129	41	27	30	249
Percent												
Very low birthweight ⁴	1.1	9.5	88.1	35.3	2.7	0.4	0.1	0.1	0.0	0.0	0.1	2.1
Low birthweight ⁵	6.4	36.0	95.2	65.8	37.4	17.5	2.7	3.6	1.3	1.2	2.0	7.6

- Quantity zero.
0.0 Quantity more than zero but less than 0.05.
¹ Equivalents of the gram weights in pounds and ounces are shown in the Technical notes.
² Expressed in completed weeks.
³ Includes races other than white and black and origin not stated.
⁴ Birthweight of less than 1,500 grams (3 lb 4 oz).
⁵ Birthweight of less than 2,500 grams (5 lb 8 oz).
⁶ Includes all persons of Hispanic origin of any race.

Table 44. Percent of live births very preterm and preterm and percent of live births of very low birthweight and low birthweight, by race and Hispanic origin of mother: United States, 1981-98

Year	Very preterm ¹						Preterm ²					
	All races ³	White		Black		Hispanic ⁴	All races ³	White		Black		Hispanic ⁴
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
1998	1.96	1.57	1.52	4.11	4.15	1.72	11.6	10.5	10.2	17.5	17.6	11.4
1997	1.94	1.53	1.49	4.17	4.19	1.68	11.4	10.2	9.9	17.5	17.6	11.2
1996	1.89	1.48	1.43	4.13	4.17	1.66	11.0	9.8	9.5	17.4	17.5	10.9
1995	1.89	1.46	1.41	4.25	4.29	1.66	11.0	9.7	9.4	17.7	17.8	10.9
1994	1.91	1.45	1.39	4.32	4.36	1.67	11.0	9.6	9.3	18.1	18.2	10.9
1993	1.93	1.45	1.39	4.41	4.45	1.67	11.0	9.5	9.1	18.5	18.6	11.0
1992 ⁷	1.91	1.40	1.33	4.47	4.50	1.64	10.7	9.1	8.7	18.4	18.5	10.7
1991 ⁷	1.94	1.41	1.35	4.62	4.65	1.65	10.8	9.1	8.7	18.9	19.0	11.0
1990 ⁸	1.92	1.39	1.33	4.61	4.63	1.69	10.6	8.9	8.5	18.8	18.9	11.0
1989 ⁹	1.95	1.41	1.34	4.64	4.68	1.76	10.6	8.8	8.4	18.9	19.0	11.1
1988	1.96	1.42	---	4.72	---	---	10.2	8.5	---	18.7	---	---
1987	1.96	1.44	---	4.61	---	---	10.2	8.5	---	18.4	---	---
1986	1.90	1.41	---	4.47	---	---	10.0	8.4	---	18.0	---	---
1985	1.88	1.42	---	4.37	---	---	9.8	8.2	---	17.8	---	---
1984	1.83	1.38	---	4.22	---	---	9.4	7.9	---	17.1	---	---
1983	1.86	1.40	---	4.34	---	---	9.6	8.0	---	17.7	---	---
1982	1.84	1.40	---	4.22	---	---	9.5	8.0	---	17.4	---	---
1981	1.81	1.37	---	4.13	---	---	9.4	7.9	---	17.3	---	---

Year	Very low birthweight ⁵						Low birthweight ⁶					
	All races ³	White		Black		Hispanic ⁴	All races ³	White		Black		Hispanic ⁴
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
1998	1.45	1.15	1.15	3.08	3.11	1.15	7.6	6.5	6.6	13.0	13.2	6.4
1997	1.42	1.13	1.12	3.04	3.05	1.13	7.5	6.5	6.5	13.0	13.1	6.4
1996	1.37	1.09	1.08	2.99	3.02	1.12	7.4	6.3	6.4	13.0	13.1	6.3
1995	1.35	1.06	1.04	2.97	2.98	1.11	7.3	6.2	6.2	13.1	13.2	6.3
1994	1.33	1.02	1.01	2.96	2.99	1.08	7.3	6.1	6.1	13.2	13.3	6.2
1993	1.33	1.01	1.00	2.96	2.99	1.06	7.2	6.0	5.9	13.3	13.4	6.2
1992 ⁷	1.29	0.96	0.94	2.96	2.97	1.04	7.1	5.8	5.7	13.3	13.4	6.1
1991 ⁷	1.29	0.96	0.94	2.96	2.97	1.02	7.1	5.8	5.7	13.6	13.6	6.1
1990 ⁸	1.27	0.95	0.93	2.92	2.93	1.03	7.0	5.7	5.6	13.3	13.3	6.1
1989 ⁹	1.28	0.95	0.93	2.95	2.97	1.05	7.0	5.7	5.6	13.5	13.6	6.2
1988	1.24	0.93	---	2.86	---	---	6.9	5.7	---	13.3	---	---
1987	1.24	0.94	---	2.79	---	---	6.9	5.7	---	13.0	---	---
1986	1.21	0.93	---	2.73	---	---	6.8	5.7	---	12.8	---	---
1985	1.21	0.93	---	2.71	---	---	6.8	5.7	---	12.6	---	---
1984	1.19	0.93	---	2.60	---	---	6.7	5.6	---	12.6	---	---
1983	1.19	0.92	---	2.60	---	---	6.8	5.7	---	12.8	---	---
1982	1.18	0.91	---	2.56	---	---	6.8	5.6	---	12.6	---	---
1981	1.16	0.91	---	2.52	---	---	6.8	5.7	---	12.7	---	---

--- Data not available.

¹ Births of less than 32 completed weeks of gestation.² Births of less than 37 completed weeks of gestation.³ Includes races other than white and black and origin not stated.⁴ Includes all persons of Hispanic origin of any race.⁵ Less than 1,500 grams (3 lb. 4 oz.).⁶ Less than 2,500 grams (5 lb. 8 oz.).⁷ Data by Hispanic origin exclude New Hampshire, which did not report Hispanic origin.⁸ Data by Hispanic origin exclude New Hampshire and Oklahoma, which did not report Hispanic origin.⁹ Data by Hispanic origin exclude New Hampshire, Oklahoma, and Louisiana, which did not report Hispanic origin.

Table 45. Number and percent low birthweight and number of live births by birthweight, by age and race and Hispanic origin of mother: United States, 1998

Age and race and Hispanic origin of mother	Low birthweight ¹		Birthweight ²												
	Number	Percent	Total	Less than 500 grams	500-999 grams	1,000-1,499 grams	1,500-1,999 grams	2,000-2,499 grams	2,500-2,999 grams	3,000-3,499 grams	3,500-3,999 grams	4,000-4,499 grams	4,500-4,999 grams	5,000-grams or more	Not stated
All races ³															
All ages	298,208	7.6	3,941,553	5,950	22,471	28,555	58,921	182,311	649,658	1,457,401	1,135,572	335,087	54,809	6,200	4,618
Under 15 years	1,241	13.1	9,462	34	134	142	242	689	2,343	3,755	1,785	309	17	4	8
15-19 years	46,107	9.5	484,895	881	3,546	4,333	8,522	28,825	104,571	194,310	112,412	23,759	2,898	246	592
15 years	2,853	11.5	24,777	59	280	272	576	1,666	5,819	10,063	5,004	915	93	6	24
16 years	5,964	10.9	55,033	123	463	618	1,091	3,669	12,679	22,157	11,674	2,216	246	19	78
17 years	9,129	9.8	93,421	167	713	831	1,696	5,722	20,787	37,561	21,144	4,175	461	46	118
18 years	12,863	9.4	137,567	258	999	1,208	2,338	8,060	29,552	55,245	32,123	6,713	836	70	165
19 years	15,298	8.8	174,097	274	1,091	1,404	2,821	9,708	35,734	69,284	42,467	9,740	1,262	105	207
20-24 years	72,449	7.5	965,122	1,391	5,407	6,533	13,422	45,696	175,299	374,751	261,907	68,521	10,019	1,078	1,098
25-29 years	71,960	6.7	1,083,010	1,528	5,447	6,745	14,264	43,976	165,650	398,043	329,127	99,177	16,176	1,723	1,154
30-34 years	62,075	7.0	889,365	1,269	4,709	6,165	12,820	37,112	125,931	313,825	277,951	90,984	15,748	1,841	1,010
35-39 years	35,636	8.4	424,890	682	2,609	3,696	7,678	20,971	62,387	144,795	128,302	43,755	8,359	1,043	613
40-44 years	8,037	9.9	81,027	157	561	850	1,804	4,665	12,786	26,772	23,218	8,280	1,548	254	132
45-54 years	703	18.6	3,782	8	58	91	169	377	691	1,150	870	302	44	11	11
White, total															
All ages	203,224	6.5	3,118,727	3,271	13,676	18,878	40,733	126,666	465,221	1,140,245	958,560	294,288	48,671	5,348	3,170
Under 15 years	522	10.9	4,801	18	59	67	99	279	1,033	1,953	1,068	206	12	3	4
15-19 years	27,319	8.0	340,694	425	1,933	2,479	5,062	17,420	66,641	137,261	87,130	19,386	2,417	198	342
15 years	1,448	9.5	15,233	29	129	134	313	843	3,156	6,339	3,515	691	68	6	10
16 years	3,383	9.3	36,439	66	274	341	613	2,089	7,615	14,821	8,611	1,747	202	13	47
17 years	5,346	8.2	64,951	72	392	479	1,028	3,375	13,189	26,251	16,262	3,408	397	36	62
18 years	7,806	8.0	97,971	122	548	684	1,395	5,057	19,217	39,500	25,100	5,519	681	52	96
19 years	9,336	7.4	126,100	136	590	841	1,713	6,056	23,464	50,350	33,642	8,021	1,069	91	127
20-24 years	46,926	6.4	736,664	691	3,101	4,125	8,770	30,239	121,628	284,953	214,318	58,526	8,699	913	701
25-29 years	50,913	5.8	880,688	888	3,369	4,614	10,278	31,764	122,832	319,637	282,660	87,926	14,400	1,490	830
30-34 years	45,299	6.1	737,532	710	3,070	4,350	9,460	27,709	95,618	256,365	242,049	81,649	14,192	1,611	749
35-39 years	25,872	7.4	349,799	434	1,730	2,562	5,610	15,536	47,327	117,792	110,866	39,065	7,541	897	439
40-44 years	5,792	8.9	65,485	101	367	602	1,317	3,405	9,604	21,389	19,732	7,275	1,371	225	97
45-54 years	581	19.0	3,064	4	47	79	137	314	538	895	737	255	39	11	8
White, non-Hispanic															
All ages	154,596	6.6	2,361,462	2,426	10,205	14,486	31,418	96,061	341,150	843,988	740,782	235,239	39,319	4,146	2,242
Under 15 years	243	11.4	2,132	11	37	29	57	109	414	846	499	122	6	-	2
15-19 years	18,147	8.3	219,169	296	1,352	1,703	3,405	11,391	41,232	85,619	58,122	13,896	1,800	138	215
15 years	770	9.9	7,767	23	75	74	178	420	1,495	3,076	1,924	444	47	4	7
16 years	2,021	9.9	20,464	45	190	209	377	1,200	4,054	8,021	5,066	1,135	135	7	25
17 years	3,456	8.6	40,388	44	269	323	657	2,163	7,824	15,872	10,495	2,404	280	25	32
18 years	5,275	8.2	64,472	78	384	484	964	3,365	12,234	25,360	16,986	3,989	523	37	68
19 years	6,625	7.7	86,078	106	434	613	1,229	4,243	15,625	33,290	23,651	5,924	815	65	83
20-24 years	33,256	6.5	511,101	480	2,187	3,003	6,285	21,301	82,762	192,491	151,498	43,314	6,662	664	454
25-29 years	39,366	5.8	678,227	656	2,578	3,540	7,966	24,626	92,974	241,941	220,369	70,244	11,550	1,175	608
30-34 years	37,016	6.1	603,639	559	2,400	3,544	7,832	22,681	76,694	207,587	200,270	68,393	11,835	1,283	561
35-39 years	21,353	7.3	291,202	341	1,327	2,098	4,673	12,914	38,910	97,372	93,163	33,030	6,339	710	325
40-44 years	4,734	8.9	53,480	80	286	497	1,082	2,789	7,724	17,391	16,269	6,027	1,098	166	71
45-54 years	481	19.2	2,512	3	38	72	118	250	440	741	592	213	29	10	6

See footnotes at end of table.

Table 45. Number and percent low birthweight and number of live births by birthweight, by age and race and Hispanic origin of mother: United States, 1998--Con.

Age and race and Hispanic origin of mother	Low birthweight ¹		Birthweight ²												
	Number	Percent	Total	Less than 500 grams	500-999 grams	1,000-1,499 grams	1,500-1,999 grams	2,000-2,499 grams	2,500-2,999 grams	3,000-3,499 grams	3,500-3,999 grams	4,000-4,499 grams	4,500-4,999 grams	5,000-grams or more	Not stated
Black, total															
All ages	79,484	13.0	609,902	2,425	7,909	8,427	15,369	45,354	141,095	230,862	124,959	27,965	4,168	584	785
Under 15 years	673	15.7	4,289	16	71	68	135	383	1,216	1,659	647	87	4	1	2
15-19 years	17,330	13.7	126,937	425	1,525	1,730	3,198	10,452	34,005	50,192	21,396	3,454	368	33	159
15 years	1,309	15.2	8,599	27	144	130	242	766	2,426	3,365	1,287	178	22	-	12
16 years	2,362	14.4	16,414	55	171	258	439	1,439	4,563	6,464	2,608	362	32	3	20
17 years	3,494	13.9	25,090	90	306	329	615	2,154	6,832	9,936	4,113	619	50	6	40
18 years	4,663	13.4	34,885	124	429	498	870	2,742	9,267	13,875	5,955	956	115	13	41
19 years	5,502	13.1	41,949	129	475	515	1,032	3,351	10,917	16,552	7,433	1,339	149	11	46
20-24 years	22,700	12.0	189,088	660	2,149	2,227	4,186	13,478	45,296	73,896	38,181	7,677	986	116	236
25-29 years	16,835	12.1	139,302	589	1,873	1,816	3,264	9,293	29,661	52,343	31,338	7,601	1,188	166	170
30-34 years	12,790	13.7	93,785	478	1,394	1,483	2,602	6,833	19,048	33,615	21,236	5,807	1,002	159	128
35-39 years	7,441	16.0	46,657	215	740	915	1,608	3,963	9,748	15,920	10,102	2,760	523	93	70
40-44 years	1,654	17.5	9,496	38	154	182	360	920	2,044	3,121	1,994	552	96	16	19
45-54 years	61	17.6	348	4	3	6	16	32	77	116	65	27	1	-	1
Black, non-Hispanic															
All ages	78,012	13.2	593,127	2,380	7,741	8,304	15,120	44,467	137,883	224,378	120,741	26,839	3,980	557	737
Under 15 years	656	15.6	4,204	16	67	67	130	376	1,199	1,627	629	86	4	1	2
15-19 years	17,053	13.8	124,076	420	1,500	1,705	3,155	10,273	33,308	49,051	20,784	3,346	353	31	150
15 years	1,294	15.4	8,420	27	143	130	238	756	2,370	3,288	1,261	176	20	-	11
16 years	2,322	14.5	16,021	55	170	253	435	1,409	4,450	6,315	2,526	355	32	2	19
17 years	3,436	14.0	24,542	90	298	326	607	2,115	6,703	9,702	4,006	601	50	6	38
18 years	4,587	13.5	34,089	119	424	489	864	2,691	9,074	13,562	5,790	919	107	12	38
19 years	5,414	13.2	41,004	129	465	507	1,011	3,302	10,711	16,184	7,201	1,295	144	11	44
20-24 years	22,307	12.1	184,263	648	2,112	2,200	4,111	13,236	44,363	71,936	37,001	7,393	935	107	221
25-29 years	16,537	12.3	135,158	580	1,831	1,790	3,221	9,115	28,847	50,808	30,216	7,284	1,139	162	165
30-34 years	12,542	13.8	90,827	469	1,368	1,454	2,560	6,691	18,573	32,484	20,445	5,559	953	152	119
35-39 years	7,253	16.1	45,096	206	711	903	1,580	3,853	9,531	15,338	9,703	2,615	504	89	63
40-44 years	1,607	17.6	9,172	38	150	179	347	893	1,987	3,018	1,905	532	91	15	17
45-54 years	57	17.2	331	3	2	6	16	30	75	116	58	24	1	-	-
Hispanic ⁴															
All ages	47,295	6.4	734,661	773	3,383	4,260	9,018	29,861	121,614	288,934	209,923	56,227	8,846	1,153	669
Under 15 years	285	10.5	2,716	6	23	37	45	174	630	1,123	583	82	7	3	3
15-19 years	9,145	7.5	121,388	121	577	787	1,646	6,014	25,575	51,673	28,793	5,424	602	61	115
15 years	665	8.8	7,525	4	51	61	135	414	1,682	3,314	1,591	246	22	2	3
16 years	1,375	8.6	16,079	19	82	137	237	900	3,628	6,829	3,550	608	61	7	21
17 years	1,899	7.7	24,630	27	124	155	375	1,218	5,421	10,422	5,759	985	110	10	24
18 years	2,519	7.5	33,400	43	160	202	418	1,696	6,999	14,139	8,025	1,513	162	16	27
19 years	2,687	6.8	39,754	28	160	232	481	1,786	7,845	16,969	9,868	2,072	247	26	40
20-24 years	13,519	6.1	223,113	197	906	1,089	2,468	8,859	38,640	91,672	61,973	14,882	1,978	245	204
25-29 years	11,157	5.7	196,012	214	754	1,030	2,212	6,947	29,156	75,505	60,089	16,924	2,720	306	155
30-34 years	7,847	6.2	125,702	132	642	764	1,546	4,763	17,960	46,077	38,973	12,236	2,176	307	126
35-39 years	4,262	7.9	54,195	82	399	442	868	2,471	7,824	19,014	16,228	5,528	1,108	174	57
40-44 years	997	9.0	11,056	19	74	105	217	582	1,744	3,732	3,157	1,115	247	57	7
45-54 years	83	17.4	479	2	8	6	16	51	85	138	127	36	8	-	2

- Quantity zero.
¹ Less than 2,500 grams (5 lb 8 oz).
² Equivalents of gram weights in terms of pounds and ounces are shown in Technical notes.
³ Includes races other than white and black and origin not stated.
⁴ Includes all persons of Hispanic origin of any race.

Table 46. Number and percent of births of low birthweight by race and Hispanic origin of mother: United States, each State and territory, 1998

[By place of residence. Low birthweight is birthweight of less than 2,500 grams (5 lb 8 oz)]

State	Number						Percent					
	All races ¹	White		Black		Hispanic ²	All races ¹	White		Black		Hispanic ²
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States ³	298,208	203,224	154,596	79,484	78,012	47,295	7.6	6.5	6.6	13.0	13.2	6.4
Alabama	5,747	3,040	2,963	2,663	2,661	80	9.3	7.3	7.4	13.3	13.3	5.9
Alaska	593	373	341	42	42	38	6.0	5.6	5.6	10.5	10.9	6.4
Arizona	5,326	4,503	2,546	323	311	1,947	6.8	6.6	6.6	12.2	12.6	6.6
Arkansas	3,271	2,128	2,014	1,109	1,109	113	8.9	7.5	7.6	13.9	13.9	6.6
California	32,476	24,060	10,170	4,268	4,124	13,875	6.2	5.7	5.8	11.6	11.7	5.6
Colorado	5,138	4,519	3,318	382	368	1,230	8.6	8.3	8.3	13.3	13.3	8.4
Connecticut	3,406	2,579	1,873	726	655	605	7.8	7.0	6.5	13.3	13.1	9.7
Delaware	885	480	420	388	388	58	8.4	6.2	6.1	14.8	14.9	7.7
District of Columbia	1,003	120	75	865	861	43	13.1	5.9	5.7	15.8	15.9	5.9
Florida	15,752	9,943	7,435	5,419	5,344	2,583	8.1	6.8	6.9	12.2	12.3	6.5
Georgia	10,458	5,018	4,563	5,243	5,215	439	8.5	6.4	6.6	12.7	12.7	5.3
Hawaii	1,284	254	217	59	57	169	7.5	6.2	6.2	10.7	11.0	7.7
Idaho	1,164	1,131	945	5	5	164	6.0	6.0	5.9	*	*	6.8
Illinois	14,568	8,955	6,794	5,048	5,024	2,181	8.0	6.4	6.5	14.2	14.2	6.3
Indiana	6,718	5,388	5,116	1,241	1,236	260	7.9	7.2	7.3	13.5	13.5	6.9
Iowa	2,385	2,178	2,044	140	135	106	6.4	6.2	6.2	12.8	13.1	6.1
Kansas	2,691	2,226	1,966	362	361	235	7.0	6.5	6.6	13.0	13.1	5.9
Kentucky	4,416	3,719	3,668	653	651	52	8.1	7.6	7.6	13.5	13.5	6.9
Louisiana	6,757	2,656	2,561	3,999	3,995	97	10.1	7.0	7.0	14.6	14.6	7.3
Maine	800	774	744	7	7	11	5.8	5.8	5.9	*	*	*
Maryland	6,232	2,859	2,627	3,113	3,097	217	8.7	6.4	6.4	13.0	13.1	6.1
Massachusetts	5,630	4,532	3,923	798	701	677	6.9	6.5	6.3	10.2	11.1	7.8
Michigan	10,403	6,781	5,847	3,341	3,315	392	7.8	6.4	6.3	13.8	13.9	6.6
Minnesota	3,788	3,108	2,839	404	397	169	5.8	5.4	5.6	11.0	11.1	5.7
Mississippi	4,337	1,655	1,639	2,644	2,642	16	10.1	7.2	7.3	13.7	13.7	*
Missouri	5,890	4,189	4,067	1,599	1,596	123	7.8	6.7	6.7	14.0	14.1	6.3
Montana	754	650	605	3	3	25	7.0	6.9	6.8	*	*	7.4
Nebraska	1,534	1,323	1,144	151	151	145	6.5	6.2	6.1	12.2	12.3	6.6
Nevada	2,172	1,689	1,137	299	294	552	7.6	6.9	7.3	13.3	13.5	6.3
New Hampshire	821	789	739	10	7	11	5.7	5.6	5.5	*	*	*
New Jersey	9,155	5,663	4,256	2,842	2,679	1,513	8.0	6.7	6.4	13.3	13.8	7.4
New Mexico	2,039	1,739	749	57	52	1,010	7.6	7.7	8.1	11.4	11.3	7.5
New York	20,198	12,430	7,826	6,472	5,996	4,060	7.8	6.7	6.3	11.9	12.4	7.8
North Carolina	9,854	5,578	5,089	3,924	3,914	498	8.8	7.0	7.1	13.9	13.9	6.2
North Dakota	518	456	437	16	15	7	6.5	6.5	6.5	*	*	*
Ohio	11,817	8,586	8,324	3,009	2,950	268	7.7	6.7	6.7	13.2	13.2	7.7
Oklahoma	3,529	2,571	2,328	595	579	214	7.2	6.6	6.7	12.5	12.5	6.0
Oregon	2,426	2,161	1,787	95	94	378	5.4	5.2	5.1	9.8	9.9	5.8
Pennsylvania	11,077	8,000	7,333	2,795	2,748	647	7.6	6.6	6.4	13.5	13.6	9.4
Rhode Island	949	778	529	110	97	146	7.6	7.1	6.9	11.4	11.8	7.9
South Carolina	5,129	2,418	2,345	2,648	2,644	76	9.5	7.1	7.1	14.0	14.0	5.8
South Dakota	599	480	472	9	9	9	5.8	5.7	5.7	*	*	*
Tennessee	7,008	4,483	4,359	2,411	2,408	130	9.1	7.6	7.6	14.3	14.3	6.5
Texas	25,402	19,538	9,397	5,061	4,990	10,135	7.4	6.7	6.7	12.6	12.6	6.7
Utah	3,044	2,853	2,493	42	41	352	6.7	6.6	6.6	14.9	15.6	7.2
Vermont	428	424	412	-	-	1	6.5	6.5	6.6	*	*	*
Virginia	7,468	4,355	3,994	2,779	2,762	379	7.9	6.4	6.4	12.7	12.6	6.5
Washington	4,543	3,704	3,023	311	282	572	5.7	5.4	5.3	10.1	9.8	5.7
West Virginia	1,669	1,556	1,550	102	102	5	8.0	7.8	7.9	13.4	13.5	*
Wisconsin	4,400	3,314	3,080	889	885	238	6.5	5.7	5.6	13.6	13.7	6.5
Wyoming	557	518	473	13	13	44	8.9	8.8	8.9	*	*	7.5
Puerto Rico	6,600	6,115	---	483	---	---	10.9	11.0	---	10.5	---	---
Virgin Islands	165	14	4	144	129	18	9.2	*	*	10.3	10.3	*
Guam	328	21	18	5	5	3	7.6	6.1	*	*	*	*
American Samoa	51	-	---	-	---	---	3.0	*	---	*	---	---
Northern Marianas	110	1	---	-	---	---	8.6	*	---	*	---	---

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

--- Data not available.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.³ Excludes data for the territories.

Table 47. Number and percent of births of very low birthweight by race and Hispanic origin of mother: United States, each State and territory, 1998

[By place of residence. Very low birthweight is birthweight of less than 1,500 grams (3 lb 4 oz)]

State	Number						Percent					
	All races ¹	White		Black		Hispanic ²	All races ¹	White		Black		Hispanic ²
		Total	Non-Hispanic	Total	Non-Hispanic			Total	Non-Hispanic	Total	Non-Hispanic	
United States ³	56,976	35,825	27,117	18,761	18,425	8,416	1.4	1.1	1.1	3.1	3.1	1.1
Alabama	1,214	544	530	661	661	14	2.0	1.3	1.3	3.3	3.3	*
Alaska	123	80	73	13	13	7	1.2	1.2	1.2	*	*	*
Arizona	881	726	404	69	68	319	1.1	1.1	1.0	2.6	2.8	1.1
Arkansas	617	393	371	221	221	22	1.7	1.4	1.4	2.8	2.8	1.3
California	5,986	4,358	1,773	968	938	2,581	1.1	1.0	1.0	2.6	2.7	1.0
Colorado	794	683	482	86	84	203	1.3	1.3	1.2	3.0	3.0	1.4
Connecticut	734	505	341	218	191	140	1.7	1.4	1.2	4.0	3.8	2.3
Delaware	178	81	73	94	94	6	1.7	1.1	1.1	3.6	3.6	*
District of Columbia	234	17	14	214	212	4	3.0	*	*	3.9	3.9	*
Florida	3,095	1,800	1,330	1,239	1,215	492	1.6	1.2	1.2	2.8	2.8	1.2
Georgia	2,150	885	801	1,241	1,235	80	1.8	1.1	1.2	3.0	3.0	1.0
Hawaii	231	51	47	17	17	25	1.4	1.2	1.3	*	*	1.1
Idaho	189	180	150	1	1	28	1.0	1.0	0.9	*	*	1.2
Illinois	2,868	1,648	1,252	1,135	1,128	401	1.6	1.2	1.2	3.2	3.2	1.2
Indiana	1,170	893	848	265	265	44	1.4	1.2	1.2	2.9	2.9	1.2
Iowa	461	404	377	43	43	21	1.2	1.1	1.1	3.9	4.2	1.2
Kansas	533	429	379	89	89	47	1.4	1.3	1.3	3.2	3.2	1.2
Kentucky	881	733	727	145	145	7	1.6	1.5	1.5	3.0	3.0	*
Louisiana	1,416	462	441	942	942	21	2.1	1.2	1.2	3.4	3.4	1.6
Maine	132	129	124	3	3	1	1.0	1.0	1.0	*	*	*
Maryland	1,322	483	423	791	789	54	1.8	1.1	1.0	3.3	3.3	1.5
Massachusetts	1,047	818	670	187	161	162	1.3	1.2	1.1	2.4	2.6	1.9
Michigan	2,038	1,214	1,036	780	772	69	1.5	1.2	1.1	3.2	3.2	1.2
Minnesota	678	559	523	86	85	30	1.0	1.0	1.0	2.3	2.4	1.0
Mississippi	850	274	269	573	573	5	2.0	1.2	1.2	3.0	3.0	*
Missouri	1,053	675	654	364	364	19	1.4	1.1	1.1	3.2	3.2	*
Montana	113	91	83	2	2	6	1.0	1.0	0.9	*	*	*
Nebraska	300	246	227	45	45	17	1.3	1.1	1.2	3.6	3.7	*
Nevada	355	260	171	63	61	91	1.2	1.1	1.1	2.8	2.8	1.0
New Hampshire	158	151	141	2	-	1	1.1	1.1	1.1	*	*	*
New Jersey	1,860	1,023	746	728	685	293	1.6	1.2	1.1	3.4	3.5	1.4
New Mexico	288	250	126	10	10	128	1.1	1.1	1.4	*	*	0.9
New York	3,886	2,147	1,318	1,578	1,486	704	1.5	1.2	1.1	2.9	3.1	1.3
North Carolina	2,102	1,004	928	1,037	1,036	77	1.9	1.3	1.3	3.7	3.7	1.0
North Dakota	107	92	87	4	4	2	1.3	1.3	1.3	*	*	*
Ohio	2,291	1,604	1,539	660	648	65	1.5	1.3	1.2	2.9	2.9	1.9
Oklahoma	647	495	448	108	108	37	1.3	1.3	1.3	2.3	2.3	1.0
Oregon	400	360	287	11	10	78	0.9	0.9	0.8	*	*	1.2
Pennsylvania	2,222	1,516	1,366	666	653	136	1.5	1.2	1.2	3.2	3.2	2.0
Rhode Island	209	164	120	31	28	23	1.7	1.5	1.6	3.2	3.4	1.2
South Carolina	1,064	430	412	625	624	16	2.0	1.3	1.3	3.3	3.3	*
South Dakota	120	88	88	3	3	-	1.2	1.0	1.1	*	*	*
Tennessee	1,302	733	720	552	551	15	1.7	1.2	1.3	3.3	3.3	*
Texas	4,517	3,224	1,584	1,171	1,154	1,639	1.3	1.1	1.1	2.9	2.9	1.1
Utah	453	418	364	7	7	49	1.0	1.0	1.0	*	*	1.0
Vermont	90	90	87	-	-	-	1.4	1.4	1.4	*	*	*
Virginia	1,574	820	737	699	697	85	1.7	1.2	1.2	3.2	3.2	1.5
Washington	854	663	552	92	83	94	1.1	1.0	1.0	3.0	2.9	0.9
West Virginia	302	277	277	24	24	-	1.5	1.4	1.4	3.2	3.2	*
Wisconsin	814	588	534	196	195	56	1.2	1.0	1.0	3.0	3.0	1.5
Wyoming	73	67	63	2	2	4	1.2	1.1	1.2	*	*	*
Puerto Rico	800	740	---	58	---	---	1.3	1.3	---	1.3	---	---
Virgin Islands	36	2	1	33	30	3	2.0	*	*	2.4	2.4	*
Guam	33	1	1	-	-	-	0.8	*	*	*	*	*
American Samoa	11	-	---	-	---	---	*	*	---	*	---	---
Northern Marianas	9	-	---	-	---	---	*	*	---	*	---	---

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

- Quantity zero.

--- Data not available.

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.³ Excludes data for the territories.

Table 48. Live births with selected abnormal conditions of the newborn and rates by age of mother, by race of mother: United States, 1998

[Rates are number of live births with specified abnormal condition per 1,000 live births in specified group]

Abnormal condition and race of mother	All births ¹	Abnormal condition reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races ²										
Anemia	3,941,553	4,133	1.1	1.2	1.0	1.0	1.1	1.1	1.2	94,142
Birth injury ³	3,575,736	10,966	3.2	3.2	3.1	3.3	3.1	3.0	2.5	97,438
Fetal alcohol syndrome ⁴	3,874,103	272	0.1	0.1	0.0	0.1	0.1	0.1	*	95,263
Hyaline membrane disease/RDS	3,941,553	24,734	6.4	7.3	6.6	6.2	6.0	6.5	7.6	94,142
Meconium aspiration syndrome	3,941,553	8,042	2.1	2.4	2.1	1.9	2.1	2.0	2.4	94,142
Assisted ventilation less than 30 minutes ⁵	3,821,642	81,206	21.8	21.5	20.4	22.1	22.7	22.8	24.0	103,170
Assisted ventilation 30 minutes or longer ⁵	3,821,642	34,251	9.2	11.0	9.0	8.5	8.7	9.8	12.3	103,170
Seizures	3,941,553	2,105	0.5	0.6	0.5	0.5	0.5	0.6	0.4	94,142
White										
Anemia	3,118,727	2,960	1.0	1.1	0.9	0.9	1.0	1.0	1.1	71,189
Birth injury ³	2,805,467	9,120	3.3	3.5	3.4	3.5	3.3	3.1	2.5	73,895
Fetal alcohol syndrome ⁴	3,060,543	149	0.0	*	0.0	0.0	0.0	0.1	*	72,267
Hyaline membrane disease/RDS	3,118,727	20,010	6.6	7.5	6.6	6.4	6.1	6.7	7.7	71,189
Meconium aspiration syndrome	3,118,727	5,914	1.9	2.3	2.0	1.8	1.9	1.9	2.3	71,189
Assisted ventilation less than 30 minutes ⁵	3,051,216	66,491	22.4	22.0	20.8	22.6	23.2	23.4	24.6	78,503
Assisted ventilation 30 minutes or longer ⁵	3,051,216	26,399	8.9	10.6	8.6	8.3	8.5	9.5	12.1	78,503
Seizures	3,118,727	1,666	0.5	0.6	0.5	0.5	0.5	0.6	0.4	71,189
Black										
Anemia	609,902	958	1.6	1.5	1.5	1.7	1.6	1.6	2.5	13,568
Birth injury ³	568,454	1,090	2.0	2.1	1.9	2.0	2.0	1.8	*	13,913
Fetal alcohol syndrome ⁴	603,361	53	0.1	*	*	*	*	*	*	13,591
Hyaline membrane disease/RDS	609,902	4,001	6.7	7.0	6.7	6.3	6.5	7.1	9.3	13,568
Meconium aspiration syndrome	609,902	1,748	2.9	2.5	2.6	3.1	3.6	3.4	3.5	13,568
Assisted ventilation less than 30 minutes ⁵	570,596	11,170	20.1	19.6	18.8	20.7	21.8	21.0	23.1	14,487
Assisted ventilation 30 minutes or longer ⁵	570,596	6,579	11.8	12.4	11.1	11.2	12.1	14.0	15.2	14,487
Seizures	609,902	346	0.6	0.6	0.5	0.6	0.6	0.7	*	13,568

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

0.0 Quantity more than zero but less than 0.05.

¹ Total number of births to residents of areas reporting specified condition.² Includes races other than white and black.³ Nebraska and Texas do not report this condition.⁴ Wisconsin does not report this condition.⁵ New York City does not report this condition.

NOTE: Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 49. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States and the District of Columbia, 1998

[Rates are number of live births with specified congenital anomaly per 100,000 live births in specified group]

Congenital anomaly and race of mother	All births ¹	Congenital anomaly reported	Age of mother							Not stated
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years	
All races²										
Anencephalus	3,914,235	398	10.3	11.4	9.6	10.7	10.1	9.9	*	67,290
Spina bifida/Meningocele	3,914,235	838	21.8	26.4	23.7	19.9	21.9	16.6	*	67,290
Hydrocephalus	3,914,235	941	24.5	29.9	27.3	20.3	22.9	25.1	26.6	67,290
Microcephalus	3,914,235	240	6.2	8.1	6.3	5.6	6.1	5.3	*	67,290
Other central nervous system anomalies	3,914,235	833	21.7	26.8	21.8	18.3	21.2	22.9	31.4	67,290
Heart malformations	3,914,235	4,639	120.6	109.3	111.6	117.9	123.3	140.3	195.7	67,290
Other circulatory/respiratory anomalies	3,914,235	5,140	133.6	126.3	132.9	131.9	132.9	140.1	182.5	67,290
Rectal atresia/stenosis	3,914,235	364	9.5	8.5	9.9	10.2	8.9	8.4	*	67,290
Tracheo-esophageal fistula/Esophageal atresia	3,914,235	499	13.0	9.6	13.0	13.1	13.1	15.7	*	67,290
Omphalocele/Gastroschisis	3,914,235	1,171	30.4	69.6	44.0	20.0	15.6	16.2	*	67,290
Other gastrointestinal anomalies	3,914,235	1,214	31.6	31.8	30.3	29.4	34.5	31.6	41.1	67,290
Malformed genitalia	3,914,235	2,938	76.4	74.4	76.9	77.8	76.3	74.0	77.3	67,290
Renal agenesis	3,914,235	515	13.4	12.9	12.6	14.3	13.8	13.7	*	67,290
Other urogenital anomalies	3,914,235	4,121	107.1	101.4	102.7	104.6	115.0	112.4	113.6	67,290
Cleft lip/palate	3,914,235	3,127	81.3	88.9	84.8	76.7	78.2	80.8	90.6	67,290
Polydactyly/Syndactyly/Adactyly	3,914,235	3,258	84.7	114.7	95.2	78.1	72.2	70.2	78.5	67,290
Clubfoot	3,914,235	2,178	56.6	64.4	61.4	53.3	51.2	53.3	72.5	67,290
Diaphragmatic hernia	3,914,235	529	13.8	11.4	14.0	13.8	12.0	18.1	*	67,290
Other musculoskeletal/integumental anomalies	3,914,235	9,095	236.4	256.8	229.9	224.5	237.4	254.1	245.3	67,290
Down's syndrome	3,914,235	1,681	43.7	25.1	25.0	25.3	40.8	104.9	322.6	67,290
Other chromosomal anomalies	3,914,235	1,321	34.3	28.0	27.8	27.3	30.1	56.2	169.2	67,290
White										
Anencephalus	3,095,723	319	10.5	12.2	9.2	10.7	10.7	10.0	*	51,831
Spina bifida/Meningocele	3,095,723	693	22.8	27.1	25.2	21.2	22.7	17.6	*	51,831
Hydrocephalus	3,095,723	742	24.4	29.5	27.0	21.7	23.0	23.1	*	51,831
Microcephalus	3,095,723	187	6.1	8.0	6.0	5.6	6.0	*	*	51,831
Other central nervous system anomalies	3,095,723	693	22.8	27.4	24.5	19.4	21.9	23.7	*	51,831
Heart malformations	3,095,723	3,696	121.4	116.7	111.4	118.5	122.6	136.4	200.2	51,831
Other circulatory/respiratory anomalies	3,095,723	4,134	135.8	133.4	137.3	132.6	133.5	138.8	182.3	51,831
Rectal atresia/stenosis	3,095,723	309	10.2	8.3	10.4	10.8	10.3	8.8	*	51,831
Tracheo-esophageal fistula/Esophageal atresia	3,095,723	428	14.1	10.7	14.3	13.7	13.9	17.3	*	51,831
Omphalocele/Gastroschisis	3,095,723	901	29.6	77.7	44.2	19.5	14.0	14.3	*	51,831
Other gastrointestinal anomalies	3,095,723	947	31.1	31.0	29.5	28.8	33.8	31.9	44.8	51,831
Malformed genitalia	3,095,723	2,412	79.2	78.6	79.4	80.4	80.2	74.4	80.7	51,831
Renal agenesis	3,095,723	415	13.6	13.7	13.0	14.8	14.1	12.6	*	51,831
Other urogenital anomalies	3,095,723	3,522	115.7	113.4	110.7	112.2	124.2	117.7	124.0	51,831
Cleft lip/palate	3,095,723	2,676	87.9	103.3	95.3	80.7	82.5	85.2	97.1	51,831
Polydactyly/Syndactyly/Adactyly	3,095,723	1,757	57.7	67.0	60.3	54.6	55.2	56.8	55.3	51,831
Clubfoot	3,095,723	1,886	62.0	73.8	66.7	59.0	55.9	56.8	80.7	51,831
Diaphragmatic hernia	3,095,723	439	14.4	12.2	14.9	14.6	11.8	19.6	*	51,831
Other musculoskeletal/integumental anomalies	3,095,723	6,036	198.3	221.2	186.8	190.1	201.8	212.5	201.7	51,831
Down's syndrome	3,095,723	1,502	49.3	30.1	28.8	28.4	44.2	114.8	357.1	51,831
Other chromosomal anomalies	3,095,723	1,090	35.8	27.4	30.4	27.5	32.0	57.1	174.8	51,831

See footnotes at end of table.

Table 49. Live births with selected congenital anomalies and rates by age of mother, by race of mother: Total of 49 reporting States and the District of Columbia, 1998 --Con.

[Rates are number of live births with specified congenital anomaly per 100,000 live births in specified group]

Congenital anomaly and race of mother	All births ¹	Congenital anomaly reported	Age of mother							Not stated	
			All ages	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-54 years		
Black											
Anencephalus	609,393	61	10.1	*	*	*	*	*	*	*	7,915
Spina bifida/Meningocele	609,393	119	19.8	25.5	19.3	16.0	*	*	*	*	7,915
Hydrocephalus	609,393	155	25.8	27.0	30.6	*	25.9	43.5	*	*	7,915
Microcephalus	609,393	40	6.7	*	*	*	*	*	*	*	7,915
Other central nervous system anomalies	609,393	104	17.3	22.4	12.9	*	*	*	*	*	7,915
Heart malformations	609,393	711	118.2	88.0	109.5	125.2	125.4	182.5	216.9	*	7,915
Other circulatory/respiratory anomalies	609,393	694	115.4	99.6	104.1	124.5	120.0	163.0	*	*	7,915
Rectal atresia/stenosis	609,393	39	6.5	*	*	*	*	*	*	*	7,915
Tracheo-esophageal fistula/Esophageal atresia	609,393	52	8.6	*	*	*	*	*	*	*	7,915
Omphalocele/Gastroschisis	609,393	226	37.6	44.8	45.6	28.4	32.4	*	*	*	7,915
Other gastrointestinal anomalies	609,393	215	35.7	33.2	32.7	37.1	41.1	*	*	*	7,915
Malformed genitalia	609,393	390	64.8	64.1	66.5	69.2	54.0	67.4	*	*	7,915
Renal agenesis	609,393	77	12.8	*	*	*	*	*	*	*	7,915
Other urogenital anomalies	609,393	399	66.3	69.5	65.5	67.0	55.1	80.4	*	*	7,915
Cleft lip/palate	609,393	276	45.9	40.1	45.1	50.2	47.6	43.5	*	*	7,915
Polydactyly/Syndactyly/Adactyly	609,393	1,407	233.9	241.6	236.1	240.2	227.0	189.0	278.8	*	7,915
Clubfoot	609,393	228	37.9	37.1	41.3	32.8	34.6	50.0	*	*	7,915
Diaphragmatic hernia	609,393	70	11.6	*	10.7	*	*	*	*	*	7,915
Other musculoskeletal/integumental anomalies	609,393	1,928	320.5	288.7	312.9	312.3	349.1	397.6	371.7	*	7,915
Down's syndrome	609,393	127	21.1	*	*	*	27.0	63.0	206.5	*	7,915
Other chromosomal anomalies	609,393	169	28.1	27.8	16.6	28.4	*	58.7	*	*	7,915

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

¹ Total number of births.² Includes races other than white and black.

NOTES: Excludes data for New Mexico, which did not report congenital anomalies. Race and Hispanic origin are reported separately on birth certificates. In this table all women (including Hispanic women) are classified only according to their race; see Technical notes.

Table 50. Live births by plurality of birth and ratios, by age and race and Hispanic origin of mother: United States, 1998

Plurality and race and Hispanic origin of mother	All ages	Age of mother									
		Under 15 years	15-19 years			20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-54 years
			Total	15-17 years	18-19 years						
Number											
All live births											
All races ¹	3,941,553	9,462	484,895	173,231	311,664	965,122	1,083,010	889,365	424,890	81,027	3,782
White, total	3,118,727	4,801	340,694	116,623	224,071	736,664	880,688	737,532	349,799	65,485	3,064
White, non-Hispanic	2,361,462	2,132	219,169	68,619	150,550	511,101	678,227	603,639	291,202	53,480	2,512
Black, total	609,902	4,289	126,937	50,103	76,834	189,088	139,302	93,785	46,657	9,496	348
Black, non-Hispanic	593,127	4,204	124,076	48,983	75,093	184,263	135,158	90,827	45,096	9,172	331
Hispanic ²	734,661	2,716	121,388	48,234	73,154	223,113	196,012	125,702	54,195	11,056	479
Live births in single deliveries											
All races ¹	3,823,258	9,373	477,422	170,982	306,440	943,745	1,051,417	855,379	405,473	77,339	3,110
White, total	3,024,693	4,760	336,122	115,279	220,843	721,818	855,318	708,777	333,174	62,263	2,461
White, non-Hispanic	2,283,986	2,114	216,054	67,780	148,274	500,180	657,590	578,804	276,619	50,655	1,970
Black, total	590,372	4,243	124,246	49,265	74,981	183,222	134,328	90,051	44,739	9,209	334
Black, non-Hispanic	574,020	4,158	121,422	48,157	73,265	178,521	130,296	87,187	43,223	8,896	317
Hispanic ²	719,093	2,697	119,947	47,730	72,217	219,239	191,551	122,114	52,400	10,708	437
Live births in twin deliveries											
All races ¹	110,670	87	7,388	2,217	5,171	20,916	29,901	30,781	17,676	3,337	584
White, total	87,163	39	4,514	1,326	3,188	14,470	23,835	25,834	15,043	2,907	521
White, non-Hispanic	71,270	18	3,072	828	2,244	10,626	19,255	22,153	13,140	2,535	471
Black, total	19,001	46	2,664	824	1,840	5,785	4,838	3,551	1,831	272	14
Black, non-Hispanic	18,589	46	2,627	812	1,815	5,661	4,726	3,462	1,792	261	14
Hispanic ²	15,015	17	1,426	497	929	3,804	4,342	3,388	1,665	339	34
Live births in higher-order multiple deliveries ³											
All races ¹	7,625	2	85	32	53	461	1,692	3,205	1,741	351	88
White, total	6,871	2	58	18	40	376	1,535	2,921	1,582	315	82
White, non-Hispanic	6,206	-	43	11	32	295	1,382	2,682	1,443	290	71
Black, total	529	-	27	14	13	81	136	183	87	15	-
Black, non-Hispanic	518	-	27	14	13	81	136	178	81	15	-
Hispanic ²	553	2	15	7	8	70	119	200	130	9	8
Ratio per 1,000 live births											
All multiple births											
All races ¹	30.0	9.4	15.4	13.0	16.8	22.1	29.2	38.2	45.7	45.5	177.7
White, total	30.2	8.5	13.4	11.5	14.4	20.2	28.8	39.0	47.5	49.2	196.8
White, non-Hispanic	32.8	*	14.2	12.2	15.1	21.4	30.4	41.1	50.1	52.8	215.8
Black, total	32.0	10.7	21.2	16.7	24.1	31.0	35.7	39.8	41.1	30.2	*
Black, non-Hispanic	32.2	10.9	21.4	16.9	24.3	31.2	36.0	40.1	41.5	30.1	*
Hispanic ²	21.2	*	11.9	10.4	12.8	17.4	22.8	28.5	33.1	31.5	87.7
Twin births											
All races ¹	28.1	9.2	15.2	12.8	16.6	21.7	27.6	34.6	41.6	41.2	154.4
White, total	27.9	8.1	13.2	11.4	14.2	19.6	27.1	35.0	43.0	44.4	170.0
White, non-Hispanic	30.2	*	14.0	12.1	14.9	20.8	28.4	36.7	45.1	47.4	187.5
Black, total	31.2	10.7	21.0	16.4	23.9	30.6	34.7	37.9	39.2	28.6	*
Black, non-Hispanic	31.3	10.9	21.2	16.6	24.2	30.7	35.0	38.1	39.7	28.5	*
Hispanic ²	20.4	*	11.7	10.3	12.7	17.0	22.2	27.0	30.7	30.7	71.0
Ratio per 100,000 live births											
Higher-order multiple births ³											
All races ¹	193.5	*	17.5	18.5	17.0	47.8	156.2	360.4	409.8	433.2	2326.8
White, total	220.3	*	17.0	*	17.9	51.0	174.3	396.1	452.3	481.0	2676.2
White, non-Hispanic	262.8	*	19.6	*	21.3	57.7	203.8	444.3	495.5	542.3	2826.4
Black, total	86.7	*	21.3	*	*	42.8	97.6	195.1	186.5	*	*
Black, non-Hispanic	87.3	*	21.8	*	*	44.0	100.6	196.0	179.6	*	*
Hispanic ²	75.3	*	*	*	*	31.4	60.7	159.1	239.9	*	*

- Quantity zero.

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

¹ Includes races other than white and black and origin not stated.² Includes all persons of Hispanic origin of any race.³ Births in greater than twin deliveries.

Technical notes

Source of data

Data shown in this report for 1998 are based on 100 percent of the birth certificates in all States and the District of Columbia. The data are provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program (VSCP). In 1984 and earlier years, the VSCP included varying numbers of States that provided data based on 100 percent of their birth certificates. Data for States not in the VSCP were based on a 50-percent sample of birth certificates filed in those States. Information on sampling procedures and sampling errors for 1984 and earlier years is provided in the *Technical Appendix, Vital Statistics of the United States, 1997, Volume I, Natality (3)*. Information on the percent of records with missing information for maternal and infant characteristics included in this report is shown by State in [table I](#). Data are not shown for the variables race, age, and marital status of mother. Missing data are imputed in these cases; see separate sections in the [Technical notes](#) for more information.

Age of mother

Age of mother is computed in most cases from the mother's and infant's dates of birth as reported on the birth certificate. The mother's age is directly reported by five States (Kentucky, Nevada, North Dakota, Virginia, and Wyoming) and American Samoa. From 1964 to 1996, mother's age was edited for ages outside the age range 10–49 years. Births reported to occur to mothers younger than age 10 or older than age 49 years had age imputed according to the age of mother from the previous record with the same race and total birth order (total of live births and fetal deaths). Beginning in 1997, age of mother is edited for ages outside the age range 10–54 years (3). A review and verification of unedited birth data for 1996 showed that the vast majority of births reported as occurring to women aged 50 years and over were to women aged 50–54 years. The numbers of births to women aged 50–54 years are too small for computing age-specific birth rates. These births have been included with births to women aged 45–49 years for computing birth rates.

In 1998 age of mother was not reported on 0.02 percent of the records; for these records age of mother was imputed according to the last record with the same race and total birth order.

Race and Hispanic origin

Race and Hispanic origin are reported separately on the birth certificate. Beginning with the 1989 data year, NCHS started tabulating its birth data primarily by race of the mother. Birth data published for 1988 and prior years showed births tabulated by the race of the child, which was determined from the race of the parents as entered on the birth certificate.

Trend data by race shown in this report are by race of mother for all years beginning with the 1980 data year; data for 1980–88 that were previously published by race of child have been re-tabulated by race of mother. In order to facilitate continuity and analysis of the data, trend tables showing data for years prior to 1980 show data for both race of mother and race of child for 1980. This makes it possible to distinguish the effects of this change from real changes in the data. The text discussions of data by race are based on tabulations by race of mother.

Text references to white births and white mothers or black births and black mothers are used interchangeably for ease in writing.

The factors influencing the decision to tabulate births by race of the mother have been discussed in detail elsewhere (67). They include the 1989 revision of the birth certificate, which includes many more health questions that are directly associated with the mother. In these instances, it is more appropriate to tabulate births by the mother's race. Another factor influencing the decision to tabulate births by race of mother is the large proportion of births with race of father not stated, 14 percent in 1998. Although this proportion has declined slightly in the 1990's, it is still higher than in 1978, 11 percent. The high proportion of records with the father's race not reported reflects the increase in the proportion of births to unmarried women; in many such cases, no information is reported on the father. These births are already assigned the race of the mother because there is no alternative. Tabulating all births by race of mother, therefore, provides for a more uniform approach, rather than a necessarily arbitrary combination of parental races.

Race of mother is reported by all registration areas in eight categories: white, black, American Indian, Chinese, Japanese, Hawaiian, Filipino, and "other" Asian or Pacific Islander (API). In addition, nine States (California, Hawaii, Illinois, Minnesota, New Jersey, New York, Texas, Virginia, and Washington) report data on API subgroups included in the "other" API category (Vietnamese, Asian Indian, Korean, Samoan, Guamanian, and remaining API). A report on births in 1992 to women in these API subgroups has been published (68).

In 1998 race of mother was not reported for 0.8 percent of births. In these cases, if the race of the father was known, the race of the father was assigned to the mother. When information was not available for either parent, the race of the mother was imputed according to the specific race of the mother on the preceding record with a known race of mother. This was necessary for just 0.4 percent of births in 1998.

Hispanic origin and race are reported independently on the birth certificate, as noted previously. Data for Hispanic subgroups are shown in most cases for five groups: Mexican, Puerto Rican, Cuban, Central and South American, and other and unknown Hispanic. 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 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 births to Hispanic women are reported as white. In these tabulations, data for non-Hispanic persons are classified according to the race of the mother because there are substantial differences in fertility and maternal and infant health between Hispanic and non-Hispanic white women.

Items asking for the Hispanic origin of the mother and the father have been included on the birth certificates of all States and the District of Columbia, the Virgin Islands, and Guam since 1993 (4). Puerto Rico, American Samoa, and the Northern Marianas do not collect this information. The percent of records for which Hispanic origin of the parents was not reported in 1998 is shown by State in [table I](#).

Marital status

National estimates of births to unmarried women are based on two methods of determining marital status. For 1994 through 1996, birth certificates in 45 States and the District of Columbia included a question about the mother's marital status. In 1997 California added a

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 1998

[By place of residence]

Area	Number of births	Place of birth	Attendant at birth	Mother's birth-place	Father's age	Father's race	Hispanic origin		Educational attainment Mother	Live-birth order	Length of gestation	Month prenatal care began	Number of prenatal visits
							Mother	Father					
Total of reporting areas ¹	3,941,553	0.0	0.0	0.3	14.4	14.8	1.2	15.3	1.5	0.7	1.0	2.8	3.6
Alabama	62,074	–	–	0.0	23.8	23.8	.0	23.8	0.3	0.0	0.1	0.3	0.3
Alaska	9,926	.0	.0	.2	12.9	14.7	.5	13.7	2.0	.2	.3	1.7	1.5
Arizona	78,243	–	.0	.3	21.5	23.3	1.3	23.6	2.0	.4	.2	2.1	3.6
Arkansas	36,865	.0	.0	.4	20.6	21.8	.1	21.0	.9	.2	.3	2.4	3.3
California	521,661	.0	.1	.3	7.4	6.8	.7	6.3	1.7	.1	5.4 ²	1.6	2.9
Colorado	59,577	–	–	.2	9.6	10.2	.0	10.3	1.4	.0	.0	.7	.9
Connecticut	43,820	.0	.0	.4	9.4	10.8	5.3	14.4	3.9	8.3	.1	5.4	9.0
Delaware	10,578	.0	.0	.3	30.7	31.6	.3	30.7	.7	.3	.1	.9	1.1
District of Columbia	7,686	–	–	.0	44.9	51.3	.5	44.7	9.0	.2	.4	15.3	18.6
Florida	195,637	.0	–	.2	17.6	17.7	.1	19.1	.4	.0	.1	.8	1.7
Georgia	122,368	.0	.0	.2	18.0	18.4	.8	18.6	2.0	.3	.1	2.9	2.7
Hawaii	17,583	–	.0	.1	8.4	8.6	.1	8.4	.4	.0	10.4	5.3	6.1
Idaho	19,391	.0	.0	.3	8.6	11.2	1.5	11.4	4.2	1.3	.6	2.2	2.6
Illinois	182,588	.0	.0	.1	15.5	16.8	.0	16.8	.8	.2	.2	1.8	2.2
Indiana	85,122	.3	.1	.2	13.5	13.7	.4	13.7	.9	.4	.1	1.5	2.6
Iowa	37,282	.0	.0	.4	12.1	14.2	1.1	15.0	1.5	.1	.1	1.3	3.9
Kansas	38,422	.0	.0	.1	10.6	10.7	1.0	12.1	.4	.0	.1	.6	.8
Kentucky	54,329	.0	.1	.0	22.0	22.7	.1	23.7	.2	.1	.1	1.1	1.3
Louisiana	66,888	–	.0	.0	22.3	22.5	.2	22.5	.1	.0	.0	.3	.5
Maine	13,733	–	.0	–	10.0	15.0	4.3	18.7	.8	.3	.1	.5	.5
Maryland	71,972	.0	.0	.7	8.4	10.1	.6	6.8	2.0	1.6	.5	4.7	8.2
Massachusetts	81,411	.0	.0	.0	7.8	7.6	.4	6.8	.3	.2	.2	.9	.3
Michigan	133,666	.0	.2	.1	16.0	18.0	5.4	22.5	1.4	.6	.1	3.9	5.4
Minnesota	65,202	.0	.0	.0	8.9	11.3	5.2	15.4	2.2	.5	1.0	5.6	5.0
Mississippi	42,939	.0	.0	.1	24.2	24.0	.1	24.3	.2	.1	.2	.6	1.1
Missouri	75,358	.0	.0	.2	18.3	18.3	.1	18.5	.8	.3	.2	1.4	2.0
Montana	10,795	.0	.1	–	10.2	11.5	2.0	13.4	.4	.0	.1	.5	.5
Nebraska	23,534	.0	.0	.0	12.2	12.8	2.2	14.4	.1	.0	.0	.3	.6
Nevada	28,699	–	.0	.8	22.4	23.3	.7	22.0	3.2	1.1	1.1	6.2	10.0
New Hampshire	14,429	–	–	.0	7.2	9.1	3.5	11.6	.8	2.8	.2	1.7	1.8
New Jersey	114,550	.1	.1	.2	8.9	11.1	.4	9.4	2.3	.2	.2	5.0	6.0
New Mexico	27,318	.0	.0	2.8	27.5	26.8	.0	26.8	5.1	.5	.7	5.7	5.5
New York	258,207	.1	.1	.4	15.7	16.1	6.2	20.8	1.7	.1	.2	10.0	6.7
North Carolina	111,688	.0	.0	.0	17.2	17.2	.0	17.1	.2	.0	.1	.5	.5
North Dakota	7,932	–	–	.0	7.9	9.4	3.1	12.3	.2	–	.1	.6	.3
Ohio	152,794	.0	.0	.2	15.2	16.0	.4	15.8	.5	.2	.0	.5	1.5
Oklahoma	49,461	.0	.1	.1	17.0	18.9	1.1	18.8	2.0	12.2	3.2	10.9	12.8
Oregon	45,273	–	–	.1	11.6	4.6	.2	4.9	1.2	.1	.0	.4	.5
Pennsylvania	145,899	.0	.0	.8	5.7	4.3	.6	3.8	2.3	.4	.2	3.2	4.8
Rhode Island	12,599	–	–	.3	13.6	14.2	12.8	23.1	2.9	2.2	2.6	8.8	9.8

See footnotes at end of table.

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 1998—Con.

[By place of residence]

Area	Number of births	Place of birth	Attendant at birth	Mother's birth-place	Father's age	Father's race	Hispanic origin		Educational attainment Mother	Live-birth order	Length of gestation	Month prenatal care began	Number of prenatal visits
							Mother	Father					
South Carolina	53,877	–	.0	.3	28.8	28.9	.1	28.8	4.6	.1	.2	1.5	1.6
South Dakota	10,288	.0	–	.0	11.8	12.1	.1	13.3	.2	–	.0	.4	.4
Tennessee	77,396	.0	.0	.0	16.1	16.2	.0	16.3	.2	.0	.2	1.1	.9
Texas	342,283	.0	.0	.4	15.3	15.4	.3	15.4	1.3	1.2	.6	2.0	5.2
Utah	45,165	.0	.0	.2	9.7	10.8	.3	9.3	.9	.2	.1	2.9	3.0
Vermont	6,582	.0	–	.1	9.1	15.3	2.6	16.4	2.5	.4	.2	3.6	1.2
Virginia	94,351	.0	.1	.1	17.8	18.6	.1	18.5	.5	1.1	.3	.6	1.2
Washington	79,663	.0	.0	.8	11.8	12.0	3.2	12.3	10.6	4.5	1.0	9.7	13.1
West Virginia	20,747	.1	.0	.1	13.3	14.2	.2	14.6	.5	.2	.5	4.3	3.2
Wisconsin	67,450	–	–	.0	28.4	28.4	.0	28.4	.1	.0	.0	.2	.3
Wyoming	6,252	.0	–	.0	13.6	14.0	.1	13.9	.4	.0	.1	.5	.5
Puerto Rico	60,412	–	.1	–	2.9	3.4	...	...	.2	.0	.1	.2	.1
Virgin Islands	1,800	.1	.6	–	21.6	24.3	3.2	26.4	1.7	.9	.8	.6	1.7
Guam	4,318	.1	.5	.1	23.6	24.9	.4	23.3	.6	.6	.2	.8	1.2
American Samoa	1,688	.1	–	5.9	34.2	34.8	...	...	...	–	...	...	...
Northern Marianas	1,462	.2	1.0	0.3	9.6	24.4	...	...	25.0	23.1	26.3	56.5	25.0

See footnotes at end of table.

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 1998

[By place of residence]

Area	Number of births	Birth-weight	5-minute-Apgar score	Medical risk factors	Tobacco use	Alcohol use	Weight gain	Obstetric procedures	Complications of labor and/or delivery	Method of delivery	Abnormal conditions of newborn	Congenital anomalies
Total of reporting areas ¹	3,941,553	0.1	0.6	1.4	1.5	1.5	8.3	0.9	1.2	0.9	2.4	1.7
Alabama	62,074	0.0	0.2	0.0 ³	0.0	0.1	3.1	0.0	0.0	0.3	0.0	0.1
Alaska	9,926	.2	.6	.3	.6	.6	1.6	.3	.3	.4	.4	.3
Arizona	78,243	.1	.6	.0	1.8	2.0	11.3	.0	.0	.2	.0	.4
Arkansas	36,865	.1	3.6	.5	.9	1.0	9.5	.4	.5	.7	.4	.4
California	521,661	.0	...	.0	...	...	...	.0	.0	.0	.0	.0
Colorado	59,577	.0	.3	.0	.1	.1	3.4	.0	.0	.0	.0	.1
Connecticut	43,820	.0	1.5	11.8	8.1	7.4	18.6	10.4	12.2	4.5	18.9	20.1
Delaware	10,578	.0	.4	.0	.2	.2	1.9	.0	.0	.0	.1	.1
District of Columbia	7,686	.1	1.1	.0	.1	.1	16.4	.0	.0	.0	.0	.0
Florida	195,637	.1	.2	.0	.1	.1	4.4	.0	.0	.6	.0	.0
Georgia	122,368	.0	.5	.4	.4	.4	5.6	.0	.0	.3	.0	.0
Hawaii	17,583	2.8	7.2	16.2	.1	.1	13.8	9.7	7.3	16.5	17.2	18.9
Idaho	19,391	.3	.6	1.0	.7	1.0	10.2	.9	.9	.3	.7	.7
Illinois	182,588	.1	.3	.1	1.0	.2	3.9	.0	.1	.4	.1	.1
Indiana	85,122	.5	.5	.1	...	.4	3.2	.1	.2	.4	.6	.6
Iowa	37,282	.1	.3	.2	3.3	3.8	6.9	.1	.3	.4	.3	.4
Kansas	38,422	.0	.4	.5 ³	.5	.5	.7	.4	.4	2.9	.4	.4
Kentucky	54,329	.1	.4	6.1	4.5	4.5	8.6	3.9	6.5	4.1	11.3	10.3
Louisiana	66,888	.1	.3	.0	.1	.1	6.8	.0	.1	.1	.1	.0
Maine	13,733	.1	.2	.1	1.1	1.4	1.8	.0	.1	.2	.1	.2
Maryland	71,972	.1	.5	.0	.5	.7	8.3	.0	.0	.2	.0	.0
Massachusetts	81,411	.2	.3	.6	.3	.3	1.1	.6	.6	.4	1.0	1.0
Michigan	133,666	.3	.4	.1	1.8	1.5	9.4	.1	.1	.6	.1	.1
Minnesota	65,202	.1	.8	8.3	7.2	7.3	18.1	6.5	7.6	4.5	8.2	8.5
Mississippi	42,939	.0	.4	.1	.2	.2	4.6	.1	.1	.2	.1	.1
Missouri	75,358	.0	.5	.1	.4	.4	3.0	.1	.1	.7	.1	.1
Montana	10,795	.0	.4	.1	.8	1.5	1.4	.1	.1	.5	.2	.1
Nebraska	23,534	.0	.2	.0	.9	.9	1.3	.0	.0	.2	.0 ⁶	.0
Nevada	28,699	.1	1.7	10.7	2.2	2.5	11.8	.5	6.6	1.5	12.4	12.5
New Hampshire	14,429	.1	.3	.0	.2	.3	5.5	.0	.0	.2	.1	.1
New Jersey	114,550	.1	.2	2.3	1.0	1.0	6.1	.1	1.6	.5	26.2	1.7
New Mexico	27,318	1.6	4.0	.1	2.0	2.1	11.3	.0	.0	.4	.1	...
New York	258,207	.1	.2	1.1	4.3 ⁴	.2	9.6	.2	.4	.3	0.9 ⁷	1.0
North Carolina	111,688	.0	.3	.0	.1	.1	2.3	.0	.0	.4	.0	.4
North Dakota	7,932	.1	.4	.1	.6	.7	1.3	.1	.1	1.0	.1	.1
Ohio	152,794	.1	.2	.0	.3	.1	2.6	.0	.0	.4	.0	.0
Oklahoma	49,461	.6	5.5	34.0	23.9	24.2	34.6	30.2	33.0	26.9	39.5	40.3
Oregon	45,273	.0	.4	.5	.7	.7	3.0	.0	.0	.2	.0	.0
Pennsylvania	145,899	.1	.3	.1	.9	.6	8.3	.0	.1	.1	.6	.5
Rhode Island	12,599	.4	.7	8.4	2.7	2.9	12.0	8.3	8.4	.7	18.9	19.3

See footnotes at end of table.

Table I. Percent of birth records on which specified items were not stated: United States and each State and territory, 1998—Con.

[By place of residence]

Area	Number of births	Birth-weight	5-minute-Apgar score	Medical risk factors	Tobacco use	Alcohol use	Weight gain	Obstetric procedures	Complications of labor and/or delivery	Method of delivery	Abnormal conditions of newborn	Congenital anomalies
South Carolina	53,877	.0	.4	.0	.1	.1	2.6	.0	.0	.5	.0	.0
South Dakota	10,288	.0	.3	.0	...	...	1.4	.0	.0	.2	.0	.0
Tennessee	77,396	.0	.3	.0	.2	.2	6.1	.0	.1	.4	.1	.0
Texas	342,283	.1	...	1.3 ⁵	.4	.5	19.6	.1	.1 ⁸	.7	.2 ⁶	.3
Utah	45,165	.0	.3	.1	.5	.4	4.1	.0	.0	.0	.2	.4
Vermont	6,582	.2	.2	.1	.9	.5	2.0	.1	.1	.0	.2	.2
Virginia	94,351	.3	.4	.0	.1	.1	4.8	.0	.0	.4	.1	.1
Washington	79,663	.3	.4	5.5	5.2	15.1	23.7	7.1	9.3	.4	11.0	10.4
West Virginia	20,747	.1	.2	.0	.8	2.4	9.0	.0	.0	.2	.0	.0
Wisconsin	67,450	.0	.4	.1	.1	.1	1.6	.0	.1	.0	.1 ⁹	.1
Wyoming	6,252	.0	.4	.0	1.1	1.1	2.1	.0	.0	.2	.0	.0
Puerto Rico	60,412	.0	.2	.0	.0	.0	.1	.0	.1	.0	.1	.1
Virgin Islands	1,800	.1	2.9	6.4	2.3	2.3	9.8	2.5	7.4	3.0	8.7	6.8
Guam	4,318	.1	1.3	5.4	1.1	1.3	4.0	1.9	2.9	1.3	5.7	5.5
American Samoa	1,688	-	...	...	...	...	...	...	...	...	...	...
Northern Marianas	1,462	12.3	21.5	...	...	...	...	...	...	43.6	...	...

0.0 Quantity more than zero but less than 0.05.

--- Data not available.

- Quantity zero.

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

²California reports date last normal menses began but does not report clinical estimate of gestation.

³Kansas does not report Rh sensitization.

⁴New York City (but not New York State) reports tobacco use.

⁵Texas does not report genital herpes and uterine bleeding.

⁶Nebraska and Texas do not report birth injury.

⁷New York City does not report assisted ventilation less than 30 minutes and assisted ventilation of 30 minutes or more.

⁸Texas does not report anesthetic complications and fetal distress.

⁹Wisconsin does not report fetal alcohol syndrome.

direct question to their birth certificate; thus by 1997, all but four States (Connecticut, Michigan, Nevada, and New York) included a direct question on their birth certificates. Nevada asks for the mother's marital status through the electronic birth registration process but this item is not included on certified or paper copies of the birth certificate. Beginning June 15, 1998, Connecticut discontinued inferring the mother's marital status and added a direct question on mother's marital status to the State's birth certificate.

In the two States (Michigan and New York) that use inferential procedures to compile birth statistics by marital status in 1998, a birth is inferred as nonmarital if either of these factors 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; this is now the key indicator in the nonreporting States.

Since 1980 the National Center for Health Statistics has published information on nonmarital births, which incorporates reported and inferential data. The inferential procedures represent a substantial departure from the method used before 1980 to prepare national estimates of births to unmarried women, which assumed that the incidence of births to unmarried women in States with no direct question on marital status was the same as the incidence in reporting States in the same geographic division (23). Inferential procedures in current use, however, are quite different from those in use during the 1980's, when there was heavy reliance on a comparison of the surnames of the parents and the child to infer the mother's marital status. The procedures now in use depend, as noted above, on very reliable indicators, namely a paternity affidavit or missing information on the father.

A review of Connecticut's birth data for 1998 indicate that during the first 6 months of 1998, when the inferential procedures were still in use, the proportion of births to unmarried women was somewhat higher (33 percent) than in the last 6 months when marital status was based on a direct question (29 percent). The inferential procedures in effect in Connecticut relied principally on a comparison of the surnames of the parents and child. It appears that the inferential procedures resulted in some overestimation of the number of births to unmarried women, probably because of the reliance on a comparison of surnames. It is estimated that if the Connecticut reporting procedures had not changed, the number of nonmarital births would have been about 1,000 higher. Because Connecticut accounts for only about 1 percent of U.S. births, the reporting changes had essentially no impact on data for the Nation.

The procedures for reporting marital status in California, Nevada, and New York City changed beginning January 1, 1997. The methods used to determine marital status and the impact of the procedures on the data were discussed in detail in previous reports (1, 20).

The use of inferential marital status data together with information from a direct question represents an attempt to use related information on the birth certificate to improve the quality of national data as well as to provide data for the individual nonreporting States. Because of the continued substantial increases in nonmarital childbearing throughout the 1980's, the data have been intensively evaluated by the Division of Vital Statistics, NCHS. The results of this evaluation show that trends in birth rates for unmarried women for rates computed on the basis of

estimated data and on the basis of inferred data are essentially the same.

The mother's marital status was not reported in 1998 on 0.04 percent of the birth records. Marital status was imputed as "married" for these records.

Prenatal care

As a result of a programming error, the proportions presented in "Report of Final Natality Statistics, 1996" and "Births: Final Data for 1997" for the Adequacy of Prenatal Care Utilization Index (APNCU) are incorrect for levels of care other than intensive use of care (19, 20, 71). Levels for the adequate care category are only slightly different from those published previously. The corrected APNCU levels for 1990 and 1995-97 are presented in this report.

Gestation

The primary measure used to determine the gestational age of the newborn is the interval between the first day of the mother's last normal menstrual period (LMP) and the date of birth. It is subject to error for several reasons, including imperfect maternal recall or misidentification of the LMP because of postconception bleeding, delayed ovulation, or intervening early miscarriage. These data are edited for LMP-based gestational ages that are clearly inconsistent with the infant's plurality and birthweight (see below), but reporting problems for this item persist and may occur more frequently among some subpopulations and among births with shorter gestations (70, 72).

The U.S. Standard Certificate of Live Birth includes an item, "clinical estimate of gestation," that is being compared with length of gestation computed from the date the last normal menstrual period (LMP) began when the latter appears to be inconsistent with birthweight. This is done for normal weight births of apparently short gestations and very low birthweight births reported to be full term. The clinical estimate was also used if the LMP date was not reported. The period of gestation for 5.1 percent of the births in 1998 was based on the clinical estimate of gestation. For 97 percent of these records, the clinical estimate was used because the LMP date was not reported. For the remaining 3 percent, the clinical estimate was used because it was compatible with the reported birthweight, whereas the LMP-based gestation was not. In cases where the reported birthweight was inconsistent with both the LMP-computed gestation and the clinical estimate of gestation, the LMP-computed gestation was used, and birthweight was reclassified as "not stated." This was necessary for about 350 births, or 0.01 percent of all birth records in 1998. The levels of the adjustments in 1998 data were similar to those for 1997 and earlier years (20).

Birthweight

Birthweight is reported in some areas in pounds and ounces rather than in grams. However, the metric system has been used in tabulating and presenting the statistics to facilitate comparison with data published by other groups. Equivalents of the gram weights in terms of pounds and ounces are as follows:

Less than 500 grams = 1 lb 1 oz or less

500-999 grams = 1 lb 2 oz-2 lb 3 oz

1,000-1,499 grams = 2 lb 4 oz-3 lb 4 oz

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

Method of delivery

Several rates are computed for method of delivery. The overall cesarean section rate or *total cesarean* rate is computed as the percent of all births that were delivered by cesarean section. The *primary cesarean* rate is a measure that relates the number of women having a first cesarean delivery to all women giving birth who have never had a cesarean delivery. The denominator for this rate includes all births less those with method of delivery classified as repeat cesarean, vaginal birth after previous cesarean, or method not stated. The rate for *vaginal birth after previous cesarean* (VBAC) delivery is computed by relating all VBAC deliveries to the sum of VBAC and repeat cesarean deliveries, that is, to women with a previous cesarean section. The proportion of VBAC deliveries among births in Hawaii in 1998 is overstated because of incomplete reporting in some hospitals.

Computations of percents, percent distributions, and medians

Births for which a particular characteristic is unknown were subtracted from the figures for total births that were used as denominators before percents, percent distributions, and medians were computed. The percent of records with missing information for each item is shown by State in [table I](#). The median number of prenatal visits also excludes births to mothers who had no prenatal care. Computations of the median years of school completed and the median number of prenatal visits were based on ungrouped data. An asterisk is shown in place of any derived statistic based on fewer than 20 births in the numerator or denominator.

Population denominators

Birth and fertility rates for 1998 shown in [tables 1, 3–6, 8, 9, 13, and 14](#) are based on populations estimated as of July 1, 1998. These populations are shown in [tables II and III](#). The population estimates have been published by the U.S. Bureau of the Census (5) and are based on the 1990 census counts by race and age, which were modified to be consistent with Office of Management and Budget racial categories and historical categories for birth data, and in the case of age, to reflect age as of the census reference date. The modification procedures are described in detail in a census report (73).

Birth and fertility rates by State shown in [table 10](#) are based on State-level population estimates provided by the U.S. Bureau of the Census that are consistent with the U.S. populations (74). Rates by State shown in this report may differ from rates computed on the basis of other population estimates. Birth and fertility rates by month shown in [table 15](#) are based on monthly population estimates also based on the 1998 estimates. Rates for unmarried women shown in [tables 17 and](#)

[18](#) are based on distributions of the population by marital status as of March 1998 provided by the U.S. Bureau of the Census (22), which have been adjusted to July 1998 population levels (5) by the Division of Vital Statistics, NCHS (23).

Birth and fertility rates for the Hispanic population, shown in [tables 6, 8, 9, and 14](#), are based on estimates of the total Hispanic population as of July 1, 1998 (5). Rates for Hispanic subgroups are based on special population estimates that are presented in [table III](#) in the [Technical notes](#) (75).

Computation of rates

In computing birth rates by live-birth order, births with birth order not stated were distributed in the same proportion as births of known live-birth order. This procedure is done separately by race.

In computing birth and fertility rates for the Hispanic population, births with origin of mother not stated are included with non-Hispanic births rather than being distributed. Thus, rates for the U.S. Hispanic population are underestimates of the true rates to the extent that the births with origin of mother not stated (1.2 percent) were actually to Hispanic mothers (see [table I](#)). In computing the rates, the census-based populations with origin not stated are imputed. The effect on the rates is believed to be small.

Age of father—Information on age of father is often missing on birth certificates of children born to unmarried women ([table I](#)). In computing birth rates by age of father, births where age of father is not stated are distributed in the same proportions as births with known age within each 5-year age classification of mother. This procedure is followed because, while father's age is missing on 14 percent of the birth certificates, one third of these were on records where the mother is a teenager. This distribution procedure is done separately by race. When the father's race is not stated, the race of the mother is assigned to the father prior to distributing the data for age of father not stated. The resulting distributions are summed to form a composite frequency distribution that is the basis for computing birth rates by age of father. This procedure avoids the distortion in rates that would result if the relationship between age of mother and age of father were disregarded.

Graphic presentation

Trend data shown in [figures 2–7](#) are plotted using a logarithmic scale. This approach is taken to facilitate comparison of the relative change in rates over time for each series of rates as well as the differentials among rates for different series. The trend lines in [figure 2](#), for example, show that women 40–44 years of age experienced the most change of any group over the period, and also that they had the greatest increase in rates since 1985.

Random variation and significance testing for natality data

The number of births reported for an area is essentially a complete count, because more than 99 percent of all births are registered. Although this number is not subject to sampling error, it may be affected by nonsampling errors such as mistakes in recording the mother's residence or age during the registration process.

When the number of births is used for analytic purposes the number of events that *actually* occurred can be thought of as one in

Table II. Estimated total population by race, and estimated female population by age and race: United States, 1998

[Populations estimated as of July 1]

Age	All races	White	Black	American Indian	Asian or Pacific Islander
Total population	270,298,524	223,000,729	34,430,569	2,359,946	10,507,280
Female population					
15-44 years	60,111,557	48,250,829	8,591,694	569,534	2,699,500
10-14 years	9,387,020	7,402,657	1,472,646	119,551	392,166
15-19 years	9,493,761	7,500,658	1,487,073	113,821	392,209
15-17 years	5,694,086	4,498,674	881,464	71,297	242,651
18-19 years	3,799,675	3,001,984	605,609	42,524	149,558
20-24 years	8,678,024	6,868,796	1,332,918	93,674	382,636
25-29 years	9,341,226	7,394,657	1,368,895	93,239	484,435
30-34 years	10,179,403	8,145,421	1,448,812	89,390	495,780
35-39 years	11,369,766	9,261,994	1,529,631	92,526	485,615
40-44 years	11,049,377	9,079,303	1,424,365	86,884	458,825
45-49 years	9,607,011	7,972,031	1,169,762	71,258	393,960

SOURCE: U.S. Bureau of the Census. Unpublished Census file NESTV98.wk1. consistent with populations published in: U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington, DC: U.S. Bureau of the Census. Internet release, June 4, 1999. <http://www.census.gov/population/www/estimates/uspop.html>.

Table III. Estimated total population by specified Hispanic origin and estimated female population by age and specified Hispanic origin and by race for women of non-Hispanic origin: United States, 1998

[Populations estimated as of July 1]

Age	Hispanic					Non-Hispanic		
	Total	Mexican	Puerto Rican	Cuban	Other Hispanic ¹	Total ²	White	Black
Total population	30,250,264	19,552,181	3,018,584	1,322,312	638,171	240,048,291	195,439,555	32,717,947
Female population								
15-44 years	7,269,192	4,605,176	759,516	263,807	1,640,985	52,842,369	41,645,748	8,172,590
10-14 years	1,286,910	884,607	139,675	30,635	231,989	8,100,120	6,238,757	1,398,096
15-19 years	1,296,337	861,714	151,227	36,648	246,744	8,197,425	6,322,186	1,415,021
15-17 years	774,225	527,598	91,034	23,087	132,501	4,919,866	3,795,902	838,562
18-19 years	522,112	334,116	60,193	13,561	114,243	3,277,559	2,526,284	576,459
20-24 years	1,250,938	828,513	109,181	29,625	283,615	7,427,083	5,725,391	1,265,049
25-29 years	1,223,460	801,871	130,708	39,510	251,371	8,117,764	6,282,628	1,300,046
30-34 years	1,270,594	792,065	130,108	58,495	289,929	8,908,804	6,993,329	1,372,694
35-39 years	1,207,754	691,785	137,162	56,344	322,468	10,162,016	8,166,734	1,456,919
40-44 years	1,020,109	629,228	100,830	43,185	246,858	10,029,277	8,155,480	1,362,861
45-49 years	794,527	457,033	82,975	34,958	219,561	8,812,484	7,251,049	1,122,532

¹Includes Central and South American and other and unknown Hispanic.

²Includes races other than white and black.

SOURCE: Population estimates based on unpublished tabulations prepared by the Housing and Household Economic Statistics Division, U.S. Bureau of the Census. Totals for Hispanic population and non-Hispanic population by race are consistent with figures published in: U.S. Bureau of the Census. Unpublished Census file NESTV98.wk1. consistent with populations published in: U.S. population estimates, by age, sex, race, and Hispanic origin: 1990 to 1998. Washington, DC: U.S. Bureau of the Census. Internet release, June 4, 1999. <http://www.census.gov/population/www/estimates/uspop.html>.

a large series of possible results that *could have* occurred under the same circumstances. When considered in this way, the number of births is subject to random variation. The probable range of values may be estimated from the actual figures according to certain statistical assumptions.

The **confidence interval** is the range of values for the number of births, birth rates, or percent of births that you could expect in 95 out of 100 cases. The **confidence limits** are the end points of this range of values (the highest and lowest values). Confidence limits tell you how much the number of events or rates could vary under similar circumstances.

Confidence limits for numbers, rates, and percents can be estimated from the actual number of events. Procedures differ for rates and

percents and also differ depending on the number of births on which these statistics are based. Below are detailed procedures and examples for each type of case.

95-percent confidence limits for numbers less than 100

When the number of births is less than 100 and the rate is small, the data are assumed to follow a Poisson probability distribution. Confidence limits are estimated using the following formulas:

$$\text{Lower limit} = B \times L$$

$$\text{Upper limit} = B \times U$$

where:

B = the number of births

L = the value in [Table IV](#) that corresponds to the number B

U = the value in [Table IV](#) that corresponds to the number B

Example

Suppose that the number of first births to American Indian women 40–44 years of age was 47. The confidence limits for this number would be:

$$\begin{aligned}\text{Lower limit} &= B \times L \\ &= 47 \times 0.73476 \\ &= 35\end{aligned}$$

$$\begin{aligned}\text{Upper limit} &= B \times U \\ &= 47 \times 1.32979 \\ &= 63\end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to American Indian women 40–44 years of age would lie between 35 and 63.

95-percent confidence limits for numbers of 100 or more

When the number of events is greater than 100, the data are assumed to be approximately normally distributed. Formulas for 95-percent confidence limits are:

$$\begin{aligned}\text{Lower limit} &= B - (1.96 \times \sqrt{B}) \\ \text{Upper limit} &= B + (1.96 \times \sqrt{B})\end{aligned}$$

where:

B = the number of births

Example

Suppose that the number of first births to white women 40–44 years of age was 14,108. The 95-percent confidence limits for this number would be:

$$\begin{aligned}\text{Lower limit} &= 14,108 - (1.96 \times \sqrt{14,108}) \\ &= 14,108 - 233 \\ &= 13,875\end{aligned}$$

$$\begin{aligned}\text{Upper limit} &= 14,108 + (1.96 \times \sqrt{14,108}) \\ &= 14,108 + 233 \\ &= 14,341\end{aligned}$$

This means that the chances are 95 out of 100 that the actual number of first births to white women 40–44 years of age would lie between 13,875 and 14,341.

Computing confidence intervals for rates

The same statistical assumptions can be used to estimate the variability in birth rates. Again, one formula is used for rates based on numbers of events less than 100, and another formula for rates based on numbers of 100 or greater. For our purposes, assume that the denominators of these rates (the population estimates) have no error. While this assumption is technically correct only for denominators

based on the census that occurs every 10 years, the error in intercensal population estimates is usually small, difficult to measure, and therefore not considered.

95-percent confidence limits for rates based on less than 100 events

When the number of events in the numerator is less than 20, an asterisk is shown in place of the rate because there were too few births to compute a statistically reliable rate. When the number of events in the numerator is greater than 20 but less than 100, the confidence interval for a rate can be estimated using the two formulas that follow and the values in [Table IV](#).

$$\text{Lower limit} = R \times L$$

$$\text{Upper limit} = R \times U$$

where:

R = the birth rate

L = the value in [Table IV](#) that corresponds to the number B in the numerator of the rate

U = the value in [Table IV](#) that corresponds to the number B in the numerator of the rate

Example

Suppose that the first birth rate for American Indian women 40–44 years of age was 0.54 per 1,000, based on 47 births in the numerator. Using [Table IV](#):

$$\text{Lower limit} = 0.54 \times 0.73476 = .40$$

$$\text{Upper limit} = 0.54 \times 1.32979 = .72$$

This means that the chances are 95 out of 100 that the actual first birth rate for American Indian women 40–44 year of age lies between .40 and .72.

95-percent confidence limits for rates when the numerator is 100 or more

In this case, use the following formula for the birth rate R based on the number of births B :

$$\text{Lower limit} = R - [1.96 \times (R / \sqrt{B})]$$

$$\text{Upper limit} = R + [1.96 \times (R / \sqrt{B})]$$

where:

R = the birth rate

B = the number of births

Example

Suppose that the first birth rate for white women 40–44 years of age was 1.55 per 1,000, based on 14,108 births in the numerator. Therefore, the 95-percent confidence interval would be:

$$\begin{aligned}\text{Lower limit} &= 1.55 - [1.96 \times (1.55 / \sqrt{14,108})] \\ &= 1.55 - .026 \\ &= 1.52\end{aligned}$$

Table IV. Values of *L* and *U* for calculating 95 percent confidence limits for numbers of events and rates when the number of events is less than 100

<i>N</i>	<i>L</i>	<i>U</i>	<i>N</i>	<i>L</i>	<i>U</i>
1	0.02532	5.57164	51	0.74457	1.31482
2	0.12110	3.61234	52	0.74685	1.31137
3	0.20622	2.92242	53	0.74907	1.30802
4	0.27247	2.56040	54	0.75123	1.30478
5	0.32470	2.33367	55	0.75334	1.30164
6	0.36698	2.17658	56	0.75539	1.29858
7	0.40205	2.06038	57	0.75739	1.29562
8	0.43173	1.97040	58	0.75934	1.29273
9	0.45726	1.89831	59	0.76125	1.28993
10	0.47954	1.83904	60	0.76311	1.28720
11	0.49920	1.78928	61	0.76492	1.28454
12	0.51671	1.74680	62	0.76669	1.28195
13	0.53246	1.71003	63	0.76843	1.27943
14	0.54671	1.67783	64	0.77012	1.27698
15	0.55969	1.64935	65	0.77178	1.27458
16	0.57159	1.62394	66	0.77340	1.27225
17	0.58254	1.60110	67	0.77499	1.26996
18	0.59266	1.58043	68	0.77654	1.26774
19	0.60207	1.56162	69	0.77806	1.26556
20	0.61083	1.54442	70	0.77955	1.26344
21	0.61902	1.52861	71	0.78101	1.26136
22	0.62669	1.51401	72	0.78244	1.25933
23	0.63391	1.50049	73	0.78384	1.25735
24	0.64072	1.48792	74	0.78522	1.25541
25	0.64715	1.47620	75	0.78656	1.25351
26	0.65323	1.46523	76	0.78789	1.25165
27	0.65901	1.45495	77	0.78918	1.24983
28	0.66449	1.44528	78	0.79046	1.24805
29	0.66972	1.43617	79	0.79171	1.24630
30	0.67470	1.42756	80	0.79294	1.24459
31	0.67945	1.41942	81	0.79414	1.24291
32	0.68400	1.41170	82	0.79533	1.24126
33	0.68835	1.40437	83	0.79649	1.23965
34	0.69253	1.39740	84	0.79764	1.23807
35	0.69654	1.39076	85	0.79876	1.23652
36	0.70039	1.38442	86	0.79987	1.23499
37	0.70409	1.37837	87	0.80096	1.23350
38	0.70766	1.37258	88	0.80203	1.23203
39	0.71110	1.36703	89	0.80308	1.23059
40	0.71441	1.36172	90	0.80412	1.22917
41	0.71762	1.35661	91	0.80514	1.22778
42	0.72071	1.35171	92	0.80614	1.22641
43	0.72370	1.34699	93	0.80713	1.22507
44	0.72660	1.34245	94	0.80810	1.22375
45	0.72941	1.33808	95	0.80906	1.22245
46	0.73213	1.33386	96	0.81000	1.22117
47	0.73476	1.32979	97	0.81093	1.21992
48	0.73732	1.32585	98	0.81185	1.21868
49	0.73981	1.32205	99	0.81275	1.21746
50	0.74222	1.31838			

$$\begin{aligned} \text{Upper limit} &= 1.55 + [1.96 \times (1.55 / \sqrt{14,108})] \\ &= 1.55 + .026 \\ &= 1.58 \end{aligned}$$

This means that the chances are 95 out of 100 that the actual first birth rate for white women 40–44 years of age lies between 1.52 and 1.58.

Computing 95-percent confidence intervals for percents

In many instances we need to compute the confidence intervals for percents. Percents derive from a binomial distribution. As with birth rates, an asterisk will be shown for any percent that is based on fewer than 20 births in the numerator. We easily compute a 95-percent confidence interval for a percent when the following conditions are met:

$$B \times p \geq 5 \text{ and } B \times q \geq 5$$

where:

$$\begin{aligned} B &= \text{number of births in the denominator} \\ p &= \text{percent divided by 100} \\ q &= 1 - p \end{aligned}$$

For natality data, these conditions will be met except for very rare events in small subgroups. If the conditions are *not* met, the variation in the percent will be so large as to render the confidence intervals meaningless. When these conditions are met the 95-percent confidence interval can be computed using the normal approximation of the binomial. The 95-percent confidence intervals are computed by the following formulas:

$$\begin{aligned} \text{Lower limit} &= p - \left(1.96 \sqrt{\frac{pq}{B}} \right) \\ \text{Upper limit} &= p + \left(1.96 \sqrt{\frac{pq}{B}} \right) \end{aligned}$$

where:

- B = number of births in the denominator
- p = percent divided by 100
- $q = 1 - p$

Example

Suppose that the percent of births to Hispanic women in Alabama that were to unmarried women was 23.0 percent. This was based on 310 births in the numerator and 1,345 births in the denominator. First we test to make sure we can use the normal approximation of the binomial:

$$1,345 \times .230 = 309$$

$$1,345 \times (1 - .230) = 1,345 \times .770 = 1,036$$

Both 309 and 1,036 are greater than 5 so we can proceed. The 95-percent confidence interval would be:

$$\text{Lower limit} = .23 - \left[1.96 \sqrt{\frac{.23(.77)}{1,345}} \right]$$

$$= .23 - .022$$

$$= .208, \text{ or } 20.8 \text{ percent}$$

$$\text{Upper limit} = .23 + \left[1.96 \sqrt{\frac{.23(.77)}{1,345}} \right]$$

$$= .23 + .022$$

$$= .252, \text{ or } 25.2 \text{ percent}$$

This means that the chances are 95 out of 100 that the actual percent of births in Alabama to Hispanic women that are to unmarried women lies between 20.8 and 25.2 percent.

Significance testing

One of the rates is based on fewer than 100 cases

To compare two rates, when one or both of those rates are based on less than 100 cases, you first compute the confidence intervals for both rates. Then you check to see if those intervals overlap. If they **do** overlap, the difference is not statistically significant at the 95-percent level. If they **do not** overlap, the difference is indeed "statistically significant."

Example

Is the first birth rate for American Indian women 40–44 years of age (.54 per 1,000) significantly lower than the comparable rate for white women (1.55)? The rate for American Indian women is based on 47 events whereas the rate for white women is based on 14,108 events. The rate for American Indian women is based on less than 100 events; therefore, the first step is to compute the confidence intervals for both rates.

	Lower Limit	Upper Limit
American Indian women	0.40	0.72
White women	1.52	1.58

These two confidence intervals do not overlap. Therefore, the first birth rate for American Indian women aged 40–44 years is significantly lower (at the 95-percent confidence level) than the comparable rate for white women.

Both rates are based on 100 or more events

When both rates are based on 100 or more events, the difference between the two rates is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two rates.

$$1.96 \sqrt{\frac{R_1^2}{N_1} + \frac{R_2^2}{N_2}}$$

where:

- R_1 = first rate
- R_2 = second rate
- N_1 = first number of births
- N_2 = second number of births

If the difference is **greater** than this statistic, then the difference would occur by chance less than 5 times out of 100. If the difference is **less** than this statistic, the difference might occur by chance more than 5 times out of 100. We say that the difference is not statistically significant at the 95-percent confidence level.

Example

Is the first birth rate for black women 40–44 years of age (1.08 per 1,000) significantly lower than the comparable rate for white women (1.55)? Both rates are based on more than 100 births (1,535 for black women and 14,108 for white women). The difference between the rates is $1.55 - 1.08 = .47$. The statistic is then calculated as follows:

$$1.96 \sqrt{\frac{1.08^2}{1,535} + \frac{1.55^2}{14,108}}$$

$$= 1.96 \times \sqrt{[(1.166/1,535) + (2.403/14,108)]}$$

$$= 1.96 \times \sqrt{0.00076 + 0.00017}$$

$$= 1.96 \times \sqrt{0.00093}$$

$$= 1.96 \times .03$$

$$= .06$$

The difference between the rates (.47) is greater than this statistic (.06). Therefore, the difference is statistically significant at the 95-percent confidence level.

Testing differences between two percents

When testing the difference between two percents, both percents must meet the following conditions:

$$B \times p \geq 5 \text{ and } B \times q \geq 5$$

where:

- B = number of births in the denominator

$$p = \text{percent divided by } 100$$

$$q = 1 - p$$

When both percents meet these conditions then the difference between the two percents is considered statistically significant if it exceeds the statistic in the formula below. This statistic equals 1.96 times the standard error for the difference between two percents.

$$1.96 \sqrt{p(1-p) \left(\frac{1}{B_1} + \frac{1}{B_2} \right)}$$

where:

B_1 = number of births in the denominator for the first percent
 B_2 = number of births in the denominator for the second percent

$$p = \frac{B_1 p_1 + B_2 p_2}{B_1 + B_2}$$

p_1 = first percent divided by 100
 p_2 = second percent divided by 100

Example

Is the percent of births to Hispanic women that were to unmarried women higher in Alaska (28.8 percent) than in Alabama (23.0). The number in the denominator was 1,345 in Alabama and 593 in Alaska. The necessary conditions are met for both percents (calculations not shown). The difference between the two percents is .288 - .230 = .058. The statistic is then calculated as follows:

$$1.96 \sqrt{.248(.752) (.00243)} = 1.96 \times \sqrt{.00045}$$

$$= 1.96 \times .021$$

$$= .042$$

The difference between the percents (.058) is greater than this statistic (.042). Therefore, the difference is statistically significant at the 95-percent confidence level.

Definitions of medical terms

The 1989 revision of the U.S. Standard Certificate of Live Birth includes several maternal and infant health items in checkbox format, including obstetric procedures, medical risk factors, complications of labor and/or delivery, abnormal conditions of the newborn, and congenital anomalies of the child (figure 1). The definitions which follow are adapted and abbreviated from a set of definitions compiled by a committee of Federal and State health statistics officials for the National Association of Public Health Statistics and Information Systems, formerly known as the Association for Vital Records and Health Statistics (76).

Medical risk factors for this pregnancy

Anemia—Hemoglobin level of less than 10.0 g/dL during pregnancy or a hematocrit of less than 30 percent during pregnancy.
Cardiac disease—Disease of the heart.

Acute or chronic lung disease—Disease of the lungs during pregnancy.

Diabetes—Metabolic disorder characterized by excessive discharge of urine and persistent thirst; includes juvenile onset, adult onset, and gestational diabetes during pregnancy.

Genital herpes—Infection of the skin of the genital area by herpes simplex virus.

Hydramnios/oligohydramnios—Any noticeable excess (hydramnios) or lack (oligohydramnios) of amniotic fluid.

Hemoglobinopathy—A blood disorder caused by alteration in the genetically determined molecular structure of hemoglobin (example: sickle cell anemia).

Hypertension, chronic—Blood pressure persistently greater than 140/90, diagnosed prior to onset of pregnancy or before the 20th week of gestation.

Hypertension, pregnancy-associated—An increase in blood pressure of at least 30 mm Hg systolic or 15 mm Hg diastolic on two measurements taken 6 hours apart after the 20th week of gestation.

Eclampsia—The occurrence of convulsions and/or coma unrelated to other cerebral conditions in women with signs and symptoms of pre-eclampsia.

Incompetent cervix—Characterized by painless dilation of the cervix in the second trimester or early in the third trimester of pregnancy, with premature expulsion of membranes through the cervix and ballooning of the membranes into the vagina, followed by rupture of the membranes and subsequent expulsion of the fetus.

Previous infant 4,000+ grams—The birth weight of a previous live-born child was over 4,000+ grams (8 pounds 14 ounces).

Previous preterm or small-for-gestational-age infant—Previous birth of an infant prior to term (before 37 completed weeks of gestation) or of an infant weighing less than the tenth percentile for gestational age using a standard weight for age chart.

Renal disease—Kidney disease.

Rh sensitization—The process or state of becoming sensitized to the Rh factor as when an Rh-negative woman is pregnant with an Rh-positive fetus.

Uterine bleeding—Any clinically significant bleeding during the pregnancy taking into consideration the stage of pregnancy; any second or third trimester bleeding of the uterus prior to the onset of labor.

Obstetric procedures

Amniocentesis—Surgical transabdominal perforation of the uterus to obtain amniotic fluid to be used in the detection of genetic disorders, fetal abnormalities, and fetal lung maturity.

Electronic fetal monitoring—Monitoring with external devices applied to the maternal abdomen or with internal devices with an electrode attached to the fetal scalp and a catheter through the cervix into the uterus, to detect and record fetal heart tones and uterine contractions.

Induction of labor—The initiation of uterine contractions before the spontaneous onset of labor by medical and/or surgical means for the purpose of delivery.

Stimulation of labor—Augmentation of previously established labor by use of oxytocin.

Tocolysis—Use of medications to inhibit preterm uterine contractions to extend the length of pregnancy and, therefore, avoid a preterm birth.

Ultrasound—Visualization of the fetus and the placenta by means of sound waves.

<p>38a. MEDICAL RISK FACTORS FOR THIS PREGNANCY (Check all that apply)</p> <p>Anemia (Hct. <30/Hgb. <10) 01 <input type="checkbox"/></p> <p>Cardiac disease 02 <input type="checkbox"/></p> <p>Acute or chronic lung disease 03 <input type="checkbox"/></p> <p>Diabetes 04 <input type="checkbox"/></p> <p>Genital herpes 05 <input type="checkbox"/></p> <p>Hydramnios/Oligohydramnios 06 <input type="checkbox"/></p> <p>Hemoglobinopathy 07 <input type="checkbox"/></p> <p>Hypertension, chronic 08 <input type="checkbox"/></p> <p>Hypertension, pregnancy-associated 09 <input type="checkbox"/></p> <p>Eclampsia 10 <input type="checkbox"/></p> <p>Incompetent cervix 11 <input type="checkbox"/></p> <p>Previous infant 4000+ grams 12 <input type="checkbox"/></p> <p>Previous preterm or small-for-gestational-age infant 13 <input type="checkbox"/></p> <p>Renal disease 14 <input type="checkbox"/></p> <p>Rh sensitization 15 <input type="checkbox"/></p> <p>Uterine bleeding 16 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 17 <input type="checkbox"/></p> <p>(Specify)</p>	<p>40. COMPLICATIONS OF LABOR AND/OR DELIVERY (Check all that apply)</p> <p>Febrile (>100°F. or 38°C.) 01 <input type="checkbox"/></p> <p>Meconium, moderate/heavy 02 <input type="checkbox"/></p> <p>Premature rupture of membrane (>12 hours) 03 <input type="checkbox"/></p> <p>Abruptio placenta 04 <input type="checkbox"/></p> <p>Placenta previa 05 <input type="checkbox"/></p> <p>Other excessive bleeding 06 <input type="checkbox"/></p> <p>Seizures during labor 07 <input type="checkbox"/></p> <p>Precipitous labor (<3 hours) 08 <input type="checkbox"/></p> <p>Prolonged labor (>20 hours) 09 <input type="checkbox"/></p> <p>Dysfunctional labor 10 <input type="checkbox"/></p> <p>Breech/Malpresentation 11 <input type="checkbox"/></p> <p>Cephalopelvic disproportion 12 <input type="checkbox"/></p> <p>Cord prolapse 13 <input type="checkbox"/></p> <p>Anesthetic complications 14 <input type="checkbox"/></p> <p>Fetal distress 15 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 16 <input type="checkbox"/></p> <p>(Specify)</p>	<p>43. CONGENITAL ANOMALIES OF CHILD (Check all that apply)</p> <p>Anencephalus 01</p> <p>Spina bifida/Meningocele 02</p> <p>Hydrocephalus 03</p> <p>Microcephalus 04</p> <p>Other central nervous system anomalies (Specify) _____ 05</p> <p>Heart malformations 06</p> <p>Other circulatory/respiratory anomalies (Specify) _____ 07</p> <p>Rectal atresia/stenosis 08</p> <p>Tracheo-esophageal fistula/ Esophageal atresia 09</p> <p>Omphalocele/ Gastroschisis 10</p> <p>Other gastrointestinal anomalies (Specify) _____ 11</p> <p>Malformed genitalia 12</p> <p>Renal agenesis 13</p> <p>Other urogenital anomalies (Specify) _____ 14</p> <p>Cleft lip/palate 15</p> <p>Polydactyly/Syndactyly/Adactyly 16</p> <p>Club foot 17</p> <p>Diaphragmatic hernia 18</p> <p>Other musculoskeletal/integumental anomalies (Specify) _____ 19</p> <p>Down's syndrome 20</p> <p>Other chromosomal anomalies (Specify) _____ 21</p> <p>None 00</p> <p>Other _____ 22</p> <p>(Specify)</p>
<p>38b. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items)</p> <p>Tobacco use during pregnancy Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Average number cigarettes per day _____</p> <p>Alcohol use during pregnancy Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Average number drinks per week _____</p> <p>Weight gained during pregnancy _____ lbs.</p>	<p>41. METHOD OF DELIVERY (Check all that apply)</p> <p>Vaginal 01 <input type="checkbox"/></p> <p>Vaginal birth after previous C-section 02 <input type="checkbox"/></p> <p>Primary C-section 03 <input type="checkbox"/></p> <p>Repeat C-section 04 <input type="checkbox"/></p> <p>Forceps 05 <input type="checkbox"/></p> <p>Vacuum 06 <input type="checkbox"/></p>	<p>42. ABNORMAL CONDITIONS OF THE NEWBORN (Check all that apply)</p> <p>Anemia (Hct. <39/Hgb. <13) 01 <input type="checkbox"/></p> <p>Birth injury 02 <input type="checkbox"/></p> <p>Fetal alcohol syndrome 03 <input type="checkbox"/></p> <p>Hyaline membrane disease/RDS 04 <input type="checkbox"/></p> <p>Meconium aspiration syndrome 05 <input type="checkbox"/></p> <p>Assisted ventilation <30 min 06 <input type="checkbox"/></p> <p>Assisted ventilation ≥30 min 07 <input type="checkbox"/></p> <p>Seizures 08 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 09 <input type="checkbox"/></p> <p>(Specify)</p>
<p>39. OBSTETRIC PROCEDURES (Check all that apply)</p> <p>Amniocentesis 01 <input type="checkbox"/></p> <p>Electronic fetal monitoring 02 <input type="checkbox"/></p> <p>Induction of labor 03 <input type="checkbox"/></p> <p>Stimulation of labor 04 <input type="checkbox"/></p> <p>Tocolysis 05 <input type="checkbox"/></p> <p>Ultrasound 06 <input type="checkbox"/></p> <p>None 00 <input type="checkbox"/></p> <p>Other _____ 07 <input type="checkbox"/></p> <p>(Specify)</p>		

Figure I. Selected maternal and infant health items from the 1989 revision of the U.S. Standard Certificate of Live Birth

Complications of labor and/or delivery

Febrile—A fever greater than 100 degrees F. or 38 C. occurring during labor and/or delivery.

Meconium, moderate/heavy—Meconium consists of undigested debris from swallowed amniotic fluid, various products of secretion, excretion and shedding by the gastrointestinal tract; moderate to heavy amounts of meconium in the amniotic fluid noted during labor and/or delivery.

Premature rupture of membranes (more than 12 hours)—Rupture of the membranes at any time during pregnancy and more than 12 hours before the onset of labor.

Abruptio placenta—Premature separation of a normally implanted placenta from the uterus.

Placenta previa—Implantation of the placenta over or near the internal opening of the cervix.

Other excessive bleeding—The loss of a significant amount of blood from conditions other than abruptio placenta or placenta previa.

Seizures during labor—Maternal seizures occurring during labor from any cause.

Precipitous labor (less than 3 hours)—Extremely rapid labor and delivery lasting less than 3 hours.

Prolonged labor (more than 20 hours)—Abnormally slow progress of labor lasting more than 20 hours.

Dysfunctional labor—Failure to progress in a normal pattern of labor.

Breech/malpresentation—At birth, the presentation of the fetal buttocks rather than the head, or other malpresentation.

Cephalopelvic disproportion—The relationship of the size, presentation, and position of the fetal head to the maternal pelvis which prevents dilation of the cervix and/or descent of the fetal head.

Cord prolapse—Premature expulsion of the umbilical cord in labor before the fetus is delivered.

Anesthetic complications—Any complication during labor and/or delivery brought on by an anesthetic agent or agents.

Fetal distress—Signs indicating fetal hypoxia (deficiency in amount of oxygen reaching fetal tissues).

Abnormal conditions of the newborn

Anemia—Hemoglobin level of less than 13.0 g/dL or a hematocrit of less than 39 percent.

Birth injury—Impairment of the infant's body function or structure due to adverse influences which occurred at birth.

Fetal alcohol syndrome—A syndrome of altered prenatal growth and development occurring in infants born of women who consumed excessive amounts of alcohol during pregnancy.

Hyaline membrane disease/RDS—A disorder primarily of prematurity, manifested clinically by respiratory distress and pathologically by pulmonary hyaline membranes and incomplete expansion of the lungs at birth.

Meconium aspiration syndrome—Aspiration of meconium by the fetus or newborn, affecting the lower respiratory system.

Assisted ventilation (less than 30 minutes)—A mechanical method of assisting respiration for newborns with respiratory failure.

Assisted ventilation (30 minutes or more)—Newborn placed on assisted ventilation for 30 minutes or longer.

Seizures—A seizure of any etiology.

Congenital anomalies of child

Anencephalus—Absence of the cerebral hemispheres.

Spina bifida/meningocele—Developmental anomaly characterized by defective closure of the bony encasement of the spinal cord, through which the cord and meninges may or may not protrude.

Hydrocephalus—Excessive accumulation of cerebrospinal fluid within the ventricles of the brain with consequent enlargement of the cranium.

Microcephalus—A significantly small head.

Other central nervous system anomalies—Other specified anomalies of the brain, spinal cord, and nervous system.

Heart malformations—Congenital anomalies of the heart.

Other circulatory/respiratory anomalies—Other specified anomalies of the circulatory and respiratory systems.

Rectal atresia/stenosis—Congenital absence, closure, or narrowing of the rectum.

Tracheo-esophageal fistula/Esophageal atresia—An abnormal passage between the trachea and the esophagus; esophageal atresia is the congenital absence or closure of the esophagus.

Omphalocele/gastroschisis—An omphalocele is a protrusion of variable amounts of abdominal viscera from a midline defect at the base of the umbilicus. In gastroschisis, the abdominal viscera protrude through an abdominal wall defect, usually on the right side of the umbilical cord insertion.

Other gastrointestinal anomalies—Other specified congenital anomalies of the gastrointestinal system.

Malformed genitalia—Congenital anomalies of the reproductive organs.

Renal agenesis—One or both kidneys are completely absent.

Other urogenital anomalies—Other specified congenital anomalies of the organs concerned in the production and excretion of urine, together with organs of reproduction.

Cleft lip/palate—Cleft lip is a fissure or elongated opening of the lip; cleft palate is a fissure in the roof of the mouth. These are failures of embryonic development.

Polydactyly/syndactyly/adactyly—Polydactyly is the presence of more than five digits on either hands and/or feet; syndactyly is having fused or webbed fingers and/or toes; adactyly is the absence of fingers and/or toes.

Club foot—Deformities of the foot, which is twisted out of shape or position.

Diaphragmatic hernia—Herniation of the abdominal contents through the diaphragm into the thoracic cavity usually resulting in respiratory distress.

Other musculoskeletal/integumental anomalies—Other specified congenital anomalies of the muscles, skeleton, or skin.

Down's syndrome—The most common chromosomal defect with most cases resulting from an extra chromosome (trisomy 21).

Other chromosomal anomalies—All other chromosomal aberrations.

Related reports

Many of the topics discussed in this report are covered in more analytic detail in other reports published by NCHS. Topics of reports published in the past 5 years include Hispanic origin births (4); twin and triplet births (62, 63); teenage birth rates by State (6, 21); birth rates by educational attainment of the mother (77); cesarean deliveries, attendant at birth, place of delivery, and obstetric procedures (53, 78); births to unmarried mothers (23); trends in pregnancies and pregnancy rates (7), and trends in smoking (32).

This report presents summary tabulations from the final natality statistics for 1998. The National Center for Health Statistics will respond to requests for unpublished data whenever possible.

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