User Guide to the 2006 Fetal Death Public Use File



2006 Fetal Death Data Set

User's Guide

ACKNOWLEDGMENTS

Preparation of this user's guide was coordinated by Sharon Kirmeyer, and Marian MacDorman of the Division of Vital Statistics (DVS) under the general direction of Joyce A. Martin, Lead Statistician, Reproductive Statistics Branch (RSB), DVS, and Stephanie J. Ventura, Chief of the Reproductive Statistics Branch (DVS). Additional review was provided by Elizabeth Wilson and Donna Hoyert of DVS. The vital statistics computer file on which it is based was prepared by DVS staff.

The Division of Vital Statistics, Charles J. Rothwell, Director, and Delton Atkinson, Deputy Director, manage the Vital Statistics Cooperative Program, through which the vital registration offices of all states, the District of Columbia, New York City, Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands, provided the data to the National Center for Health Statistics (NCHS). This Division, and its Data Acquisition and Evaluation Branch (DAEB) at Research Triangle Park (RTP), and Systems, Programming, and Statistical Resources Branch (SPSRB) staffs, processed computer edits, designed and programmed the tabulations, reviewed the data, prepared documentation for this publication, and were responsible for receipt and processing of the basic data file.

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Questions on the documentation or substantive questions concerning the data should be directed to the Reproductive Statistics Branch, Division of Vital Statistics, NCHS, 3311 Toledo Road, Hyattsville, MD 20782-2003 (1-800) 232-4636.

Department of Health and Human Services Centers for Disease Control and Prevention National Center for Health Statistics Division of Vital Statistics

2006 Fetal Death Data Set

Contents

Introduction

Control count of records

List of data elements and locations

Record layout and definition of item and codes

Country codes

Detailed Technical Notes to the United States 2006 Data – Fetal Deaths (formerly: "Technical Appendix to the Vital Statistics of the United States – Fetal Deaths").

Documentation tables.

External links

Births: Final Data for 2006 http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_07.pdf

Fetal and Perinatal Mortality, United States, 2006 [In press – link will be added at the end of August 2012].

Infant Mortality Statistics from the 2006 Period Linked Birth/Infant Death Data Set http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_17.pdf

Introduction:

User Guide to the 2006 Fetal Death Public Use File

U.S. fetal death data

United States fetal death data available in this file represent fetal deaths registered in the 50 states, the District of Columbia, and New York City. The majority of states require reporting fetal deaths of 20 weeks of gestation or more, or 350 grams delivery weight (roughly equivalent to 20 weeks), or some combination of the two. The Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) receives these data as electronic files, prepared from individual records processed by each registration area, through the Vital Statistics Cooperative Program.

Fetal death data for the U.S. are limited to events occurring within the United States to U.S. residents and nonresidents. Fetal deaths to nonresidents of the United States are excluded from all tabulations by place of residence. Fetal deaths occurring to U.S. citizens outside of the United States are not included in this file. Most of the Documentation Tables included in this User's Guide are restricted to fetal deaths occurring at gestation of 20 weeks or more. For more detailed information on the 2006 fetal death file see the *Detailed Technical Notes –United States*, 2006 – Fetal Deaths in this User's Guide.

Availability of geographic detail

Beginning with the 2005 data year, the U.S. micro-data fetal death file no longer includes geographic detail (e.g., mother's state of residence). Tabulations of fetal death data by residence of mother for states and for counties with populations of 250,000 or more are available for previous years using the VitalStats online data access tool

described below. Certain geographic level data may also be available upon request: See "NCHS Data Release and Access Policy for Micro-data and Compressed Vital Statistics Files", available at: http://www.cdc.gov/nchs/nvss/dvs_data_release.htm.

The 2006 territories file includes data on fetal deaths occurring in Puerto Rico, and Guam. It includes limited geographical data such as information identifying individual possessions and counties (or their equivalent) with populations of 250,000 or more by place of occurrence and residence.

VitalStats

Fetal death public use data, including geographic level detail for states and counties are available at VitalStats. VitalStats is an online data access tool which provides access to a collection of interactive pre-built tables, and the ability to build tables from many public use fetal death variables. Interactive charting and mapping tools are a key part of the system, and provide powerful options for visualizing and manipulating tabulated data. Tabulated data can be exported to Excel for further analysis. VitalStats for fetal deaths, 2003 – 2006, is available at:

Downloadable files

http://www.cdc.gov/nchs/VitalStats.htm.

Fetal death public use data files from 1982 to 2006, including User Guides, U.S. Fetal Death Data, and U.S. Possessions Fetal Death Data are available for downloading directly from the NCHS website at:

http://www.cdc.gov/nchs/data_access/Vitalstatsonline.htm .

The 1989 and 2003 Revisions of the U.S. Report of Fetal Death

This data file includes data based on both the 1989 Revision of the U.S. Standard Report of Fetal Death (unrevised) and the 2003 revision of the U.S. Report of Fetal Report in 2003 (revised). The 2003 revision is described in detail elsewhere. (See the 2003 Revision website at: http://www.cdc.gov/nchs/vital certs rev.htm). Sixteen states: California, Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, and Washington implemented the revised fetal death report as of January 1, 2006. The 16 revised states represent 23 percent of all U.S. fetal deaths of 20 weeks and over. Where comparable, revised data are combined with data from the remaining 34 states, the District of Columbia, and New York City. (Revised data are denoted by "A;" unrevised data are denoted by "S" in the "Rev" column of the file layout.) Where data for the 1989 and 2003 certificate revisions are not comparable, for selected items (e.g., educational attainment of the mother), unrevised and revised data are shown in separate fields in the data file. Selected items new to the 2003 Revision are also in the public use file. Also see discussion of reporting flags. For further information please contact us at births@cdc.gov or (1-301) 458-4111.

Incomplete national reporting: Selecting reporting areas for the 2006 Fetal Death File

The use of reporting flags

As a result of the delayed, phased transition to the 2003 Standard Report of Fetal Deaths, the 2006 fetal death file includes data for reporting areas that use the 2003 revision of the U.S. Standard Report of Fetal Death (revised) and data for reporting areas that use the 1989 Report of Fetal Death (unrevised). Although many data items are

comparable across revisions and are available for the entire United States, many items have more limited reporting areas. For example, information on pre-pregnancy and gestational diabetes, revised data items, is available for 16 states for 2006.

Reporting flags were developed to help the user more readily identify fetal deaths for all reporting areas for items with less than national reporting. The national reporting area is defined as the 50 states, the District of Columbia, and New York City (which is independent of New York State for the purpose of fetal death registration). Reporting flags are available for most items on the file. Positions for reporting flags are noted along with each data item in the file layout.

Translating "blanks"

In the 2006 fetal death file, for data items which are not common or comparable across certificate revisions, fetal deaths to residents of a revised state occurring in an unrevised state, and fetal deaths to residents in an unrevised state occurring in a revised state, are represented by "blanks." Blanks should be treated as "unknowns" for tabulations. In sum, the correct use of reporting flags and translation of blanks will result in an accurate tally of fetal deaths for items with incomplete national reporting. For an example of SAS code that may be used to incorporate the correct use of reporting flags and the translation of blanks, see below.

Example of SAS code using reporting flags (and translating blanks)

The example below is for the revised prenatal care item: "month prenatal care began". Prenatal care data based on the revised certificate are not considered comparable with data based on the unrevised certificate, and are presented separately. (See also Births: Final Data for 2006 (1).) Accordingly, use of the reporting flag for this item will

produce 2006 data for the month prenatal care began for the 16 revised states which had implemented the revised Report as of January 1, 2006.

Sample SAS program

```
01
       DATA work;
02
              INFILE 'c:fet06us.dat' LRECL=801;
03
              INPUT
04
                     tabflg
05
                     restatus 138
06
                     precare 245-246
07
                    f_precare 668;
80
09
              /*Include if 20 weeks gestation or more*/
10
              IF tabflg EQ 2;
              /*Exclude foreign residents*/
11
12
              IF restatus NE 4:
              /*Select reporting area*/
13
14
              IF f precare=1;
              /*Convert blanks to unknown*/
15
16
              IF precare=. THEN precare=99;
17
18
       PROC FREQ:
19
              TABLE precare;
       RUN;
20
```

In this example, "tabflg" is used to select fetal deaths of 20 weeks gestation or more. Also, "restatus" is used to exclude fetal deaths to foreign residents (this is standard practice for all NCHS tabulations). As well in this example, blanks are represented by numeric values SAS code = (.). However, for some items in the file, e.g., pregnancy risk factors, blanks are represented by character values for which the SAS code is empty quotes ('').

References

Martin JA, Hamilton, B., et al. Births: Final data for 2006; vol 57 no 7. Hyattsville,
 MD: National Center for Health Statistics. 2009.

Control Count of Records

File Characteristics: Fetal Public Use File 2006

All files:

Record format: Blocked, Fixed, Format Code scheme: Numeric/Alphabetic/Blank

Record length: 801

Record counts

U.S. set record count:

Counts of 20 weeks or more:

Record count: 26,002
By occurrence: 26,002
By residence: 25,972
To foreign residence: 30

Counts less than 20 weeks:

Record count: 26,712
By occurrence: 26,712
By residence: 26,698
To foreign residence: 14

<u>U.S. possessions set record count:</u> 584 (20 weeks or more)

| Counts of 20 weeks or | more: Guam | Puerto Rico |
|-----------------------|------------|-------------|
| Record counts: | 32 | 492 |
| By occurrence: | 32 | 492 |
| By residence: | 31 | 489 |
| To foreign residence: | 1 | 3 |

2006 LIST OF DATA ELEMENTS AND LOCATIONS – FETAL DEATH FILE

| | <u>Data Items</u> | Locations (*) |
|----|---|--|
| 1. | General a) Tabulation flag (gestational age) b) Data year c) Resident status | 9 15-18 138 |
| 2. | Prenatal Care a) Month began | 245-246 -R 256-257 -U |
| | b) Number of visits | 270-271 |
| 3. | Fetus a) Sex b) Plurality c) Weight at delivery d) Gestational age e) Month/year of delivery f) Day of week of delivery | 436 423 463-466 451-452 15-20 29 |
| 4. | a) Ageb) Racec) Marital statusd) Educatione) Hispanic Origin | 89-90 143 153 155 -R 156-157 -U 148,149 |
| 5. | Pregnancy History a) Live birth order b) Total birth order | 212 217 |
| 6. | Father a) Age | 184-185 |
| 7. | Other Items a) Place of delivery b) Attendant at delivery c) Residence reporting flags | 42 410 569-801 |

LIST OF DATA ELEMENTS AND LOCATIONS

| <u>Data Items</u> | <u>Locations</u> |
|---|---------------------|
| 8. Medical and Health Data | |
| a) Method of delivery | 392-403 |
| b) Medical risk factors | 313-319 -R |
| | 331,335,336,337–U,R |
| c) Other risk factors | |
| Tobacco | 284-289, 294 -R |
| | 290, 291-293 -U |
| Weight gain during pregnancy | 276-278 |
| d) Obstetric procedures | 357,359 –U,R |
| e) Complications of labor and/or delivery | 384 –U,R |
| f) Congenital anomalies | 492-503-R |
| | 504,505,513,518,523 |
| | -U.R |

(*) specific revisions: U = Unrevised; 1989 Report of Fetal Death R = Revised; 2003 Report of Fetal Death

2006 Fetal Death Public Use File Documentation (5/30/12)

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|---------|-----------------|----------------------------|-------|--|--|
| 1-6 | 6 | BLANK | | | | | |
| 7 | 1 | VERSION | Version | | A,S | A S | State used the 2003 version of the US Standard Birth Certificate (Revised) State used the 1989 version of the US Standard Birth Certificate (Unrevised) |
| 8 | 1 | BLANK | | | | | |
| 9 | 1 | TABFLG | Tabulation Flag | | A,S | 1 2 | Under 20 Weeks (exclude) 20 Weeks or more (include) |
| 10-14 | 5 | BLANK | | | | | |
| 15-18 | 4 | DOD_YY | Delivery Year | | A,S | 2006 | Year of birth |
| 19-20 | 2 | DOD_MM | Delivery Month | | A,S | 01 02 03 04 05 06 07 08 09 10 11 | January February March April May June July August September October November December |
| 21-28 | 8 | BLANK | | | | | |
| 29 | 1 | DOD_WK | Weekday | | A,S | 1 2 3 4 5 6 7 | Sunday Monday Tuesday Wednesday Thursday Friday Saturday |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----------|--------------------|---|----------------------------|--------------|---|---|
| 30-31 | 2 | OSTATE | Territory of occurrence (This item is available in the geographic codes are not av | | île) | | |
| | | | <u>Territories</u> | | A,S | AS GU MP PR VI | American Samoa Guam Northern Marianas Puerto Rico Virgin Islands |
| 32-36 | 5 | BLANK | | | | | |
| 37-39 | 3 | OCNTYFIPS | Occurrence County (This item is available in the geographic codes are not av | | îile) A,S | 021 025 031 097 113 127 999 | Bayamo'n Caguas Carolina Mayaguez Ponce San Juan County of less than 100,000 |
| | | | Other Outlying Ar | reas of the United St | tates_ | 000 999 | No county level geography County of less than 100,000 |
| 40 | 1 | OCNTYPOP | Occurrence Territory Cou (This item is available in the geographic codes are not av | e territory file only, | îile) A,S | 0 1 2 3 4 5 6 | County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County of 100,000 to 250,000 County of 50,000 to 100,000 County of 25,000 to 50,000 County of 10,000 to 25,000 County of 10,000 to 25,000 County less than 10,000 |
| * Eor tl | ao Vargio | on column (Var) th | a following and a smale | | | | • • • • • • • • • • • • • • • • • • • |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

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| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|-------------|---------------------------|----------------------------|-------|---|---|
| 41 | 1 | BFACIL | Delivery Place (Revised) | 676 | A | 1 2 3 4 5 6 7 9 Blank | Hospital Freestanding Birth Center Home (intended) Home (not intended) Home (unknown if intended) Clinic / Doctor's Office Other Unknown Not on certificate |
| 42 | 1 | UBFACIL | Delivery Place | | A,S | 1 2 3 4 5 9 | Hospital Freestanding Birthing Center Clinic / Doctor's Office Residence Other Unknown |
| 43-58 | 16 | BLANK | | | | | |
| 59 | 1 | BFACIL3 | Delivery Place Recode | | A,S | 1 2 3 | In Hospital Not in Hospital Unknown/not stated |
| 60-86 | 27 | BLANK | | | | | |
| 87 | 1 | MAGE_IMPFLG | Mother's Age Imputed | | A,S | Blank 1 | Age not imputed Age imputed |
| 88 | 1 | MAGE_REPFLG | Reported Age of Mother F | lag | A,S | Blank 1 | Reported age not used Reported age used |
| 89-90 | 2 | MAGER | Mother's Single Year of A | ge | A,S | 12 13 14 15 16 17 | 12 years and under 13 years 14 years 15 years 16 years 17 years |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards S

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|----------|-----------------|----------------------------|----------------------------|-------|----------|----------------------------------|
| | | | | | | | |
| | | | | | | 18 | 18 years |
| | | | | | | 19 | 19 years |
| | | | | | | 20 | 20 years |
| | | | | | | 21 | 21 years |
| | | | | | | 22 | 22 years |
| | | | | | | 23 | 23 years |
| | | | | | | 24 | 24 years |
| | | | | | | 25 | 25 years |
| | | | | | | 26 | 26 years |
| | | | | | | 27 | 27 years |
| | | | | | | 28 29 | 28 years |
| | | | | | | 30 | 29 years 30 years |
| | | | | | | 31 | 31 years |
| | | | | | | 32 | 32 years |
| | | | | | | 33 | 33 years |
| | | | | | | 34 | 34 years |
| | | | | | | 35 | 35 years |
| | | | | | | 36 | 36 years |
| | | | | | | 37 | 37 years |
| | | | | | | 38 | 38 years |
| | | | | | | 39 | 39 years |
| | | | | | | 40 | 40 years |
| | | | | | | 41 | 41 years |
| | | | | | | 42 | 42 years |
| | | | | | | 43 | 43 years |
| | | | | | | 44 | 44 years |
| | | | | | | 45 | 45 years |
| | | | | | | 46 | 46 years |
| | | | | | | 47 | 47 years |
| | | | | | | 48 | 48 years |
| | | | | | | 49 50 | 49 years 50 years and over ** |
| | | | ** Includes births to wome | n agad 50 to 64 years | , | 30 | 30 years and over *** |
| | | | includes offuns to worke | if aged 50 to 04 years | ·. | | |
| 91-92 | 2 | MAGER14 | Mother's Age Recode 14 | | A,S | 01 | Under 15 Years |
| | | | _ | | | 03 | 15 years |
| | | | | | | 04 | 16 years |
| | | | | | | 05 | 17 years |
| * For t | he Versi | on column (Ver) | the following codes apply: | | | | |

²⁰⁰³ Version of US Standard Birth Certificate

A

S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|-------------|--|----------------------------|-------|--|---|
| | | | ** Includes births to women | aged 50 to 64 years | | 06 07 08 09 10 11 12 13 | 18 years 19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years 50-54 years ** |
| 93 | 1 | MAGER9 | Mother's Age Recode 9 ** Includes births to women | aged 50 to 64 years | A,S | 1 2 3 4 5 6 7 8 9 | 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 ** |
| 94-95 | 2 | MBCNTRY | Mother's Birth Country (This item is available in the geographic codes are not av | territory file only, | A,s | AA-ZZ | See Geographic Documentation |
| 96-108 | 13 | BLANK | | | | | |
| 109-110 | 2 | MRSTATEPSTL | Mother's Territory of Resi (This item is available in the geographic codes are not av Territories | territory file only, | A,S | AS GU MP PR VI | American Samoa Guam Northern Marianas Puerto Rico Virgin Islands |

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S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|--------------------|-----|---------------------|--|----------------------------|------------|---|--|
| 111-113 114-116 | 3 | BLANK MRCNTYFIPS | Mother's FIPS County of (This item is available in the geographic codes are not as | e territory file only, | A,s | 001-999 000 | See Geographic Tables Foreign |
| 117-131 | 15 | BLANK | | | | | |
| 132 | 1 | RCNTY_POP | Population of Residence C (This item is available in the geographic codes are not as | e territory file only, | A,S | 0 1 2 3 4 5 6 9 Z | County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County of 100,000 to 250,000 County of 50,000 to 100,000 County of 25,000 to 50,000 County of 10,000 to 25,000 County of 10,000 to 25,000 County less than 10,000 Foreign resident |
| 133-136 | 4 | BLANK | | | | | |
| 137 | 1 | RECTYPE | Record Type (This item is available in the geographic codes are not as | | le) A,S | 1 2 | RESIDENT: State and county of occurrence and residence are the same. NONRESIDENT: State and county of occurrence and residence are different. |

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S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|----------|--|--|---------------|--|--|
| 138 | 1 | RESTATUS | Residence Status <u>United States</u> | | A,S | 1 2 3 | RESIDENT: State and county of occurrence and residence are the same. INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different. INTERSTATE NONRESIDENT: State of occurrence and residence are different but both are one of the 50 US states or District of Columbia. FOREIGN RESIDENT: The state of residence is not one of the 50 US states or District of Columbia. |
| | | | <u>Territories</u> | | | 1 2 3 4 | RESIDENT: State and county of occurrence and residence are the same. (Unique to Guam, all US residents are considered residents of Guam and thus are assigned 1.) INTRATERRITORY NONRESIDENT: Territory of occurrence and residence are the same but county is different. INTERTERRITORY RESIDENT: Territory of occurrence and residence are different but both are US Territories. FOREIGN RESIDENT: The residence is not a US Territory. |
| 139-140 | 2 | MBRACE | Mother's Bridged Race Includes only states reporting 01-14 used for individuals and Codes 21-24 used for individuals and Codes 24 also used for individuals and Code 24 also used for individuals and Code 24 also used for individuals and Code 24 also used for individual a | reporting only one ra iduals reporting more dged to a single race. viduals reporting c Islander group; | ce. e than | 01 02 03 04 05 06 07 08 09 10 11 12 13 14 21 22 23 | White – single race Black – single race American Indian / Alaskan Native – single race Asian Indian – single race Chinese – single race Filipino – single race Japanese – single race Korean – single race Vietnamese – single race Other Asian – single race Hawaiian – single race Guamanian Samoan Other Pacific Islander Bridged White Bridged American Indian or Alaskan Native Bridged Asian or Pacific Islander |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|-----------|--|----------------------------|--------------------|--------------------------------------|---|
| 141-142 | 2 | BLANK | | | | | |
| 143 | 1 | MRACEREC | Mother's Race Recode United States and | non-Puerto Rican T | A,S Γerritories | 1 2 3 4 | White Black American Indian or Alaskan Native Asian or Pacific Islander |
| | | | Puerto Rico | | | 1 2 0 | White Black Other (not classified as White or Black) |
| 144 | 1 | MRACEIMP | Mother's Race Imputed | | A,S | Blank 1 2 | Mother's race not imputed Unknown race imputed All other races, formerly coded 09, imputed. |
| 145-147 | 3 | BLANK | | | | | |
| 148 | I | UMHISP | Mother's Hispanic Origin | 569 | A,S | 0 1 2 3 4 5 | Non-Hispanic Mexican Puerto Rican Cuban Central or South American Other and Unknown Hispanic Origin unknown or not stated |
| 149 | 1 | MRACEHISP | Mother's Race/Hispanic C | Origin 569 | A,S | 1 2 3 4 5 6 7 8 | Mexican Puerto Rican Cuban Central or South American Other and Unknown Hispanic Non-Hispanic White Non-Hispanic Black Non-Hispanic Other Races Origin unknown or not stated |
| 150-152 | 3 | BLANK | | | | | |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards S

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|-----------|--|-------------------------------|---------------------------|---|---|
| 153 | 1 | MAR | Mother's Marital Status United States & a | 780 all non-Puerto Rican T | A,S <u>Γerritories</u> | . 1 2 9 | Yes No Unknown or not Stated |
| | | | Puerto Rico | | | 1 2 3 9 | Yes Unmarried parents living together Unmarried parents not living together Unknown or not stated |
| 154 | 1 | MAR_IMP | Mother's Marital Status I | mputed | A,S | Blank 1 | Marital Status not imputed Marital Status imputed |
| 155 | 1 | MEDUC | Mother's Educ –Revised | 571 | A | 1 2 3 4 5 6 7 8 | 8 th grade or less 9 th through 12 th grade with no diploma High school graduate or GED completed Some college credit, but not a degree. Associate degree (AA,AS) Bachelor's degree (BA, AB, BS) Master's degree (MA, MS, MEng, MEd, MSW, MBA) Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD) Unknown |
| 156-157 | 2 | UMEDUC | Mother's Educ –Unrevise | d 647 | S | 00 01-08 09 10 11 12 13 14 15 16 17 | No formal education Years of elementary school 1 year of high school 2 years of high school 3 years of high school 4 years of high school 1 year of college 2 years of college 3 years of college 4 years of college 5 or more years of college Not stated |
| 158 | 1 | MEDUC_REC | Mother's Education Reco | de 647 | S | 1 2 3 | 0 – 8 years 9 – 11 years 12 years |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards S

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|-------------|--------------------------|----------------------------|-------|--|--|
| | | | | | | 4 5 6 | 13 – 15 years 16 years and over Not stated |
| 159-174 | 16 | BLANK | | | | | |
| 175 | 1 | FAGERPT_FLG | Father's Reported Age Us | ed | A,S | Blank 1 | Father's reported age not used Father's reported age used |
| 176-181 | 6 | BLANK | | | | | |
| 182-183 | 2 | FAGECOMB | Father's Combined Age (I | Revised) | A | 09-98 99 | Father's combined age in years Unknown or not stated |
| 184-185 | 2 | UFAGECOMB | Father's Combined Age (U | Jnrevised) | A,S | 10-98 99 | Father's combined age in years Unknown or not stated |
| 186-187 | 2 | FAGEREC11 | Father's Age Recode 11 | | A,S | 01 02 03 04 05 06 07 08 09 10 | 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 Not stated |
| 188-203 | 16 | BLANK | | | | | |
| 204-211 | 8 | BLANK | | | | | |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards S

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|--------------|------------|-------------|--------------------------|----------------------------|-------|-------------------|--|
| 212 | 1 | LBO_REC | Live Birth Order Recode | | A,S | 0-7 8 9 | Number of live birth order. 8 or more live births Unknown or not stated |
| 213-214 | 4 | BLANK | | | | | |
| 217 | 1 | TBO_REC | Total Birth Order Recode | | A,S | 1-7 8 9 | Number of total birth order. 8 or more total births Unknown or not stated |
| 218-244 | 27 | BLANK | | | | | |
| 245-246 | 2 | PRECARE | Month Prenatal Care Bega | | | 0.0 | N |
| | | | | 668 | A | 00 01-10 99 | No prenatal care Month prenatal care began Unknown or not stated |
| 247 | 1 | PRECARE_REC | Month Prenatal Care Bega | | | | ot rel |
| | | | | 668 | A | 1 2 | 1 st to 3 rd month 4 th to 6 th month |
| | | | | | | 3 4 | 7 th to final month No prenatal care |
| | | | | | | 5 | Unknown or not stated |
| 248-255 | 8 | BLANK | | | | | |
| 256-257 | 2 | MPCB | Month Prenatal Care Bega | n (Unrevised) | | | |
| | | | | 647 | S | 00 01-10 99 | No prenatal care Month prenatal care began Unknown or not stated |
| 258 | 1 | MPCB_REC6 | Month Prenatal Care Bega | n Recode 6 (Unrev | ised) | | |
| | | | | 647 | S | 1 2 | 1 st to 2 nd month 3 rd month |
| | | | | | | 3 | 4 th to 6 th month |
| | | | | | | 4 5 | 7 th to final month No prenatal care |
| ψ Γ 4 | 3 7 | 1 /77 \ 1 | 6.11 | | | 6 | Unknown or not stated |

^{*} For the Version column (Ver) the following codes apply: A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

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| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|------------|---------------------------|----------------------------|-------------|--|--|
| 259 | 1 | MPCB_REC5 | Month Prenatal Care Bega | n Recode 5 (Unrev 647 | vised) S | 1 2 3 | 1 st trimester (1 st to 3 rd month) 2 nd trimester (4 th to 6 th month) 3 rd trimester (7 th to final month) |
| 260-269 | 10 | BLANK | | | | 4 5 | No prenatal care Unknown or not stated |
| 270-271 | 2 | UPREVIS | Number of Prenatal Visits | 671 | A,S | 00-49 99 | Number of prenatal visits Unknown or not stated |
| 272-273 | 2 | PREVIS_REC | Number of Prenatal Visits | Recode 671 | A,S | 01 02 03 04 05 06 07 08 09 10 11 | No visits 1 to 2 visits 3 to 4 visits 5 to 6 visits 7 to 8 visits 9 to 10 visits 11 to 12 visits 13 to 14 visits 15 to 16 visits 17 to 18 visits 19 or more visits Unknown or not stated |
| 274-275 | 2 | BLANK | | | | | |
| 276-277 | 2 | WTGAIN | Weight Gain | 648 | A,S | 00-97 98 99 | Weight gain in pounds 98 pounds and over Unknown or not stated |
| 278 | 1 | WTGAIN_REC | Weight Gain Recode | 648 | A,S | 1 2 3 4 5 | Less than 10 pounds 10 to 14 pounds 15 to 19 pounds 20 to 24 pounds 25 to 29 pounds |

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|----------|-----|----------|--------------------------------------|----------------------------|-------|----------------------------|--|
| | | | | | | 6 7 8 | 30 to 34 pounds 35 or more pounds Unknown or not stated |
| 279 | 1 | BLANK | | | | | |
| 280 | 1 | DFPC_IMP | Day of Date First Prenatal | Care Imputed | R | Blank 1 | Day of date first prenatal care not imputed Day of date first prenatal care imputed |
| 281-283 | 3 | BLANK | | | | | |
| 284-285 | 2 | CIG_1 | Cigarettes 1 st Trimester | 673 | A | 00-97 98 99 Blank | Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate |
| 286-287 | 2 | CIG_2 | Cigarettes 2 nd Trimester | 674 | A | 00-97 98 99 Blank | Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate |
| 288-289 | 2 | CIG_3 | Cigarettes 3 rd Trimester | 675 | A | 00-97 98 99 Blank | Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate |
| 290 | 1 | TOBUSE | Tobacco Use (Unrevised) | 667 | S | 1 2 9 Blank | Yes No Unknown or not stated Not on certificate |
| 291-292 | 2 | CIGS | Cigarettes per Day | | S | 00-97 98 99 Blank | Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate |

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| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|------------------|---------------------------------------|----------------------------|-------|--|--|
| 293 | 1 | UCIG_REC6 | Cigarette Recode (Unrevis | ed) | S | 0 1 2 3 4 5 6 Blank | Non-smoker 1 to 5 cigarettes daily 6 to 10 cigarettes daily 11 to 20 cigarettes daily 21 to 40 cigarettes daily 41 or more cigarettes daily Unknown or not stated Not on certificate |
| 294 | 1 | CIG_REC | Smoking Status Recode (R | devised) 575 | A | Y N U X | Yes No Unknown or not stated Not on certificate |
| 295-304 | 10 | BLANK | | | | | |
| 305-307 | 3 | PWGT | Prepregnancy Weight | 577 | A | 074 075-374 375 999 | less than 75 pounds 75 – 374 pounds 375 or more pounds Unknown or not stated |
| 308 | 1 | FILLER | Filler | | | Blank | |
| 309-311 | 3 | DWGT | Maternal Delivery Weight | 578 | A | 099 100-399 400 999 | less than 100 pounds 100 – 399 pounds 400 or more pounds Unknown or not stated |
| 312 | 1 | FILLER | Filler | | | Blank | |
| 313-321 | 9 | Risk Factors (Re | evised) ms indented below follow this | code structure: | A | Y N | Yes No |

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| Position | 1 | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|---|----------------------------|--|--|---|------------|----------------------------|--|
| | 313 314 315 316 317 318 319 | 1 1 1 1 1 1 | RF_DIAB RF_GEST RF_PHYP RF_GHYP RF_ECLAM RF_PPTERM RF_PPOUTC | Prepregnancy Diabetes Gestational Diabetes Prepregnancy Hypertension Gestational Hypertension Hypertension Eclampsia Previous Preterm Birth Poor Pregnancy Outcome | 582 583 584 585 586 587 588 | | U X | Unknown or not stated Not on certificate |
| 320-323 | | 4 | BLANK | | | | | |
| 324 | | 1 | RF_CESAR | Previous Cesareans | 593 | A | Y N U X | Yes No Unknown or not stated Not on certificate |
| 325-326 | | 2 | RF_CESARN | Previous Cesareans Num | 594 | A | 00 01-30 99 Blank | None Number of previous cesareans Unknown / not stated Not on certificate |
| 327-330 | | 4 | BLANK | | | | Diunk | 1 tot on certaincate |
| 331-337 | | 7 | Risk Factors The checkbox item | ns below follow this structure: | | | S 1 2 8 | Yes No Not on certificate Unknown |
| | 331 332 | 1 3 | URF_DIAB BLANK | Diabetes | 684 | A,S | | |
| | 335 | 1 | URF_CHYPER | Chronic Hypertension | 688 | A,S | | |
| | 336 337 | 1 1 | URF_PHYPER URF_ECLAMP | Prepregnancy Associated Hy Eclampsia | pertension 689 690 | A,S A,S | | |
| 338-356 | | 19 | BLANK | | | | | |

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| Position | n | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|------------|-----|------------------------------------|---|----------------------------|-------|-----------------------|---|
| 357-359 |) | 3 | Obstetric Proced The checkbox item | ures ns below follow this structure: | | | 1 2 8 9 | Yes No Not on certificate Not stated |
| | 357 | 1 | UOP_INDUC | Induction of Labor | 703 | A,S | | |
| | 358 359 | 1 | BLANK UOP_TOCOL | Tocolysis | 705 | A,S | | |
| 360-383 | } | 24 | BLANK | | | | | |
| 384 | | 1 | The checkbox item | Labor & Delivery ns below follow this structure 1989 Standard unless otherwise | | A,S | 1 2 8 9 | Yes No Not on certificate Not stated |
| 384 | | 1 | ULD_BREECH | Breech Delivery | 721 | | | |
| 385-391 | | 7 | BLANK | | | | | |
| 392-395 | į | 4 | Method of Delive | ery (Revised) | | | | |
| | 392 | 1 | ME_PRES | Fetal Presentation | 619 | A | 1 2 3 9 | Cephalic Breech Other Unknown or not stated |
| | 393 | 1 | ME_ROUT | Route & Method of Delivery | y 620 | A | 1 2 3 4 9 | Spontaneous Forceps Vacuum Cesarean Unknown or not stated |

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| Position | | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|------------|---------------|-----------------------|--|----------------------------|--------|----------------------------|---|
| | 394 | 1 | ME_TRIAL | Trial of Labor Attempted | 621 | A | Y N X U | Yes No Not applicable Unknown or not stated |
| | 395 | 1 | ME_HYSTER | Hysterotomy/Hysterectomy | 800 | A | Y N X U | Yes No Not on certificate Unknown or not stated |
| 396-402 | | 6 The chec | Method of Delive | ry d below follow this structure: | | A,S | 1 2 8 9 | Yes No Not on certificate Unknown or not stated |
| | 396 | 1 | UME_VAG | Vaginal | 730 731 | C | | |
| | 397 398 | 1 1 | UME_VBAC UME_PRIMC | Vaginal after C-Section Primary C-Section | 731 732 | S S | | |
| | 399 | 1 | UME_REPEC | Repeat C-Section | 733 | S | | |
| | 400 | 1 | UME_FORCP | Forceps | 734 | | | |
| | 401 | 1 | UME_VAC | Vacuum | 735 | | | |
| | 402 | 1 | UME_HYSTER | Hysterectomy/hysterotomy | 797 | S | | |
| | 403 | 1 | DMETH_REC | Delivery Method Recode | 678 | A,S | 1 2 9 | Vaginal C-section Not stated |
| 404-409 | | 6 | | BLANK | | | | |
| 410 | | 1 | ATTEND | Attendant | 801 | A,S | 1 2 3 4 5 9 | Doctor of Medicine (MD) Doctor of Osteopathy (DO) Certified Nurse Midwife (CNM) Other Midwife Other Unknown or not stated |
| | | | | | | | | |

⁴¹¹⁻⁴²² 12 BLANK

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| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|------------------|---|----------------------------|-------|--|---|
| 423 | 1 | DPLURAL | Plurality Recode | | A,S | 1 2 3 4 5 | Single Twin Triplet Quadruplet Quintuplet or higher |
| 424 | 1 | BLANK | | | | | |
| 425 | 1 | IMP_PLUR | Plurality Imputed | | A,S | Blank 1 | Plurality is imputed Plurality is not imputed |
| 426-435 | 10 | BLANK | | | | | |
| 436 | 1 | SEX | Sex of Infant | | A,S | M F | Male Female |
| 437 | 1 | IMP_SEX | Sex Imputed Only where gestation is stat To be 20 weeks or more | ed or presumed | A,S | Blank 1 | Infant Sex not Imputed Infant Sex is Imputed |
| | | Gestation | | | | | |
| 438-439 | 2 | DLMP_MM | Last Normal Menses Mon | th | A,S | 01 02 03 04 05 06 07 08 09 10 11 12 99 | January February March April May June July August September October November December Unknown or not stated |
| 440-441 | 2 | BLANK | | | | | |

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| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-----|------------|----------------------------|----------------------------|--------|--|--|
| 442-445 | 4 | DLMP_YY | Date of Last Normal Men | ses Began | A,S | nnnn 9999 | Year of last normal menses Unknown or not stated |
| 446-447 | 2 | ESTGEST | Obstetric/Clinical Gestati | ion Est. 573 | A S | 0-98 02-47 99 | Range of obstetric estimate of gestation - revised Range of clinical estimate of gestation - unrevised Unknown or not stated |
| 448-450 | 3 | BLANK | | | | | |
| 451-452 | 2 | COMBGEST | Gestation – Detail in Wee | ks | A,S | 02-47 99 | 2 nd through 47 th week of Gestation Unknown |
| 453-454 | 2 | GESTREC12 | Gestation Recode 12 | | A,S | 01 02 03 04 05 06 07 08 09 10 11 | Under 16 weeks 16-19 weeks 20-23 weeks 24-27 weeks 28-31 weeks 32-35 weeks 36 weeks 40 weeks 41 weeks 42 weeks and over Unknown |
| 455 | 1 | GESTREC5 | Gestation Recode 5 | | A,S | 1 2 3 4 5 | Under 20 weeks 20-23 weeks 24-27 weeks 28 weeks and over Unknown |
| 456 | 1 | OBGEST_FLG | Obstetric Estimate of Ges | station Used Flag | A,S | Blank 1 | Obstetric Estimate is not used Obstetric Estimate is used |
| 457 | 1 | GEST_IMP | Gestation Imputed Flag | | A,S | Blank 1 | Gestation is not imputed Gestation is imputed |
| 458-462 | 5 | BLANK | | | | | |

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| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|---|---|--|---|--|---------|--|---|
| 463-466 | 4 | DBWT | Birth Weight – Detail in G | erams` A,S | 0001-81 | 65 Numbe 9999 | er of grams Not stated birth weight |
| 467-470 | 4 | BLANK | | | | | |
| 471-472 | 2 | BWTR14 | Birth Weight Recode 14 | | A,S | 01 02 03 04 05 06 07 08 09 10 11 12 13 | 0249 grams or less 0250 – 0349 grams 0350 – 0499 grams 0500 – 0999 grams 1000 – 1499 grams 1500 – 1999 grams 2000 – 2499 grams 2500 – 2999 grams 3000 – 3499 grams 3500 – 3999 grams 4000 – 4499 grams 4500 – 4999 grams 5000 – 8165 grams Unknown or Not Stated |
| 473 | 1 | BWTR4 | Birth Weight Recode 4 | | A,S | 1 1 2 3 | 1499 grams or less 1500 – 2499 grams 2500 - 8165 grams Unknown or not stated |
| 474-491 | 18 | BLANK | | | | | |
| 492-503 | 12 | | nalies of the Fetus (Revised) ms below follow this structur | e: | A | Y N U | Yes, anomaly reported No, anomaly not reported Unknown |
| 492 493 494 495 496 497 498 499 * For t | 1 1 1 1 1 1 1 the Versic | CA_ANEN CA_MNSB CA_CCHD CA_CDH CA_OMPH CA_GAST CA_LIMB CA_CLEFT on column (Ver) th | Anencephaly Meningomyelocele / Spina Cyanotic Congenital Heart Congenital Diaphragmatic I Omphalocele Gastroschisis Limb Reduction Defect Cleft Lip w/ or w/o Cleft Pate following codes apply: | Disease 637 Hernia 638 639 640 641 | | | Challowii |

For the Version column (Ver) the following codes apply: 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

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| Position | 1 | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------|-------------------------|------------------|--|---|----------------------------|------------|------------------|---|
| | 500 | 1 | CA_CLPAL | Cleft Palate alone | 643 | | | |
| 501 | | 1 | CA_DOWN | Downs Syndrome | 644 | A | C P N U | Confirmed Pending No Unknown |
| 502 | | 1 | CA_DISOR | Suspected Chromosomal D | isorder | | | |
| | | | _ | • | 645 | A | C P N U | Confirmed Pending No Unknown |
| 503 | | 1 | CA_HYPO | Hypospadias | 646 | A | Y N U | Yes, anomaly reported No, anomaly not reported Unknown |
| 504-525 | | 22 | Congenital Anom The checkbox item | nalies of the Newborn ns below follow this structure: | | A,S | 1 2 8 9 | Anomaly reported Anomaly not reported Anomaly not on certificate Anomaly not classifiable |
| | 504 | 1 | UCA_ANEN | Anencephalus | 752 | | | · |
| | 505 506 | 1 | UCA_SPINA | Spina Bifida / Meningocele | 753 | | | |
| | 513 514 | 7 1 4 | BLANK UCA_OMPHA BLANK | Omphalocele / Gastroschisis | 761 | | | |
| | 518 | 1 | UCA_CLEFTLP | Cleft Lip / Palate | 766 | | | |
| | 519 523 | 4 | BLANK UCA_DOWNS | Downs Syndrome | 771 | | | |
| 524-568 | | 45 | BLANK | | | | | |
| 569-801 | | | Flag File for Reporting flag | orting Flags s indented below follow this co | oding structure: | | 0 1 | Not reporting Reporting |
| | 569 570 | 1 1 | F_MORIGIN BLANK | Mother's Hispanic origin | | A,S | | |
| | * For th A S s | 2003 V 1989 V | Version of US Stand Version of US Stand | e following codes apply: dard Birth Certificate dard Birth Certificate dard Birth Certificate but th | is element confo | rms to the | 2003 sta | ndards |

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|------------|--------|---------------------|--|----------------------------|----------|--------|------------|
| 571 | 1 | F_MEDUC | Education of Mother | | A | | |
| 572 573 | 1 | BLANK | Ol 44: E4: 4 C | | A C | | |
| 573 574 | 1 1 | F_CLINEST BLANK | Obstetric Estimate of Ge | estation | A,S | | |
| 575 | 1 | F_TOBACO | Tobacco use | | A | | |
| 576 | 6 | BLANK | 1004000 400 | | • • | | |
| 582 | 1 | F_RF_PDIAB | Prepregnancy Diabetes | | A | | |
| 583 | 1 | F_RF_GDIAB | Gestational Diabetes | | A | | |
| 584 | 1 | F_RF_PHYPER | Prepregnancy Hypertens | ion | A | | |
| 585 | 1 | F_RF_GHYPER | Gestational Hypertensio | n | A | | |
| 586 | 1 | F_RF_ECLAMP | Hypertension Eclampsia | | A | | |
| 587 | 1 | F_RF_PPB | Previous Preterm Birth | | A | | |
| 588 | 1 | F_RF_PPO | Poor Pregnancy outcome | es | A | | |
| 589 | 4 | BLANK | | | | | |
| 593 | 1 | F_RF_CESAR | Previous Cesarean | | A | | |
| 594 | 1 | F_RF_NCESAR | Number of Previous Ces | areans | A | | |
| 595-618 | | BLANK | E (1D) (() | | | | |
| 619 | 1 | | Fetal Presentation | -f D-1: | A | | |
| 620 621 | 1 | F_MD_ROUTE | Final Route and Method | ~ | A A | | |
| 622-634 | | F_MD_TRIAL BLANK | Trial of Labor Attempte | u | A | | |
| 635 | 13 | F_CA_ANEN | Anencephaly | | A | | |
| 636 | 1 | F_CA_MENIN | Meningomyelocele/Spin | a Bifida | A | | |
| 637 | 1 | F_CA_HEART | Cyanotic Congenital He | | A | | |
| 638 | 1 | F_CA_HERNIA | Congenital Diaphragmat | | A | | |
| 639 | 1 | F_CA_OMPHA | Omphalocele | | A | | |
| 640 | 1 | F_CA_GASTRO | Gastroschisis | | A | | |
| 641 | 1 | F_CA_LIMB | Limb Reduction Defect | | A | | |
| 642 | 1 | F_CA_CLEFTLP | Cleft Lip with or withou | t Cleft Palate | A | | |
| 643 | 1 | F_CA_CLEFT | Cleft Plate Alone | | A | | |
| 644 | 1 | F_CA_DOWNS | Downs Syndrome | | A | | |
| 645 | 1 | F_CA_CHROM | Suspected Chromosoma | l Disorder | A | | |
| 646 | 1 | F_CA_HYPOS | Hypospadias | | A | | |
| 647 | 1 | F_MED | Mother's Education (Un | revised) | S | | |
| 648 | 1 | F_WTGAIN | Weight Gain | | A,S | | |
| 649-666 | | BLANK | m 1 II /II ' | 15 | C | | |
| 667 | 1 | F_TOBAC | Tobacco Use (Unrevised | • | S | | |
| 668 | 1 | F_MPCB | Month Prenatal Care Be | gan | A | | |
| 669 670 | 1 1 | BLANK E CMPGST | Combined Costation | | ٨ | | |
| 670 671 | 1 | F_CMBGST F_TDCV | Combined Gestation Total Prenatal Care Visi | te | A A,S | | |
| 0/1 | | F_TPCV | following codes apply | | A,3 | | |

²⁰⁰³ Version of US Standard Birth Certificate A

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| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------------|---------|------------------------|--------------------------------------|----------------------------|----------|--------|------------|
| | | | | | | | |
| 672 | 1 | BLANK | | | | | |
| 673 | 1 | F_CIGS_1 | Cigarettes 1 st Trimester | | A | | |
| 674 | 1 | F_CIGS_2 | Cigarettes 2 nd Trimester | | A | | |
| 675 | 1 | F_CIGS_3 | Cigarettes 3 rd Trimester | | A | | |
| 676 | 1 | F_FACILITY | Facility | | Α | | |
| 677 | 1 | BLANK | | | 4.0 | | |
| 678 | 1 | DelMethRecF | Delivery Method Recode Fla | ag | A,S | | |
| 679-683 | | BLANK | D' 1 . El | | 4.0 | | |
| 684 | 1 | F_URF_DIABETES | Diabetes Flag | | A,S | | |
| 685-687 | | BLANK | Cl II Fl | | A C | | |
| 688 | 1 | F_URF_CHYPER | 31 | | A,S | | |
| 689 | 1 | F_URF_PHYPER | | | A,S | | |
| 690 | 1 | F_URF_ECLAMP | Eciampsia | | A,S | | |
| 691-703 703 | | BLANK | Industion Flor | | A C | | |
| | 1 | F_UOB_INDUCT | induction Flag | | A,S | | |
| 704 705 | 1 1 | BLANK F_UOB_TOCOL | Togolysis Flag | | A,S | | |
| 703 706 | 15 | BLANK | Tocolysis Flag | | А,З | | |
| 706 721 | 13 | | IDraach Elag | | A,S | | |
| 721-729 | | F_ULD_ BREECH BLANK | IBIEECH Flag | | A,S | | |
| 730 | 1 | F_U_VAGINAL | Vaginal Flag (Unrevised) | | S | | |
| 730 | 1 | F_U_VBAC | VBAC Flag (Unrevised) | | S | | |
| 732 | 1 | F_U_PRIMAC | Primary C Flag (Unrevised) | | S | | |
| 733 | 1 | F_U_REPEAC | Repeat C Flag (Unrevised) | | S | | |
| 734 | 1 | F_U_FORCEP | Forceps Flag (Unrevised) | | S | | |
| 735 | 1 | F_U_VACUUM | Vacuum Flag (Unrevised) | | S | | |
| 736-751 | | BLANK | vacaum riag (Cinevisea) | | S | | |
| 752 | 1 | F_UCA_ANEN | Anencephalus Flag | | A,S | | |
| 753 | 1 | F_UCA_SPINA | Spina Bifida Flag | | A,S | | |
| 754-760 | | BLANK | Spinia Birian Ting | | 1 1,0 | | |
| 761 | 1 | F_UCA_OMPHALO | Omphalo Flag | | A,S | | |
| 762-765 | | BLANK | | | , | | |
| 766 | 1 | F_UCA_CLEFTLP | Cleft Lip Flag | | A,S | | |
| 767-770 | 4 | BLANK | 1 | | , | | |
| 771 | 1 | F_UCA_DOWNS | Downs Syndrome Flag | | A,S | | |
| 772-779 | 8 | BLANK | , c | | | | |
| 780 | 1 | F_MS_u | Mother's Marital Status | | A,S | | |
| 781-793 | 13 | BLANK | | | | | |
| 794 | 1 | F_CIG/DAY_u | Cigarettes per Day (Unrevis | ed) | S | | |
| 795 | 1 | F_NPREV | Number of prenatal visits | | A | | |
| 796 | 1 | BLANK | • | | | | |
| * For th | e Versi | on column (Ver) the | following codes apply: | | | | |
| A | | | ard Birth Certificate | | | | |
| 4.4 | _000 | or ob build | | | | | |

A 2003 Version of US Standard Birth Certificate

S 1989 Version of US Standard Birth Certificate

s 1989 Version of US Standard Birth Certificate but this element conforms to the 2003 standards

| Position | Len | Field | Description | Reporting Flag Position | Vers* | Values | Definition |
|----------------|--------|---------------------------|-------------------------------------|----------------------------|----------|--------|------------|
| 797 798-799 | 1 2 | F_HYSTERu BLANK | Hysterectomy | | A,S | | |
| 800 801 | 1 1 | F_HYSTER_r F_ATTENDANT | Hysterectomy (Revised) Attendant | | A A,S | | |

EOF

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¹⁹⁸⁹ Version of US Standard Birth Certificate but this element conforms to the 2003 standards S

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

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

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

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

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

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

Detailed Technical Notes- United States 2006

Fetal Deaths

The U.S. Standard Report of Fetal Death closely resembles the U.S. Certificates of

Live Birth in both format and content. The majority of items on the Fetal Death

Report are the same as those on the birth certificate. For information not found in the

following discussion on the fetal death data file, please see *Detailed Technical Notes*,

United States, 2006 - Natality.

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or

http://www.cdc.gov/nchs/fetal_death.htm

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Table of Contents

| Introd | luction | 5 |
|--------|--|----|
| Fetal | death definition and classification scheme of data | 6 |
| Sourc | ce of data | 7 |
| | Fetal-death statistics | 7 |
| | Reporting requirements and completeness | 8 |
| Stand | lard report of fetal death | 10 |
| | History and revisions | 10 |
| | 2003 Revision | 11 |
| The 2 | 2006 Fetal Death File | 12 |
| | Geographic detail | 13 |
| | Reporting flags | 13 |
| | Examples of SAS code using reporting flags | 14 |
| | VitalStats | 15 |
| Data i | items | 15 |
| | Item completeness | 15 |
| | Hispanic origin and race of mother | 16 |
| | Age of mother | 17 |
| | Sex of fetus | 18 |
| | Period of gestation | 18 |
| | Birthweight | 19 |
| | Total birth order | 20 |

| Comp | utation of fetal and perinatal mortality rates | 20 |
|---------|---|------|
| Errata | for 2003 and 2004 fetal death data | 23 |
| Refere | ences | 24 |
| Figure | es | |
| 1. | U.S. Standard Report of Fetal Death: 1989 Revision | 29 |
| 2. | U.S. Standard Report of Fetal Death: 2003 Revision | 31 |
| Text to | ables | |
| A. | Period of gestation at which fetal-death reporting is required: | |
| | Each reporting area, 2006 | 33 |
| B. | Implementation of the 2003 U.S. Fetal Death Report: | |
| | Each state and the District of Columbia, 2006 | 34 |
| C. | Percent of fetal death records on which specified items were not stated: Each state and | |
| | the District of Columbia, 2006 | 35 |
| D. | Corrected fetal deaths and mortality rates, United States and each state, 2003 and 2004 | - 38 |

Introduction

These technical notes, published by the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS), are for the 2006 fetal death data file. These notes supplement the "Technical Notes" of the "Fetal and Perinatal Mortality, United States, 2006" [1]. They are recommended for use with 2006 fetal death data available through VitalStats, a data access and analysis tool, (http://www.cdc.gov/nchs/VitalStats.htm), and the public use micro-data file, which may be downloaded at:

http://www.cdc.gov/nchs/about/major/dvs/Vitalstatsonline.htm#Downloadable [2]. Micro-data files for both birth and fetal death are also available on CD-ROM by request.

Reference is also often made to the 2006 birth file's "Detailed Technical Notes," which is a more detailed discussion of many more items (variables), and the quality and completeness of the vital registry data. (See [3].) The majority of items on the fetal death reports (see **Figure 1** and **Figure 2**) are the same as those on the birth certificate. The Natality Detailed Technical Notes supplements the "Technical Notes" section of "Births: Final data for 2006" [4].

Fetal death definition and classification

The 1992 Revision of the *Model State Vital Statistics Act and Regulations* recommends the following definition of fetal death. This definition is based on that set forth by the World Health Organization in 1950.

"Fetal death" means death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy and which is not an induced termination of pregnancy. The death is indicated by the fact that after such expulsion or extraction, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Heartbeats are to be distinguished from transient cardiac contractions; respirations are to be distinguished from fleeting respiratory efforts or gasps [5].

The term "fetal death" is defined on an all-inclusive basis to avoid confusion arising from the use of such terms as stillbirth, spontaneous abortion, and miscarriage. This definition has been adopted by NCHS as the nationally recommended standard. All 57 registration areas except Wisconsin and Puerto Rico have definitions similar to the standard definition [5, 6]. Puerto Rico and Wisconsin have no statutory provision but use a definition consistent with the model law [5,6].

Additionally, to increase comparability of data on fetal deaths for different countries, the United Nations [7] recommends that for statistical purposes fetal deaths be classified as early, intermediate, and late. These groups are defined as follows:

Less than 20 completed weeks of gestation

(early fetal deaths)......Group I

20 completed weeks of gestation but less than 28

(intermediate fetal deaths)......Group II

28 completed weeks of gestation and over

(late fetal deaths)......Group III

Gestation period not classifiable in groups I, II, and III.....Group IV

Group IV consists of fetal deaths with gestation not stated but presumed to be 20 weeks or more.

Sources of data

Fetal-death statistics

Fetal-death statistical files for every year are based on all reports of fetal death received by the National Center for Health Statistics. The fetal-death reporting system of the United States encompasses the 50 states, the District of Columbia, New York City (which is independent of New York State for the purpose of fetal death registration), Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. In statistical tabulations, United States refers only to the aggregate of the 50 states (including New York City) and the District of Columbia. Data for the territories are presented separately from data for the United States.

Procedures used by NCHS to collect fetal death statistics have changed over the years.

Before 1971, tabulations of fetal deaths were based solely on information obtained by NCHS from copies of the original certificates. The information from these copies was edited, coded, and tabulated. Between 1971 and 2006, individual states made the transition from paper to electronic systems, and by 2006, 49 states, plus New York City, the District of Columbia, Puerto Rico, American Samoa, the Virgin Islands, and the Northern Mariana Islands provided NCHS, via the

Vital Statistics Cooperative Program, electronic data files of fetal-death data coded according to NCHS specifications. The remaining areas, California and Guam, submitted photocopies of original reports of fetal deaths and the data were coded by NCHS.

Reporting requirements and completeness

All states have adopted laws requiring the reporting of fetal deaths. Responsibility for completing the report rests with either the hospital or funeral director, depending on state requirements. Registration area requirements for reporting fetal deaths vary [6]. Most of the areas require reporting of fetal death at gestations of 20 weeks or more. **Table A** shows the minimum period of gestation required by each state to report a fetal death in 2006. Fetal deaths may be underreported [8,9]; misclassification of induced terminations of pregnancy as fetal deaths may also occur [10-12].

Under-reporting of fetal deaths is most likely to occur in the earlier part of the required reporting period for each state (see Figure I in reference 9). Thus, for states requiring reporting of all periods of gestation, fetal deaths occurring under 20 weeks of gestation are less completely reported; for states requiring reporting of fetal deaths of 20 weeks or more, fetal deaths occurring at 20-23 weeks are less completely reported. Reporting of fetal deaths at 20-23 weeks of gestation may be more complete for those states that report fetal deaths at all periods of gestation than for others.

To maximize the comparability of data by year and by state, most of the tables on fetal deaths published by NCHS are based on fetal deaths occurring at gestations of 20 weeks or more. These tabulations also include fetal deaths for which gestation is not stated for those states requiring reporting at 20 weeks of gestation or more only. Fetal deaths of not-stated gestation are excluded for states requiring reporting of all products of conception, except for those with a

stated birthweight of 500 grams or more. In 2006, this rule was applied to the following states: Hawaii, New York, Rhode Island and Virginia (see **Table A**).

The 1992 revision of the *Model State Vital Statistics Act and Regulations* [5] changed the recommended reporting requirement to all spontaneous fetal deaths weighing 350 grams or more, or if weight is unknown, fetal deaths of 20 completed weeks of gestation or more. The 1977 revision of the *Model State Vital Statistics Act and Model State Vital Statistics Regulations* [13] had recommended that spontaneous fetal deaths at a gestation of 20 weeks or more or a weight of 350 grams or more be reported. The Model Law of 1977 also recommended that the form for reporting fetal deaths be changed from a certificate to a legally required statistical report. A proposed revision of the Model Law is currently under review: http://www.cdc.gov/nchs/nvss/model_law_revision.htm.

Prior to 1939 the nationally recommended procedure for registration of a fetal death required the filing of a live-birth certificate and a death certificate. In 1939 a separate Standard Certificate of Stillbirth (fetal death) was created to replace the former procedure. Since 1970, procedures have been used to separate reports of spontaneous fetal deaths from those of induced terminations of pregnancy [14]. These procedures were implemented because the health implications of spontaneous fetal deaths are different from those of induced terminations of pregnancy. These procedures are still used.

Standard Report of Fetal Death

History and revisions

For many years, the U.S. Standard Report of Fetal Death, issued by the Public Health Service, has been used as the principal means to attain uniformity in the contents of documents used to collect information on these events [15-17]. It has been modified in each state to the extent required by the particular needs of the state or by special provisions of the state vital statistics law. However, the reports or certificates of most states conform closely in content and arrangement to the standard.

Statistics on fetal deaths were first published for the birth-registration area in 1918 and then every year beginning with 1922. The first issue of the U.S. Standard Certificate of Fetal Death appeared in 1939. Since then, it has been revised in 1949, 1956, 1968, 1978, 1989 and, most recently, in 2003. The website for 2003 U.S. Standard Certificates is found at: http://www.cdc.gov/nchs/vital_certs_rev.htm; and the revised Report of Fetal Death at: http://www.cdc.gov/nchs/data/dvs/FDEATH11-03finalACC.pdf.

The revisions have been coordinated by the National Center for Health Statistics,

Division of Vital Statistics, through consultation with state health officers and registrars; Federal
agencies concerned with vital statistics; national, state, and county medical societies; and others
working in such fields as public health, social welfare, demography, and insurance. This revision
procedure has ensured careful evaluation of each item in terms of its current and future
usefulness for legal, medical and health, demographic, and research purposes. New items have
been added when necessary, and old items have been modified to ensure better reporting; or in
some cases, items have been dropped when their usefulness appeared to be limited.

The 2003 Revision.

In 2003, a revised U.S. Standard Report of Fetal Death was adopted in Washington state January 1, 2003; Michigan adopted later in the year. Three states, Idaho, Michigan, and Utah, implemented the revised report as of January 1, 2004; Oklahoma revised later in 2004. Kansas, Kentucky, Maryland, Nebraska, New Hampshire and South Dakota implemented the revised report as of January 1, 2005. By January 1, 2006, five more states had implemented the 2003 revision: California, Delaware, Florida, Pennsylvania, and Texas. These sixteen states represent 23% of U.S. fetal deaths. Full implementation of the new fetal death report in all reporting areas will be phased in over several years.

A key aspect of the 2003 Revision of the United States Standard Report of Fetal Death has been the re-engineering of the data collection and transmission system. The intent of the reengineering is to improve data quality, to speed data collection and transmission, and to enhance standardization of vital statistics reporting of the 2003 Revision. This effort is described at: http://www.cdc.gov/nchs/data/dvs/panelreport_acc.pdf [18]. It is recommended that the data to complete the report be obtained from the "Patient's Worksheet" and the "Facility Worksheet." For the patient's worksheet, data are directly obtained from the mother and include items such as race, Hispanic origin, and educational attainment. For the facility worksheet, data are obtained directly from medical records of the woman/mother and fetus for items such as date of last normal menses, pregnancy risk factors, and method of delivery. To assist hospital staff in completing the facility worksheet, a comprehensive instruction manual was developed: *Guide to Completing the Facility Worksheets for the Certificate of Live Birth and Report of Fetal Death (2003 Revision)* [19]. Details of the nature and content of the 1989 revision are available elsewhere [17,20].

The 2006 Fetal Death File

The 2006 Fetal Death Data File consists of data items from the 1989 Revision of the U.S. Standard Report of Fetal Death (Figure 1) used by 34 states and the District of Columbia. It also includes selected data from 16 states: California, Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, and Washington, which had implemented the 2003 revision of the U. S. Standard Report of Fetal Death as of January 1, 2006 (Figure 2). Revision dates are in **Table B.** Where comparable, data from the revised states are combined with data from the unrevised states and the District of Columbia. The 2003-2006 fetal public use micro-data files include data items common to both the 1989 and 2003 revisions of the U.S. Standard Certificate of Live Birth. Beginning with this public-use file, most non-comparable items exclusive to the 1989 revision are no longer included but are available upon request. However, education, tobacco use, prenatal care and type of cesarean or vaginal delivery are included. New medical checkbox items are also discussed in several natality reports [21-22]. Data for a number of items exclusive to the 2003 Standard Report of Fetal Death, such as maternal morbidity, are not included in the 2006 fetal death file; see Figure 2. Cause-of-fetal-death data are also not currently available.

The file layout is the best source of information on the code structure because it provides the exact codes and recodes that are available. The general rules used to classify fetal death items for unrevised states are similar to those used for natality, as set forth in: *NCHS Instruction manual, Part 12: Computer edits for natality data, effective 1993*, available on the Internet at: http://www.cdc.gov/nchs/data/dvs/instr12.pdf [23]. Comparable information is available for the revised fetal death data [24].

Classification of selected key items is discussed in the following pages. Information on

the completeness of reporting of fetal death record data is shown in **Table C**. For information on additional selected data items not discussed in this document, see *Detailed Technical Notes*, *United States*, 2006, *Natality* [3].

Geographic detail

Beginning with the 2005 data year, the public release micro-data fetal death file no longer includes geographic detail (e.g., state or county of birth). Information on the new data use policy is available at: http://www.cdc.gov/nchs/nvss/dvs data release.htm [25]. However, tabulations of fetal death data by state and for counties with populations of 250,000 or more may be made using the interactive data access tool VitalStats found at http://www.cdc.gov/nchs/VitalStats.htm and described below.

Reporting flags

Data in the 2006 public use micro-data file is from either the revised (2003) Report of Fetal Death or unrevised (1989) Report. The 2006 public use micro-data file includes reporting flags to assist in the accurate exclusion of records for items not reported by all states when tabulating data by mother's place of residence. Reporting flags should be used to generate accurate numbers by residence for items which are not reported by all states. Positions for reporting flags are included with data items in the file layout.

Translating "blanks"

In the 2006 fetal file, blanks for items such as the mother's marital status are represented by numeric values in SAS code as (.). However, for some items in the file, e.g., congenital anomalies, blanks in SAS code are represented by character values as empty (''). Blanks should be made equivalent to unknown values for tabulation. The correct use of reporting flags and translation of blanks will result in an accurate tally of fetal deaths for items with incomplete

national reporting. For examples of SAS code that may be used to incorporate the correct use of reporting flags and the translation of blanks see below.

Examples of SAS code using reporting flags (and translational blanks)

The example below is for the <u>revised</u> prenatal care item. Prenatal care data based on the revised report are not considered comparable with data based on the unrevised report, and are presented separately. Accordingly, use of the reporting flag for this item will produce 2006 data for the month prenatal care began for the 15 (California is the exception) revised States which had implemented the revised Report as of January 1, 2006 and report this item.

Sample SAS program (revised)

```
01 DATA work;
02 INFILE 'c:fet06.uspub.dat' LRECL=801;
03 INPUT
04 tabflag 9
05 restatus 138
06 precare 245-246
07 f_precare 668;
08 /*Select fetal deaths with presumed gestation of GE 20 weeks */
09 IF tabflag EQ 2;
10 /*Exclude foreign residents*/
11 IF restatus NE 4;
12 /*Select reporting area*/
13 IF f_precare=1;
14 /*Convert blanks to unknown*/
15 IF precare=. THEN precare=99;
16 /* Produce table */
17 PROC FREQ;
18 TABLE precare;
19 RUN;
```

In this example, "restatus" is used to exclude fetal deaths to foreign residents (this is standard practice for all NCHS tabulations). Also in this example, blanks for prenatal care are represented by the numeric code '99'.

To produce 2006 data for the month prenatal care began for unrevised states, use the following lines as shown (changes are bolded):

Sample SAS program (unrevised)

```
01 DATA work;
02 INFILE 'c:fet06.uspub.dat' LRECL=801;
03 INPUT
04 tabflag 9
05 restatus 138
06 mpcb 256-257
07 f_mpcb_u 647;
08 /*Select fetal deaths with presumed gestation of GE 20 weeks */
09 IF tabflag EQ 2;
10 /*Exclude foreign residents*/
11 IF restatus NE 4;
12 /*Select reporting area*/
13 IF f_mpcb_u=1;
14 /*Convert blanks to unknown*/
15 IF mcpb=. THEN mcpb =99;
16 /* Produce table */
15 PROC FREQ;
16 TABLE mcpb;
17 RUN;
```

VitalStats

VitalStats is an online data access tool which gives users access to several interactive pre-built tables and the ability to build their own tables from numerous public use variables.

Interactive charting and mapping tools are a key part of the system, and provide powerful options for visualizing and manipulating tabulated data. Additionally, users can export tabulated data to Excel for further analysis. VitalStats is available at: http://www.cdc.gov/nchs/VitalStats.htm.

Complete downloadable public use fetal death data sets and documentation are available from the same website.

Data Items

Item completeness

Interpretation of fetal death data must include evaluation of the item completeness of reporting. The percent "not stated" is one measure of the quality of the data. Completeness of reporting varies among items and states. See Table C for the percent of fetal death records on

which specified items were not stated.

In general, percentages of unknown responses are considerably higher for fetal deaths than for live births; and among fetal deaths the percentage unknown is higher for fetal deaths that occur earlier in the gestational period. Unknown responses are shown in frequency tables, but are excluded from the computation of percent distributions and fetal and perinatal mortality rates.

Thus, rates for items with a substantial percentage of unknown responses (such as birthweight) may understate the "true" rates of fetal mortality for that characteristic.

Hispanic Origin and Race

Race and Hispanic origin are reported separately on the fetal death report. In tabulations of fetal death data by race and Hispanic origin, data for Hispanic persons are not further classified by race because the majority of women of Hispanic origin are reported as white.

In 1997, the Office of Management and Budget (OMB) issued "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity"[26]. The 1997 revised standards incorporated two major changes designed to reflect the changing racial and ethnic profile of the United States. First, the revision increased from four to five the minimum set of categories to be used by Federal agencies for identification of race. The 1977 standards required Federal agencies to report race-specific tabulations using a minimum set of four single-race categories: American Indian or Alaska Native (AIAN), Asian or Pacific Islander (API), black, and white. The revised standards called for reporting of Asians separately from Native Hawaiians or Other Pacific Islanders. Secondly, the revised standards also require Federal data collection programs to allow respondents to select *one or more race categories*.

For the 2006 data year, multiple-race was reported for fetal deaths by the 16 states which had implemented the 2003 revised certificate by January 1, as well as by Minnesota which used

the 1989 revision of the fetal death report. Data from the vital records of the remaining unrevised 33 states and the District of Columbia followed the 1977 OMB standards in which a single race is reported [27]. In addition, these areas also report the minimum set of four races as stipulated in the 1977 standards, compared with the minimum of five races for the 1997 standards [26].

To provide uniformity and comparability of the data during the transition period, before multiple-race data are available for all reporting areas, it is necessary to "bridge" the responses of those who reported more than one race to a single-race. Multiple-race is imputed to a single race according to the combination of mothers' races, Hispanic origin, sex, and age indicated on the fetal death report. The bridging procedure imputes multiple-race of mothers to one of the four minimum races stipulated in the 1977 OMB standards, that is, AIAN, API, black, or white.

Beginning with data for 1989, NCHS is tabulating fetal death, perinatal, and live birth data by race of mother. When the race of the mother is unknown, the mother is assigned the father's race; when information for both parents is missing, the race of the mother is assigned to the specific race of the mother of the preceding record with known race. Information on procedures used in 1988 and prior years is presented elsewhere [28]. For more detailed information on current year procedures, see *Detailed Technical Notes*, *United States*, 2006, *Natality* [3]. The 2003 revision of the Report of Fetal Death does not include race or Hispanic origin of father.

Age of mother

Beginning with data for 1989, the U.S. Standard Report of Fetal Death asks for the mother's date of birth. Age of mother is computed from the mother's date of birth and the date of delivery. For those states whose certificates do not contain an item for the mother's date of birth, reported age of the mother (in years) is used. The age of the mother is edited for upper and lower

limits. When mothers are reported to be under 9 years of age or 65 years of age and over, the age of the mother is considered not stated and is assigned as follows: Age of mother not stated is imputed according the mother's race and Hispanic origin and total-birth order (total of live births and other terminations).

Sex of fetus

Beginning with data for 1989, for all fetal deaths of 20 weeks of gestation or more, not-stated sex of fetus is assigned the sex of the fetus from the previous record. Before 1989, no such assignment was made.

Period of gestation

The period of gestation is based on the number of completed weeks elapsed between the first day of the last normal menstrual period (LMP) and the date of delivery. The first day of 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 LMP. Data on period of gestation are computed from information on "date of delivery" and "date last normal menses began." If "date last normal menses began" is unknown or if the calculated gestation falls beyond a duration considered biologically plausible or is inconsistent with birthweight, then the obstetric (or clinical) estimate of gestation is used. To improve data quality, beginning with 1993 data, NCHS instituted a computer edit to check for consistency between gestation and delivery weight for natality [23]. Briefly, if the LMP used at gestational age is inconsistent with delivery weight, and the clinical estimate is consistent, the clinical estimate is used; if both are inconsistent with birthweight but are consistent with each other, LMP gestation is used, and birthweight is assigned to unknown. The consistency check matrix was expanded for fetal deaths to take into account earlier gestation ages and lighter delivery weights [24]. These procedures are described in NCHS instruction

manuals [23,24]. All areas reported the LMP in 2006, and all areas except California reported the clinical or obstetric estimate of gestation.

Not stated gestational age--Fetal deaths with gestational age not stated are presumed to be of 20 weeks of gestation or more if the state requires reporting of all fetal deaths at a gestational age of 20 weeks or more or the fetus weighed 500 grams or more in those states requiring reporting of all fetal deaths, regardless of gestational age.

Birthweight

Birthweight may be reported in grams or in pounds and ounces. In the tabulation and presentation of birthweight data, the metric system (grams) has been used to facilitate comparison with other data published in the United States and internationally. Birthweight specified in pounds and ounces is assigned the equivalent of the gram intervals, as follows:

Less than 350 grams = 0 lb 12 oz or less

350-499 grams = 0 lb 13 oz-1 lb 1 oz

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

Total-birth order

Total-birth order refers to the sum of live births and other terminations (including spontaneous fetal deaths and induced terminations of pregnancy) a woman has had, including the fetal death being recorded. For example, if a woman has given birth to two live babies and to one born dead, the next fetal death to occur is counted as number four in total-birth order.

Beginning with implementation of the 1989 revision of the U.S. Standard Report of Fetal Death, total-birth order is calculated from three items on pregnancy history: Number of previous live births now living; number of previous live births now dead; and number of other terminations (spontaneous and induced at any time after conception). For a discussion of the calculation of total-birth order prior to 1989, see the Technical Appendix from *Vital Statistics of the United States*, 1988, volume II, Mortality [28]).

Although all registration areas use the two standard items in the number of previous live births, registration areas phrase the item pertaining to other terminations of pregnancy differently. Total-birth order for all areas is calculated from the sum of available information. Thus, information on total-birth order may not be completely comparable among the registration areas. In addition, there may be substantial under-reporting of other terminations of pregnancy on the fetal-death report.

Computation of fetal and perinatal mortality rates

Fetal and perinatal mortality *rates* shown in *Fetal and Perinatal Mortality, United States* (1,29) are computed on the basis of the number of live births and fetal deaths.

Perinatal definitions--Beginning with data year 1979, perinatal mortality data have been published for the United States. In the International Statistical Classification of Diseases IOD (ICD) [30], the World Health Organization (WHO) recommends that national perinatal statistics

should include all fetuses and infants delivered weighing at least 500 grams (or when birthweight is unavailable, the corresponding gestational age (22 weeks) or body length (25 cm crown-heel), whether alive or dead. It further recommends that countries should present, solely for international comparisons, standard perinatal statistics in which both the numerator and denominator of all rates are restricted to fetuses and infants weighing 1,000 grams or more (or, where birthweight is unavailable, the corresponding gestational age (28 weeks) or body length (35 cm crown-heel). The international recommendation is intended to capture statistics that are comparable and well-measured whereas countries are encouraged to capture earlier events because of the importance of the earlier events and because it improves the completeness of reporting of later events.

Three definitions of perinatal mortality were developed for use by NCHS [31] in the 1950s:

<u>Perinatal Definition I</u>, generally used for international comparisons, which includes fetal deaths of 28 weeks of gestation or more and infant deaths under 7 days;

<u>Perinatal Definition II</u>, which includes fetal deaths of 20 weeks of gestation or more and infant deaths under 28 days; and

<u>Perinatal Definition III</u>, which includes fetal deaths of 20 weeks of gestation or more and infant deaths under 7 days. [31].

Birthweight and gestational age are not reported on the death certificate in the United States.

Statistics for infant deaths are produced by birthweight or gestational age by using NCHS' linked birth/infant death data set for the infant death component of the perinatal events.

Variations in fetal death reporting requirements and practices have implications for comparing perinatal rates among states. Because reporting is generally less complete near the

lower limit of the reporting requirement, states that require reporting of all products of pregnancy, regardless of gestation, are likely to have more complete reporting of fetal deaths at 20 weeks or more than those states that do not. The larger number of fetal deaths reported for these "all periods" states may result in higher perinatal mortality rates than those rates reported for states whose reporting is less complete. Accordingly, reporting completeness may account, in part, for differences among the state perinatal rates, particularly differences for Definitions II and III, which use data for fetal deaths at 20-27 weeks [32].

Not stated—For Definition I, fetal deaths for which gestation is not stated but presumed to have been of 20 weeks or more are allocated to the category 28 weeks or more, according to the proportion of fetal deaths with stated gestational age that falls into that category. For Definitions II and III, fetal deaths at a presumed gestation of 20 weeks or more are included with those at a stated gestation of 20 weeks or more [1,32]). The allocation of not-stated gestational age for fetal deaths is made individually for each state and separately for the entire United States.

Accordingly, the sum of perinatal deaths for the areas according to Definition I may not equal the total number of perinatal deaths for the United States.

Errata for 2003 and 2004 fetal death data

In the 2003 and 2004 fetal death data files, the Tabulation Flag variable located in position 9 is incorrect, due to a programming error. This variable identifies fetal deaths of stated or presumed period of gestation of either <20 weeks, or 20 weeks or more. Due to this error, some fetal death records with not stated gestational ages that should have been included in the 20 weeks or more group were erroneously assigned to the <20 week group. As most reports of fetal death data include only fetal deaths of 20 weeks or more, this error led to a slight underestimate of fetal mortality rates published in previous reports (33, 34), and User's Guides (35,36). Table D shows the effect of correcting this error on fetal mortality rates by state. In the vast majority of states, the corrected numbers differ from the originally reported numbers by less than 1%. The 2003 and 2004 Fetal death data available through VitalStats, NCHS' online data tabulation system (http://www.cdc.gov/nchs/VitalStats.htm), have been corrected, and can be used to provide control totals for program verification.

When using the 2003 and 2004 fetal mortality data files, the data user can easily correct for this problem by adding the following SAS code to their program:

DATA work;

'WA', 'WI', 'WV', 'WY') THEN TABFLG=2;

of Occurrence, and TABFLAG is the Tabulation Flag variable.

```
INFILE 'C:FET04US.DAT' LRECL=3350;
INPUT

TABFLAG 9

XOSTATE $32-33

COMBGEST 451-452;
IF COMBGEST=99 and XOSTATE IN ('AL', 'AK', 'AZ', 'CA', 'CT', 'DE', 'DC', 'FL', 'ID', 'IL', 'IN', 'IA', 'KS', 'KY', 'LA', 'ME', 'MD', 'MA', 'MI', 'MN', 'MS', 'MO', 'MT', 'NE', 'NV', 'NH' 'NJ' 'NM' 'NC', 'ND', 'OH', 'OK', 'OR', 'SC', 'SD', 'TN', 'TX', 'UT', 'VT',
```

In this statement, COMBGEST is Gestation – Detail in Weeks, XOSTATE is the Expanded State

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| Figure | |
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U.S. STANDARD

| IN IN | | | | RE | PORT OF F | ETAL | . DEATH | STATE | FILE NUMBER | | | |
|---|---|---|-----------|---|--|--|--|--|--|---|-----------------|--|
| PERMANENT BLACK INK | 1. FACILITY NAME (If not in: | stitution, give street | and numb | per) | | | | | | | | |
| FOR INSTRUCTIONS SEE | 2. CITY, TOWN, OR LOCATION OF DELIVERY | | | | 3. COUNTY O | 3. COUNTY OF DELIVERY | | | 4. DATE OF DELIVERY (Month, Day, Year) 5. SEX OF FETU | | | |
| HANDBOOK | 6a. MOTHER'S NAME (First, Middle, Last) | | | | | 6b. N | 6b. MAIDEN SURNAME 7. DATE OF | | | OF BIRTH (/ | Month,Day,Year) | |
| PARENTS | 8a. RESIDENCE STATE | 8b. COUNTY | 8c | . CITY, TOWN, | OR LOCATION | | | 8d. STREET AN | D NUMBER | | | |
| PARENTS | GE. MODE ON FEMALO. | | | FATHER'S NAME (First, Middle, Last) | | | | | 10. DATE OF BIRTH (Month,Day,Year) | | | |
| (| (Yes or no) 11. OF HISPANIC ORIGIN? | 12. BACE | — America | an Indian, 13. | | . EDUCA | TION | 14. OCCUPATION AND BUSIN | | BUSINESS/ | IESS/INDUSTRY | |
| | (Specify No or Yes—If yes, specify Cuban, Mexican, Puerto Rican, etc.) 11a. □ No □ Yes 12a. | | | | | (Specify only highest grade completed) Elementary/Secondary College | | (Worked a | | during last year) Business/Industry | | |
| MOTHER | | | | | (0-12) | | (1-4 or 5+) | 14a. | 14b. | | | |
| MOTHER | Specify: | 100 | | | 13b. | | <u> </u> | 14c. | | 14d. | | |
| FATHER | 11b. ☐ No ☐ Yes Specify: | 12b. | | | 136. | | l L | 146. | | 144. | | |
| | 15. PREGNANCY HISTORY (Complete each section) | | | Y | | | OTHER MARRIED onception, or any t | | 17. DATE LAST NORMAL MEN BEGAN (Month, Day, Year) | | | |
| MULTIPLE BIRTHS | LIVE BIRT | HS | 10000 | OTHER TERM Spontaneous and | d induced at | | Yes or no) | | | | | |
| Enter State File Number for Mate(s) | | | | any time after o | | 0 | MONTH OF PREGNA ARE BEGAN—First, tc. (Specify) | | 19. PRENATAL VISITS—Total Number (If none, so state) | | | |
| LIVE BIRTH(S) | Number | Number | _ | umber | | | VEIGHT OF FETUS | | | CLINICAL ESTIMATE OF GESTATION (Weeks) | | |
| FETAL DEATH(S) | | | | None ATE OF LAST OTHER | | 22a. PLURALITY – Single, Twin, Triplet, etc. (Specify) | | | 22b. IF NOT SINGLE BIRTH—Born First, Second, Third, etc. | | | |
| MEDICAL AND HEALTH INFORMATION | 23a. MEDICAL RISK FACTORS FOR THIS PREGNANCY (Check all that apply) Anemia (Hct. < 30/Hgb. < 10) 01 □ Cardiac disease 02 □ Acute or chronic lung disease 03 □ Diabetes 04 □ Genital herpes 05 □ Hydramnios/Oligohydramnios 06 □ Hemoglobinopathy 07 □ Hypertension, chronic 08 □ Hypertension, pregnancy-associated 09 □ Eclampsia 10 □ Incompetent cervix 11 □ Previous infant 4000 + grams 12 □ Previous preterm or small-for gestational-age infant Infant 13 □ Renal disease 14 □ Rh sensitization 15 □ Uterine bleeding 16 □ None 00 □ Other 17 □ (Specify) 23b. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items) Tobacco use during pregnancy Yes □ No □ Average number cigarettes per day Alcohol use during pregnancy Yes □ No □ Average number dirinks per week Weight gaine | | | Amniocentesi Electronic fett Induction of It Stimulation of Tocolysis | oderate/heavy toture of membrane enta ia ive bleeding ng labor bor (< 3 hours) or (> 20 hours) labor essentation disproportion omplications Decify) O OF DELIVERY (C) | neck all th | O2 O3 O4 O4 O5 O5 O5 O5 O5 O5 | (Check all that apply) Anencephalus Spina bifida/Meningocele Hydrocephalus Microcephalus Other central nervous system anomalies (Specify) Heart malformations Other circulatory/respiratory anomalies (Specify) Rectal atresia/stenosis Tracheo esophageal fistulia/Esophageal atresi Omphalocele/ Gastroschisis Other gastrointestinal anomalies (Specify) Malformed genitalia Renal agenesis Other urogenital anomalies (Specify) Cleft lip/palate Polydactyly/Syndactyly/Adactyly Club foot Diaphragmatic hernia Other musculoskeletal/integumental anoma (Specify) Down's syndrome Other chromosomal anomalies (Specify) None Other (Specify) | | 02 0 03 0 04 0 05 0 06 0 07 0 08 0 08 0 10 0 11 0 12 0 13 0 14 0 16 0 17 0 18 0 18 0 19 0 10 0 00 0 | | |
| | | Vaginal birth after previous C-section 02 □ Primary C-section 03 □ Repeat C-section 04 □ Forceps 05 □ Vacuum 06 □ Hysterotomy/Hysterectomy 07 □ | | | | | | | | | | |

| | | 4 | | | |
|----------------------|--|---|--------------------------------------|-----------------------------|--|
| | | | | | |
| | 28. PART I. Fetal or maternal condition directly causing fetal death. | Enter IMMEDIATE CAUSE | only one cause per line for a, b, an | d c. | Specify Fetal or Maternal |
| CAUSE OF | Fetal and/or maternal conditions, if any, giving rise to the immediate cause(s), stating the under lying cause last. | DUE TO (OR AS A CONSEQUENCE | | | Specify Fetal or Maternal |
| FETAL DEATH | | DUE TO (OR AS A CONSEQUENCE | OF): | | Specify Fetal or Maternal |
| | PART II. Other significant condition | ns of fetus or mother contributing to fetal d | eath but not resulting in the under | ying cause given in Part I. | 29. FETUS DIED BEFORE LABOR, DURING LABOR OR DELIVERY, UNKNOWN (Specify) |
| | 30. ATTENDANT'S NAME AND | TITLE (Type/Print) | 31. NAME | AND TITLE OF PERSON CO | OMPLETING REPORT (Type/Print) |
| | | | Name | | - |
| HS-T-007 EV. 1/89 | Other (Specify) | | Title - | | |

| MOTHER | MOTHER'S EDUCATION (Check th box that best describes the highest degree or level of school completed the time of delivery) | at the box mothe "No" b | ER OF HISPANIC ORIG x that best describes wh r is Spanish/Hispanic/La ox if mother is not Span | ether the tina. Check the ish/Hispanic/Latina) | v | what the mother cor White Black or African Am | | | | |
|------------|--|-------------------------------|---|---|---------------------|--|---|--|--|--|
| | □ 8th grade or less | | ot Spanish/Hispanic/Lati Mexican, Mexican Ameri | | | American Indian or (Name of the enroll | r Alaska Native led or principal tribe) | | | |
| | □ 9th - 12th grade, no diploma | | Puerto Rican | cari, Criicaria | | Asian Indian Chinese | | | | |
| | High school graduate or GED completed | □ Yes, (| | | | Filipino | | | | |
| | □ Some college credit but no degree | | other Spanish/Hispanic/L | .atina | | Japanese Korean | | | | |
| | ☐ Associate degree (e.g., AA, AS) | | /) | | | Vietnamese | | | | |
| | □ Bachelor's degree (e.g., BA, AB, B | , , , | 7 | | | Other Asian (Specif Native Hawaiian | (y) | | | |
| | Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA) | | | | | Guamanian or Char | morro | | | |
| | □ Doctorate (e.g., PhD, EdD) or | | | | _ | □ Samoan □ Other Pacific Islander (Specify) | | | | |
| | Professional degree (e.g., MD, DD DVM, LLB, JD) | S, | | | | Other (Specify) | еі (эресііу) | | | |
| | 22. MOTHER MARRIED? (At delivery, conception, or anytime | 23a. DATE OF FIF | RST PRENATAL CARE | | TE OF L ARE VIS | LAST PRENATAL SIT | 24. TOTAL NUMBER OF PRENATAL VISITS FOR THIS PREGNANCY | | | |
| | between) □ Yes □ No | / M M D D | / □ No Pre | natal Care | / | D D YYYY | (If none, enter "0".) | | | |
| | 25. MOTHER'S HEIGHT 26. MOTH | | ANCY WEIGHT 27. N | | | 'ERY 28. DID MO | THER GET WIC FOOD FOR HERSELF THIS PREGNANCY? Yes No | | | |
| | 29. NUMBER OF PREVIOUS LIVE BIRTHS | | OTHER PREGNANCY pontaneous or induced ic pregnancies) | 31. CIGARETTE SMO For each time peri cigarettes smoked | iod, ente | er either the number | NG PREGNANCY r of cigarettes or the number of packs of | | | |
| | 29a. Now Living 29b. Now Dead 3 | 30a. Other Outcon | nes | Average number of c | igarette | es or packs of cigare | ettes smoked per day. | | | |
| | Number Number | Number (Do not in | nclude this fetus) | Three Months Before | e Prean | | of cigarettes # of packs OR | | | |
| | □ None □ None | □ None | | First Three Months Second Three Montl Third Trimester of Pi | of Preg hs of Pr | nancy egnancy | OR OR OR | | | |
| | 29c. DATE OF LAST LIVE BIRTH | 30b. DATE OF L | | 32. DATE LAST NOR | RMAL | 33. PLURALITY - S | Single, 34. IF NOT SINGLE BIRTH- | | | |
| | MM YYYY | | CY OUTCOME / | MENSES BEGAI | | Twin, Triplet, e | | | | |
| | | MM | YYYY | MM DD YYY | | (Specify) | (Specify) | | | |
| | 35. MOTHER TRANSFERRED FOR M IF YES, ENTER NAME OF FACILI | | | ONS FOR DELIVERY? | ' □ Ye | es 🗆 No | | | | |
| MEDICAL | 36. RISK FACTORS IN THIS PREGNAN Diabetes | CY (Check all that | apply): | | 37 | | RESENT AND/OR TREATED DURING ICY (Check all that apply) | | | |
| AND | Prepregnancy (Diagnosis prior to | this pregnancy) | | | | □ Gonorrhea | | | | |
| HEALTH | , , | regriancy) | | | | □ Syphilis | | | | |
| NFORMATION | Hypertension □ Prepregnancy (Chronic) | | | | | □ Chlamydia | | | | |
| | Gestational (PIH, preeclampsia)Eclampsia | | | | | Listeria | | | | |
| | Previous preterm birth | | | | | □ Group B Strepto | ococcus | | | |
| | Other previous poor pregnancy outco growth restricted birth) | me (Includes perin | atal death, small-for-ges | tational age/intrauterine | | Cytomegalovirus | s | | | |
| | Pregnancy resulted from infertility tre | atment-If yes, ched | ck all that apply: | | | Parvovirus | | | | |
| | Fertility-enhancing drugs, Artificia | Il insemination or | | | | Toxoplasmosis | | | | |
| | Intrauterine insemination | | | | | None of the abo | ve | | | |
| | Assisted reproductive technology | (e.g., in vitro fertiliz | zation (IVF), gamete intra | afallopian transfer (GIFT | Γ)) | □ Other (Specify)_ | | | | |
| | Mother had a previous cesarean delining If yes, how many | very | | | | | | | | |
| | None of the above | | | | | | | | | |
| | 38. METHOD OF DELIVERY | | | BIDITY (Check all that a ciated with labor and del | | | L ANOMALIES OF THE FETUS heck all that apply) | | | |
| | A. Was delivery with forceps attempted | out unsuccessful? | Maternal transfus | on | | □ Anencephaly □ Meningomyel | locele/Spina bifida | | | |
| | B. Was delivery with vacuum extraction unsuccessful? | attempted but | | gree perineal laceration | | Cyanotic conCongenital di | genital heart disease aphragmatic hernia | | | |
| | □ Yes □ No | | Ruptured uterus | | | OmphaloceleGastroschisis | 3 | | | |
| | C. Fetal presentation at delivery | | Unplanned hyster | • | | amputation a | on defect (excluding congenital nd dwarfing syndromes) | | | |
| | CephalicBreech | | Admission to inter | | | Cleft Palate a | | | | |
| | □ Other | | Unplanned operated delivery | ing room procedure folk | owing | Down SyndroKaryotyp | e confirmed | | | |
| | D. Final route and method of delivery (C Vaginal/Spontaneous | heck one) | None of the above | 9 | | □ Karyotyp | | | | |
| | □ Vaginal/Forceps □ Vaginal/Vacuum | | | | | □ Karyotyp □ Karyotyp | e confirmed | | | |
| | Cesarean If cesarean, was a trial of labor at | empted? | | | | Hypospadias | | | | |
| | □ Yes | | | | | 01 110 1 | | | | |
| | E. Hysterotomy/Hysterectomy | | | | | | | | | |
| | □ Yes □ No | | | | | | | | | |

Table A. Period of gestation/ weight minimums at which fetal-death reporting is required: Each reporting area, 2006

| | | | | 20 weeks | 20 weeks | 20 weeks | | | |
|----------------------------------|--|--|----------------|--|----------|----------|--|----------------|--|
| Area | All periods | 16 ws -! | 201 | or 350 | or 400 | or 500 | E marth | 250 5 | E00ar |
| Area | of gestation | 16 weeks | 20 weeks | grams | grams | grams | 5 months | 350 grams | 500grams |
| Alabama | | | X | | | | | | |
| Alaska | | | Х | V | | | | | |
| Arizona | 11/ | | | Х | | | | | |
| Arkansas | ¹ X | | | | | | | | |
| California | 1 | | Х | | | | | | |
| Colorado | ¹ X | | | | | | | | |
| Connecticut | | | Х | | | | | | |
| Delaware | | | | | | | | ² X | |
| District of Columbia | | | | | | Х | | | |
| Florida | | | Х | | | | | | |
| Georgia | ¹X | | | | | | | | |
| Hawaii | Х | | | | | | | | |
| Idaho | | | | Х | | | | | |
| Illinois | | | Х | | | | | | |
| Indiana | | | Х | | | | | | |
| Iowa | | | Х | | | | | | |
| Kansas | | | | 1 | | | 1 | Х | Ī |
| Kentucky | 1 | | 1 | Х | 1 | 1 | | | |
| Louisiana | 1 | i | 1 | Х | 1 | 1 | 1 | 1 | İ |
| Maine | 1 | | Х | | | | | | |
| Maryland | 1 | | ³ X | | | | | | |
| Massachusetts | | | + | Х | | | 1 | | |
| Michigan | | | | | Х | | | | |
| Minnesota | + | | X | <u> </u> | | <u> </u> | <u> </u> | | |
| Mississippi | + | | | Х | <u> </u> | <u> </u> | <u> </u> | | |
| Missouri | + | | + | X | 1 | 1 | - | + | |
| Montana | | | + | ^ | | | 1 | ²X | |
| Nebraska | | | X | | | | | ^ | |
| | | | | | | | | | |
| Nevada | | | Х | V | | | | | |
| New Hampshire | | | V | Х | | | | | |
| New Jersey | | | Х | | | | | | V |
| New Mexico | | | | | | | | | Х |
| New York | Х | | | | | | | | |
| New York excluding New York City | X | | | | | | | | |
| New York City | X | | | | | | | | |
| North Carolina | | | Х | | | | | | |
| North Dakota | | | Х | | | | | | |
| Ohio | | | Χ | | | | | | |
| Oklahoma | | | X | | | | | | |
| Oregon | | | Х | | | | | | |
| Pennsylvania | | Х | | | | | | | |
| Rhode Island | Х | | | | | | | | |
| South Carolina | | | | Х | | | | | |
| South Dakota | | | | 1 | | | 1 | İ | Х |
| Tennessee | | Ī | 1 | Ī | 1 | 1 | Ī | Ī | ⁴ X |
| Texas | 1 | i | Х | 1 | 1 | 1 | 1 | 1 | İ |
| Utah | 1 | | Х | | | | | | |
| Vermont | 1 | | 5X | † | 1 | 1 | † | 1 | |
| Virginia | Х | | | 1 | 1 | 1 | 1 | 1 | |
| Washington | | | Х | | 1 | 1 | | 1 | |
| West Virginia | + | | X | + | 1 | 1 | + | 1 | |
| Wisconsin | + | | | X | 1 | 1 | + | 1 | |
| Wyoming | + | 1 | Х | ^ | 1 | 1 | 1 | 1 | 1 |
| Puerto Rico | - | | ^ | 1 | 1 | 1 | X | 1 | |
| | - V | | 1 | + | 1 | 1 | _ ^ | 1 | |
| Virgin Islands | Х | ! | 1 | V | 1 | 1 | - | 1 | |
| Guam | | | I | X | I | I | 1 | 1 | I |

^{1/} Although State law requires the reporting of fetal deaths of all periods of gestation, only data for fetal deaths of 20 weeks of gestation or more are provided to NCHS.

2/ If weight is unknown, 20 completed weeks of gestation or more.

3/ If gestational age is unknown, weight of 500 grams or more.

4/ If weight is unknown, 22 completed weeks of gestation or more.

5/ If gestational age is unknown, weight of 400 grams or more, 15 ounces or more.

Table B. Implementation of the 2003 U.S. Fetal Death Report:

Each state and the District of Columbia, 2003-2006

| Year | 2006 | 2005 | 2004* | 2003 |
|----------------------|-------------|------|-------|------|
| Total | 16 | 11 | 5 | 1 |
| Alabama | | | | |
| Alaska | | | | |
| Arizona | | | | |
| Arkansas | | | | |
| California | Х | | | |
| Colorado | | | | |
| Connecticut | | | | |
| Delaware | Х | | | |
| District of Columbia | | | | |
| Florida | Х | | | |
| Georgia | | | | |
| Hawaii | | | | |
| Idaho | Х | Х | Х | |
| Illinois | | | | |
| Indiana | | | | |
| lowa | | | | |
| Kansas | Х | Х | | |
| Kentucky | X | X | | |
| Louisiana | | | | |
| Maine | | | | |
| Maryland | Х | Х | | |
| Massachusetts | | | | |
| Michigan | Х | Х | Х | |
| Minnesota | Α | | | |
| Mississippi | | | | |
| Missouri | | | | |
| Montana | | | | |
| Nebraska | Х | Х | | |
| Nevada | | | | |
| New Hampshire | Х | Х | | |
| New Jersey | | | | |
| New Mexico | | | | |
| New York | | | | |
| North Carolina | | | | |
| North Dakota | | | | |
| Ohio | | | | |
| Oklahoma | Х | Х | Х* | |
| Oregon | | | | |
| Pennsylvania | Х | | | |
| Rhode Island | | | | |
| South Carolina | | | | |
| South Dakota | Х | Х | | |
| Tennessee | | | | |
| Texas | Х | | | |
| Utah | Х | Х | Х | |
| Vermont | | | | |
| Virginia | | | | |
| Washington | Х | Х | Х | Х |
| West Virginia | | | | |
| Wisconsin | | | | |
| Wyoming | | | | |
| * Mid-year reviser | | | | |

^{*} Mid-year reviser

Table C. Percent of fetal death records on which specified items were not stated: United States, each state and the District of Columbia, 2006. [By place of residence. Records include only those with stated or presumed period of gestation of 20 weeks or more.]

| Reporting area | Total fetal deaths | Length of gestation ¹ | Delivery weight | Place of delivery | Hispanic origin of mother | Marital status ² | Mother's ed attaini | |
|----------------------|--------------------|----------------------------------|--------------------|-------------------|---------------------------------|--------------------------------|-------------------------------|-----------------------------|
| | | | | | | | Unrevised states ³ | Revised states ⁴ |
| Total US | 25972 | 2.1 | 12.0 | 0.1 | 5.2 | 2.0 | 18.5 | 11.7 |
| Alaska | 60 | 6.7 | 25.0 | _ | 15.0 | 5.0 | 23.3 | |
| Alabama | 573 | 0.2 | 4.5 | - | 0.2 | - | 9.8 | |
| Arizona | 564 | 1.1 | 3.5 | - | 3.5 | 0.4 | 2.8 | |
| Arkansas | 308 | 1.3 | 3.6 | _ | 0.3 | _ | 12.0 | |
| California | 2974 | 8.7 | 5.4 | 0.4 | 3.2 | | | 6.2 |
| Colorado | 383 | 0.5 | 8.1 | _ | 1.6 | _ | 7.8 | |
| Connecticut | 234 | 1.7 | 5.6 | 0.4 | 6.4 | _ | 32.1 | |
| Delaware | 70 | _ | - | _ | 1.4 | _ | | 2.9 |
| District of Columbia | 73 | 2.7 | 9.6 | - | 6.8 | 1.4 | 47.9 | |
| Florida | 1707 | 2.1 | 8.9 | 0.1 | 2.9 | 4.3 | | 13.1 |
| Georgia | 1005 | 1.5 | 16.8 | 0.2 | 13.8 | _ | 42.1 | |
| Hawaii | 128 | 0.8 | 48.4 | 0.8 | 20.3 | 0.8 | 39.1 | |
| Idaho | 104 | _ | 6.7 | _ | - | _ | | 7.7 |
| Illinois | 1042 | 0.6 | 9.6 | 0.1 | 3.6 | _ | 9.1 | |
| Indiana | 579 | 1.7 | 12.1 | 0.7 | 4.1 | _ | 15.2 | |
| Iowa | 234 | 0.4 | 4.3 | - | 0.9 | - | 7.3 | |
| Kansas | 202 | 2.0 | 0.5 | _ | 2.5 | 1.0 | | 12.4 |
| Kentucky | 379 | _ | 11.1 | 0.3 | 0.5 | 0.3 | | 7.4 |
| Louisiana | 386 | 3.9 | 9.6 | - | 0.5 | - | 8.0 | |
| Maine | 68 | 2.9 | 22.1 | - | 26.5 | - | 25.0 | |
| Maryland | 618 | _ | 9.1 | - | 5.2 | 6.8 | | 19.9 |
| Massachusetts | 379 | 0.3 | 2.1 | - | 22.2 | - | 25.3 | |
| Michigan | 707 | 0.3 | 9.2 | - | 21.8 | 4.0 | | 23.6 |
| Minnesota | 352 | 0.3 | 3.7 | _ | 4.0 | _ | 19.0 | |
| Mississippi | 432 | 0.5 | 3.0 | - | 3.2 | 0.2 | 22.2 | |
| Missouri | 456 | 0.4 | 4.4 | - | 2.9 | - | 13.4 | |
| Montana | 54 | - | 3.7 | - | - | - | 3.7 | |
| Nebraska | 149 | _ | 13.4 | - | _ | - | | 12.8 |
| Nevada | 275 | 1.5 | 10.9 | - | 1.5 | | 7.6 | |
| New Hampshire | 77 | _ | 5.2 | - | 3.9 | - | | 11.7 |
| New Jersey | 783 | 0.5 | 6.5 | 0.1 | 2.7 | 0.4 | 8.3 | |
| New Mexico | 73 | 4.1 | 12.3 | - | 4.1 | - | 45.2 | |
| New York | 1992 | 1.4 | 33.2 | - | 6.7 | | 32.9 | |
| North Carolina | 852 | 0.9 | 5.3 | - | 0.8 | - | 4.9 | |
| North Dakota | 49 | 6.1 | 10.2 | - | 18.4 | - | 8.2 | |
| Ohio | 939 | 0.6 | 6.4 | - | 1.1 | - | 6.5 | |
| Oklahoma | 301 | 6.6 | 36.2 | - | 15.9 | 13.3 | | 29.2 |
| Oregon | 207 | - | 1.4 | - | 1.0 | 0.5 | 15.0 | |
| Pennsylvania | 963 | 0.7 | 20.4 | 0.1 | 16.4 | 9.1 | | 26.0 |
| Rhode Island | 58 | - | 15.5 | - | 96.6 | - | 93.1 | |
| South Carolina | 589 | 0.5 | 2.5 | - | 0.5 | - | 11.5 | |
| South Dakota | 32 | - | 3.1 | - | - | - | | 3. |
| Tennessee | 400 | 1.8 | 2.0 | - | 1.8 | 0.3 | 16.8 | |
| Texas | 2162 | 1.9 | 13.8 | 0.1 | 0.4 | 3.7 | | 2.5 |
| Utah | 243 | | | - | - | 0.4 | | 5.3 |
| Vermont | 34 | 2.9 | 2.9 | - | 2.9 | 2.9 | 14.7 | |
| Virginia | 658 | 1.1 | 39.4 | 0.2 | 6.1 | - | 38.6 | |
| Washington | 495 | 3.2 | 25.7 | 0.4 | 14.3 | 9.5 | | 22.0 |
| West Virginia | 138 | 1.4 | 15.9 | - | - | 0.7 | 17.4 | |
| Wisconsin | 390 | | 1.8 | - | 0.8 | - | 8.2 | |
| | 42 | | 7.1 | _ | | _ | 21.4 | |

Table C. Percent of fetal death records on which specified items were not stated: United States, each state and the District of Columbia2006-Con. [By place of residence. Records include only those with stated or presumed period of gestation of 20 weeks or more.]

| Reporting area | Total fetal deaths | Month prer beg | | Number prenatal visits | Tobacc | o Use⁵ | Pregnancy risk factors ⁶ | Method of delivery ⁷ | Congenital anomalies ⁸ |
|----------------------|--------------------|---------------------|---------------------|------------------------------|---------------------|---------------------|---|---------------------------------|-----------------------------------|
| | | Unrevised | Revised | viole | Unrevised | Revised | iaciois | | |
| | | states ³ | states ⁴ | | states ³ | states ⁴ | | | |
| Total US | 25972 | 17.1 | 18.2 | 15.1 | 14.8 | 12.6 | 6.3 | 5.6 | 7.6 |
| Alaska | 60 | 28.3 | | 25.0 | 16.7 | | 11.7 | 15.0 | 23.3 |
| Alabama | 573 | 6.3 | | 9.6 | 4.2 | | 3.0 | 1.0 | 2.8 |
| Arizona | 564 | 4.4 | | 4.1 | 4.1 | | 4.1 | 2.8 | 3.2 |
| Arkansas | 308 | 10.1 | | 11.4 | 4.9 | | 0.3 | 0.3 | 0.6 |
| California | 2974 | | | 4.9 | | | 1.2 | 1.4 | 1.6 |
| Colorado | 383 | 6.3 | | 9.7 | 11.2 | | - | 0.3 | - |
| Connecticut | 234 | 16.7 | | 14.5 | 5.1 | | 5.6 | 2.6 | 10.7 |
| Delaware | 70 | | - | 1.4 | | 1.4 | - | - | 2.9 |
| District of Columbia | 73 | 45.2 | | 32.9 | 21.9 | | 4.1 | 5.5 | 4.1 |
| Florida | 1707 | | 16.5 | 13.4 | | | 4.2 | 3.0 | 4.1 |
| Georgia | 1005 | 23.0 | | 21.8 | 24.4 | | 0.1 | 8.7 | 0.2 |
| Hawaii | 128 | 43.0 | | 38.3 | | | | | |
| Idaho | 104 | | 2.9 | 1.0 | | 5.8 | | 1.0 | 1.0 |
| Illinois | 1042 | 15.0 | | 15.8 | 14.8 | | 17.3 | 12.0 | 24.2 |
| Indiana | 579 | 15.5 | | 15.9 | 9.0 | | 11.1 | 3.8 | 10.7 |
| lowa | 234 | 6.8 | | 0.9 | 4.3 | | 1.3 | - | 0.4 |
| Kansas | 202 | | 16.8 | 11.4 | 4.5 | | 1.0 | 1.0 | 0.4 |
| Kentucky | 379 | | 9.2 | 4.2 | | | 4.0 | 5.8 | 2.9 |
| Louisiana | 386 | 10.4 | | 8.5 | 4.4 | | 2.3 | 0.8 | 2.3 |
| Maine | 68 | 17.6 | | 19.1 | 19.1 | | 22.1 | 11.8 | 26.5 |
| Maryland | 618 | | 15.0 | 6.8 | 19.1 | | 0.6 | 0.5 | 1.8 |
| Massachusetts | 379 | 23.2 | 15.0 | 17.7 | 15.8 | | 15.6 | 1.3 | 1.0 17.9 |
| Michigan | 707 | 23.2 | 15.4 | 17.7 15.7 | 15.8 | | 15.6 | 1.3 4.4 | 0.6 |
| Minnesota | | | | 8.0 | | | | | |
| | 352 | 7.7 | | | 5.7 | | 8.8 | 0.3 | 17.6 |
| Mississippi | 432 | 13.4 | | 26.6 | 7.6 | | 3.9 | 0.7 | 9.7 |
| Missouri | 456 | 12.9 | | 13.4 | 4.6 | | 0.9 | 1.1 | 2.6 |
| Montana | 54 | 1.9 | 7.4 | 3.7 | 9.3 | 0.7 | 1.9 | - | 3.7 |
| Nebraska | 149 | 4.0 | 7.4 | 5.4 | | | 47.4 | - | - |
| Nevada | 275 | 1.8 | | 7.3 | 8.4 | | 17.1 | 9.5 | 28.0 |
| New Hampshire | 77 | | 14.3 | 2.6 | | | - | - | 1.3 |
| New Jersey | 783 | 9.1 | | 8.7 | 7.2 | | 4.3 | 2.6 | 10.9 |
| New Mexico | 73 | 26.0 | | 24.7 | 13.7 | | 2.7 | 4.1 | |
| New York | 1992 | 39.8 | | 37.4 | 49.9 | | 24.7 | 23.4 | |
| North Carolina | 852 | 4.7 | | 4.8 | 2.0 | | 1.2 | 1.2 | 1.3 |
| North Dakota | 49 | 2.0 | | 12.2 | 12.2 | | 8.2 | | 12.2 |
| Ohio | 939 | 9.6 | | 10.2 | 8.8 | | 10.5 | | 13.4 |
| Oklahoma | 301 | | 4.3 | 1.0 | | | | 18.3 | 88.4 |
| Oregon | 207 | 7.7 | | 6.3 | 8.7 | | 3.4 | | 1.0 |
| Pennsylvania | 963 | | 34.0 | 34.4 | | | 12.0 | | 22.1 |
| Rhode Island | 58 | 93.1 | | 89.7 | 87.9 | | 93.1 | 87.9 | 93.1 |
| South Carolina | 589 | 5.8 | | 6.1 | 2.7 | | 1.5 | - | 2.4 |
| South Dakota | 32 | | 3.1 | 6.3 | | 3.1 | - | - | - |
| Tennessee | 400 | 11.8 | | 13.3 | 8.8 | | 1.0 | 2.8 | 1.3 |
| Texas | 2162 | | 17.8 | 11.9 | | 8.8 | 0.0 | 2.8 | 0.0 |
| Utah | 243 | | 3.3 | 3.3 | | 2.1 | - | - | - |
| Vermont | 34 | 23.5 | | 2.9 | 20.6 | | 11.8 | - | 8.8 |
| Virginia | 658 | 41.0 | | 47.0 | 8.4 | | 6.7 | 13.2 | 6.8 |
| Washington | 495 | | 36.4 | 33.7 | | 24.6 | | 20.6 | 26.7 |
| West Virginia | 138 | 16.7 | | 14.5 | 10.9 | | 2.2 | | 0.7 |
| Wisconsin | 390 | 4.9 | | 6.7 | | | 0.3 | | 2.1 |
| Wyoming | 42 | | | 2.4 | | | 4.8 | | 11.9 |
| , , | _ | | | · · | | | | | - |

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

FOOTNOTES

- $^{1/}$ California reports date last normal menses began but does not report obstetric estimate of gestation.
- ^{2/} Marital status is not reported by California, Nevada, and New York.
- ^{3/} Data are based on the 1989 Revision of the Report of Fetal Death. Births to residents of states using the 1989 Standard Certificate of
- Live Birth occurring in states using the 2003 Standards Cetificate of Live Birth are coded as as 'not stated' for this item. See "Technical Notes".
- ^{4/} Data are based on the 2003 Report of Fetal Death. Births to residents of states using the 2003 Standard Certificate of Live Birth occurring in states using the 1989 Standard Certificate of Live Birth are coded as 'not stated' for this item. See "Technical Notes"
- ^{5/}California and Hawaii do not report tobacco use.
- Tobacco use data for Florida or Michigan are not compatible with those for either the 1989 or 2003 revisions.
- ^{6/} Six states (Idaho, Hawaii, Michigan, Nebraska, Oklahoma and Washington) do not report eclampsia.
- ^{7/} Hawaii does not report obstetric procedures.
- ^{8/} Hawaii, New Mexico and New York do not report congenital anomalies.

Table D. Corrected fetal deaths and mortality rates, United States and each state, 2003 and 2004

2004 2003 Number of deaths Rate\1 Number of deaths Rate\1 Originally Originally Originally Originally Corrected reported Corrected reported Corrected reported Corrected reported **United States** 26,004 25,653 6.32 6.23 26,001 25,655 6.28 6.20 Alabama 519 516 8.64 8.59 537 8.94 8.93 536 Alaska 65 60 6.40 5.91 54 53 5.20 5.10 Arizona 570 568 6.23 6.21 553 548 5.87 5.82 Arkansas 259 259 6.81 6.81 281 281 7.23 7.23 2819 California 2,974 2,862 5.47 5.26 2927 5.34 5.15 Colorado 394 5.65 5.65 388 5.63 394 388 5.63 Connecticut 241 241 5.59 5.59 254 254 6.00 6.00 Delaware 63 63 5.53 5.53 49 49 4.29 4.29 **District of Columbia** 65 8.85 59 7.38 7.38 68 8.46 59 Florida 1,562 1,549 7.31 7.25 1669 1649 7.60 7.51 Georgia 1,138 1,138 8.30 8.30 1175 1175 8.39 8.39 Hawaii 131 131 7.19 7.19 97 97 5.28 5.28 Idaho 113 113 5.16 5.16 129 129 5.69 5.69 Illinois 1.158 1.148 6.31 6.25 1120 1117 6.16 6.14 Indiana 507 496 5.83 5.71 531 523 6.06 5.97 Iowa 201 201 5.24 5.24 216 215 5.59 5.56 208 208 5.24 194 193 4.87 4.84 Kansas 5.24 Kentucky 339 338 6.10 6.08 362 361 6.45 6.44 459 Lousiana 479 463 7.31 7.07 486 7.38 6.97 67 4.78 4.78 Maine 50 50 3.60 3.60 67 Maryland 629 629 8.32 8.32 593 592 7.88 7.87 Massachusetts 457 457 5.67 5.67 421 420 5.34 5.32 731 730 5.54 745 745 5.71 5.71 Michigan 5.54 Minnesota 337 337 4.79 4.79 363 5.13 5.11 364 Mississippi 404 403 9.44 9.42 403 401 9.32 9.28 488 488 5.92 5.92 Missouri 6.29 6.29 463 463 55 55 4.79 4.79 42 Montana 42 3.63 3.63 Nebraska 151 151 5.79 5.79 163 163 6.15 6.15 Nevada 242 239 7.14 7.05 256 256 7.22 7.22 **New Hampshire** 68 68 4.70 4.70 67 67 4.58 4.58 769 751 **New Jersey** 768 6.54 6.52 753 6.49 6.47 New Mexico³ 87 85 3.05 87 87 3.06 3.06 3.12 **New York** 2,146 2,146 8.39 8.39 2109 2109 8.37 8.37 North Carolina 843 832 7.07 6.98 809 798 6.71 6.61 North Dakota 41 41 5.12 5.12 37 37 4.50 4.50 Ohio 937 929 6.22 6.17 978 970 6.52 6.47 Oklahoma 323 247 6.29 4.82 320 255 6.20 4.95 204 203 4.42 195 4.25 Oregon 4.40 196 4.27 903 Pennsylvania 956 956 6.51 6.51 903 6.20 6.20 Rhode Island 52 52 3.92 3.92 67 67 5.22 5.22 South Carolina 519 517 9.24 9.20 479 479 8.39 8.39 South Dakota³ 40 39 3.61 3.52 37 37 3.25 3.25 Tennessee³ 373 373 4.71 4.71 384 384 4.80 4.80 Texas 2070 5.58 5.40 2,124 2,063 5.60 5.44 2139 Utah 241 241 4.81 4.81 281 279 5.52 5.48 Vermont 21 21 3.18 3.18 29 29 4.38 4.38 Virginia 687 687 6.74 6.74 725 725 6.93 6.93 Washing 509 503 6.28 6.21 437 433 5.32 5.27 West Virginia 144 143 6.83 6.78 146 6.94 6.94 146 Wisconsin 356 356 5.06 5.06 362 359 5.09 5.13 Wyoming 31 31 4.61 4.61 58 58 8.45 8.45

¹Fetal deaths with stated or presumed gestation of 20 weeks or more.

²Rate per 1,000 live births and fetal deaths in specified group.

³State reports only fetal deaths of 500 grams or more; data for fetal deaths and rates are not comparable to data from other states.

2006 LIST OF DOCUMENTATION TABLES

Revision Status and Table Name

| A. | Revised ar | nd Unrevised Data |
|----|------------|---|
| | 1-A | Fetal deaths by period of gestation and state of occurrence |
| | 1-B | Fetal deaths by period of gestation and territory of occurrence |
| | 2 | Fetal deaths by race of mother: United States and each state |
| | 3 | Fetal deaths by Hispanic origin of mother and by race of mothers of |
| | | Non-Hispanic origin: United States and each state |
| | 4 | Fetal deaths by age of mother, race and Hispanic origin of mother and sex |
| | 5 | Fetal deaths by birthweight and sex |
| | 6 | Fetal deaths by period of gestation and sex |
| | 9 | Fetal deaths by weight gain of mother during pregnancy, by state |
| | 10 | Fetal deaths to mothers with selected risk factors during pregnancy, |
| | | characteristics of delivery, and congenital anomalies by age of mother |
| | 11 | Fetal deaths to mothers by method of delivery and by age of mother |
| | 20 | Fetal deaths by plurality, by state |
| | 22 | Fetal deaths by marital status, by state |
| | 24 | Fetal deaths by number of prenatal visits, by age of mother |
| В. | Revised D | ata |
| | 1-R | Mothers who smoked anytime during pregnancy, and those who quit |
| | | during pregnancy by age |
| | 7-R | Fetal deaths and percent distribution by mother's prepregnancy weight by |
| | | revised states |
| | 8-R | Fetal deaths and percent distribution by mother's weight at delivery by |
| | | revised states |
| | 15-R | Number of fetal deaths by education of mother |
| | 18-R | Number of fetal deaths according to method of delivery and age of mother |
| | 19-R | Number of congenital anomalies of the fetus by age of mother |
| | 21-R | Fetal deaths by place of delivery, by age of mother |
| | 23-R | Fetal deaths by month prenatal care began |
| | | |
| | | |

C. Unrevised Data

- 7-U Fetal deaths by smoking status of mother by age
- 11-U Fetal deaths by method of delivery by age of mother

U = Unrevised; 1989 Report of Fetal Death R = Revised; 2003 Report of Fetal Death

Fetal Death Documentation Table 1-A. Fetal Deaths by Period of Gestation and State of Occurrence: United States and Each State, 2006 (Fetal deaths by place of occurrence include fetal deaths that occur to nonresidents of the United States)

| | | Al | l Fetal Deaths | | | | h Stated or Pr 20 Weeks or M | |
|------------------------|---------------|-------------------|----------------------|---------------|---------------|----------------|---------------------------------|---------------|
| State of Occurrence | Total | Under 20 Weeks | 20 Weeks and Over | Not Stated | Total | 20-27 Weeks | 28 Weeks | Not Stated |
| United States | 52,714 | 24,582 | 25,458 | 2,674 | 26,002 | 13,008 | | 544 |
| Alabama | 52,714 587 | 24,582 18 | 25,458 568 | 2,674 | 26,002 569 | 296 | 12,450 272 | 544 |
| | 53 | 2 | | 4 | | | 34 | 4 |
| Alaska | | | 47 | | 51 | 13 | | |
| Arizona | 707 303 | 142 | 559 | 6 | 565 298 | 259 | 300 | 6 |
| Arkansas | | 5 | 294 | 4 | | 131 | 163 | 4 |
| California | 3,086 | 116 | 2,709 | 261 | 2,970 | 1,232 | 1,477 | 261 |
| Colorado | 412 | 17 | 392 | 3 | 394 | 182 | 210 | 2 |
| Connecticut | 240 | 4 | 232 | 4 | 236 | 119 | 113 | 4 |
| Delaware | 72 | 3 | 69 | - | 69 | 26 | 43 | - |
| District of Columbia | 128 | 5 | 121 | 2 | 123 | 65 | 56 | 2 |
| Florida | 1,784 | 64 | 1,685 | 35 | 1,720 | 885 | 800 | 35 |
| Georgia | 1,241 | 225 | 996 | 20 | 1,011 | 576 | 420 | 15 |
| Hawaii | 869 | 648 | 131 | 90 | 132 | 90 | 41 | 1 |
| Idaho | 112 | 7 | 105 | - | 105 | 36 | 69 | - |
| Illinois | 1,020 | 29 | 986 | 5 | 991 | 504 | 482 | 5 |
| Indiana | 579 | 11 | 560 | 8 | 568 | 257 | 303 | 8 |
| Iowa | 253 | 13 | 238 | 2 | 240 | 133 | 105 | 2 |
| Kansas | 189 | 2 | 183 | 4 | 187 | 56 | 127 | 4 |
| Kentucky | 390 | 16 | 372 | 2 | 374 | 188 | 184 | 2 |
| Louisiana | 422 | 50 | 357 | 15 | 372 | 179 | 178 | 15 |
| Maine | 74 | 3 | 69 | 2 | 71 | 37 | 32 | 2 |
| Maryland | 597 | 22 | 575 | _ | 575 | 302 | 273 | - |
| Massachusetts | 398 | 20 | 377 | 1 | 378 | 171 | 206 | 1 |
| Michigan | 726 | 22 | 702 | 2 | 704 | 375 | 327 | 2 |
| Minnesota | 372 | 11 | 360 | 1 | 361 | 170 | 190 | 1 |
| Mississippi | 442 | 13 | 427 | 2 | 429 | 241 | 186 | 2 |
| Missouri | 515 | 13 | 500 | 2 | 502 | 232 | 268 | 2 |
| Montana | 50 | - 13 | 50 | _ | 50 | 16 | 34 | _ |
| Nebraska | 151 | 1 | 150 | _ | 150 | 70 | 80 | _ |
| Nevada | 302 | 21 | 277 | 4 | 281 | 135 | 142 | 4 |
| | 74 | 1 | 73 | - | 73 | 33 | 40 | - |
| New Hampshire | | 36 | | 4 | 740 | 410 | | |
| New Jersey | 776 | | 736 | _ | | | 326 | 4 |
| New Mexico | 69 | 3 | 63 | 3 | 66 | 14 | 49 | 3 |
| New York | 7,023 | 5,304 | 700 | 1,019 | 707 | 362 | 338 | 7 |
| New York City | 11,695 | 10,341 | 1,296 | 58 | 1,317 | 872 | 424 | 21 |
| North Carolina | 900 | 32 | 860 | 8 | 868 | 444 | 416 | 8 |
| North Dakota | 58 | 6 | 49 | 3 | 52 | 15 | 34 | 3 |
| Ohio | 988 | 34 | 948 | 6 | 954 | 493 | 455 | 6 |
| Oklahoma | 304 | 11 | 271 | 22 | 293 | 140 | 131 | 22 |
| Oregon | 229 | 22 | 207 | - | 207 | 85 | 122 | - |
| Pennsylvania | 1,424 | 434 | 969 | 21 | 975 | 551 | 418 | 6 |
| Rhode Island | 1,027 | 949 | 64 | 14 | 64 | 28 | 36 | - |
| South Carolina | 603 | 30 | 570 | 3 | 573 | 325 | 245 | 3 |
| South Dakota | 36 | 2 | 34 | - | 34 | 11 | 23 | - |
| Tennessee | 430 | 7 | 416 | 7 | 423 | 117 | 299 | 7 |
| Texas | 2,419 | 243 | 2,135 | 41 | 2,176 | 1,102 | 1,033 | 41 |
| Utah | 280 | 25 | 255 | _ | 255 | 139 | 116 | - |
| Vermont | 32 | _ | 32 | _ | 32 | 15 | 17 | - |
| Virginia | 7,201 | 5,582 | 655 | 964 | 662 | 373 | 282 | 7 |
| Washington | 509 | 8 | 485 | 16 | 501 | 263 | 222 | 16 |
| West Virginia | 134 | - | 132 | 2 | 134 | 68 | 64 | 2 |
| Wisconsin | 392 | 9 | 381 | 2 | 383 | 165 | 216 | 2 |
| Wyoming | 37 | _ | 36 | 1 | 37 | 7 | 210 | 1 |

⁻ Quantity zero.

| | | | All Fetal Deat | hs | Fet | | ith Stated or of 20 Weeks or | |
|----------------------------|-------|-------------------|----------------------|---------------|---------|----------------|---------------------------------|---------------|
| Territory of Occurrence | Total | Under 20 Weeks | 20 Weeks and Over | Not Stated | Total | 20-27 Weeks | 28 Weeks and Over | Not Stated |
| Puerto Rico | 493 | 1 | 488 | 4 | 492 | 284 | 204 | 4 |
| Virgin Islands | 24 | 1 | 21 | 2 | 21 | 7 | 14 | - |
| Guam | 36 | 4 | 32 | - | 32 | 8 | 24 | - |
| American Samoa | 21 | - | 19 | 2 | 21 | 7 | 12 | 2 |
| Northern Marianas | 18 | - | 16 | 2 | 18 | 9 | 7 | 2 |

⁻ Quantity zero.

The SAS System

Fetal death Documentation Table 2. Fetal deaths by race of mother: United States and each state, 2006 (Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.)

Number

| | | | Number | | |
|----------------------------------|-----------|--------|--------|--------------------------------------|------------------------------|
| State | All races | White | Black | American Indian or Alaska Native¹ | Asian or Pacific Islander |
| United States | 25,972 | 17,245 | 7,253 | 290 | 1,184 |
| Alabama | 573 | 273 | 290 | 3 | 7 |
| Alaska | 60 | 32 | 2 | 22 | 4 |
| Arizona | 564 | 468 | 41 | 42 | 13 |
| Arkansas | 308 | 196 | 108 | 2 | 2 |
| California | 2,974 | 2,257 | 357 | 29 | 331 |
| Colorado | 383 | 348 | 23 | 4 | 8 |
| Connecticut | 234 | 161 | 64 | 2 | 7 |
| Delaware | 70 | 37 | 33 | - | - |
| District of Columbia | 73 | 17 | 55 | - | 1 |
| Florida | 1,707 | 1,010 | 654 | 1 | 42 |
| Georgia | 1,005 | 444 | 528 | 8 | 25 |
| Hawaii | 128 | 35 | 4 | 2 | 87 |
| Idaho | 104 | 99 | 1 | 2 | 2 |
| Illinois | 1,042 | 708 | 303 | 1 | 30 |
| Indiana | 579 | 447 | 120 | - | 12 |
| Iowa | 234 | 210 | 12 | 1 | 11 |
| Kansas | 202 | 159 | 32 | 3 | 8 |
| Kentucky | 379 | 311 | 65 | - | 3 |
| Louisiana | 386 | 182 | 198 | 4 | 2 |
| Maine | 68 | 65 | 1 | 2 | - |
| Maryland | 618 | 261 | 328 | 1 | 28 |
| Massachusetts | 379 | 271 | 84 | - | 24 |
| Michigan | 707 | 465 | 228 | 6 | 8 |
| Minnesota | 352 | 262 | 47 | 14 | 29 |
| Mississippi | 432 | 121 | 308 | 2 | 1 |
| Missouri | 456 | 312 | 134 | 2 | 8 |
| Montana | 54 | 43 | - | 10 | 1 |
| Nebraska | 149 | 123 | 12 | 5 | 9 |
| Nevada | 275 | 228 | 27 | 4 | 16 |
| New Hampshire | 77 | 72 | 1 | - | 4 |
| New Jersey | 783 | 456 | 263 | 1 | 63 |
| New Mexico | 73 | 63 | 1 | 9 | _ |
| New York | 1,992 | 1,200 | 661 | - | 131 |
| North Carolina | 852 | 449 | 374 | 7 | 22 |
| North Dakota | 49 | 38 | - | 10 | 1 |
| Ohio | 939 | 623 | 294 | 1 | 21 |
| Oklahoma | 301 | 196 | 49 | 42 | 14 |
| Oregon | 207 | 192 | 5 | - | 10 |
| Pennsylvania | 963 | 640 | 291 | 2 | 30 |
| Rhode Island | 58 | 47 | 7 | - | 4 |
| South Carolina | 589 | 274 | 312 | - | 3 |
| South Dakota | 32 | 26 | - | 6 | - |
| Tennessee | 400 | 241 | 152 | 2 | 5 |
| Texas | 2,162 | 1,677 | 416 | 4 | 65 |
| Jtah | 243 | 230 | 3 | 3 | 7 |
| Vermont | 34 | 32 | 2 | - | - |
| Virginia | 658 | 391 | 237 | 3 | 27 |
| | 495 | 386 | 41 | 21 | 47 |
| wasnington | 400 | | | | |
| | 138 | 129 | 9 | _ | _ |
| WashingtonWest VirginiaWisconsin | | | | - 4 | - 11 |

- Quantity zero

¹ Includes fetal deaths to Aleuts and Eskimos

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Data for states which report multiple-race for mothers were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Detailed Technical Notes". In this table all women (including Hispanic women)are classified only according to their race; see "Detailed Technical Notes".

The SAS System

Fetal death Documentation Table 3. Fetal deaths by Hispanic origin of mother and by race for mothers of non-Hispanic origin: United States and each state, 2006
[By place of residence]
(Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.)

| | | | | Ori | gin of r | mother | | | | | |
|-----------------------|----------------|----------|----------|-----------------|----------|----------------------------------|----------------------------------|--------------------|------------|-----------|---------------|
| | | | | Hispa | anic | | | | Non-His | panic | |
| States | All origins | Total | Mexican | Puerto Rican | Cuban | Central and South American | Other and unknown Hispanic | Total ¹ | White | Black | Not stated |
| United States | 25,972 | 5,523 | 3,490 | 410 | 93 | 788 | 742 | 19,092 | 11,147 | 6,695 | 1,357 |
| Alabama | 573 | 28 | 23 | 1 | _ | 4 | _ | 544 | 245 | 289 | 1 |
| Alaska | 60 | 2 | - | _ | _ | 1 | 1 | 49 | 27 | 2 | 9 |
| Arizona | 564 | 253 | 237 | 2 | _ | 11 | 3 | 291 | 208 | 36 | 20 |
| Arkansas | 308 | 19 | 16 | 1 | - | 1 | 1 | 288 | 178 | 107 | 1 |
| California | 2,974 | 1,459 | 1,061 | 6 | 6 | 169 | 217 | 1,421 | 771 | 332 | 94 |
| Colorado | 383 | 146 | 103 | 6 | - | 11 | 26 | 231 | 202 | 20 | 6 |
| Connecticut | 234 | 50 | 4 | 30 | - | 10 | 6 | 169 | 104 | 56 | 15 |
| Delaware | 70 | 12 | 9 | 1 | - | 2 | - | 57 | 25 | 32 | 1 |
| District of Columbia | 73 | 5 | 3 | - | - | 2 | - | 63 | 13 | 49 | 5 |
| Florida | 1,707 | 437 | 120 | 89 | 69 | 132 | 27 | 1,221 | 578 | 607 | 49 |
| Georgia | 1,005 | 102 | 78 | 3 | - | 12 | 9 | 764 | 274 | 472 | 139 |
| Hawaii | 128 | 21 | 1 | 9 | - | - | 11 | 81 | 17 | 2 | 26 |
| Idaho | 104 | 21 | 21 | _ | _ | - | _ | 83 | 78 | 1 | - |
| Illinois | 1,042 | 227 | 173 | 19 | 1 | 12 | 22 | 777 | 470 | 279 | 38 |
| Indiana | 579 | 49 19 | 9 | _ | - | 1 4 | 39 | 506 | 381 | 114 | 24 |
| Iowa | 234 | | 12 | | _ | - | 3 | 213 | 192 | 12 | 2 5 |
| Kansas | 202 379 | 35 18 | 27 12 | 2 1 | 1 | 2 | 4 | 162 359 | 125 291 | 29 65 | 2 |
| Kentucky Louisiana | 379 | 17 | 6 | 2 | 1 | 8 | 4 | 367 | 172 | 192 | 2 |
| Maine | 68 | | - | _ | _ | - | _ | 50 | 48 | 192 | 18 |
| | | | | | | | | | | | |
| Maryland | 618 | 61 | 18 | 2 | - | 35 | 6 | 525 | 194 | 305 | 32 |
| Massachusetts | 379 | 42 | 2 | 22 | 1 | 10 | 7 | 253 | 171 | 63 | 84 |
| Michigan | 707 | 38 | 24 | 3 | 1 | 1 | 9 | 515 | 353 | 149 | 154 |
| Minnesota | 352 432 | 34 12 | 17 8 | 1 | _ | 5 2 | 12 | 304 406 | 225 97 | 44 306 | 14 14 |
| Mississippi | 432 456 | 25 | 8 17 | 1 | _ | 3 | 1 4 | 418 | 284 | 126 | 13 |
| Montana | 54 | 23 | 1, | _ | _ | _ | - | 54 | 43 | 120 | 13 |
| Nebraska | 149 | 20 | 14 | 1 | _ | 3 | 2 | 129 | 105 | 12 | _ |
| Nevada | 275 | 97 | 85 | 1 | _ | 9 | 2 | 174 | 129 | 26 | 4 |
| New Hampshire | 77 | 3 | - | 3 | - | - | _ | 71 | 66 | 1 | 3 |
| New Jersey | 783 | 171 | 27 | 53 | 4 | 79 | 8 | 591 | 287 | 242 | 21 |
| New Mexico | 73 | 43 | 13 | 2 | _ | - | 28 | 27 | 18 | 1 | 3 |
| New York | 1,992 | 442 | 59 | 94 | 2 | 150 | 137 | 1,416 | 705 | 589 | 134 |
| North Carolina | 852 | 106 | 84 | 2 | _ | 16 | 4 | 739 | 340 | 370 | 7 |
| North Dakota | 49 | 1 | _ | - | _ | 1 | - | 39 | 28 | - | 9 |
| Ohio | 939 | 33 | 19 | 3 | - | 3 | 8 | 896 | 586 | 288 | 10 |
| Oklahoma | 301 | 27 | 26 | 1 | - | _ | - | 226 | 151 | 45 | 48 |
| Oregon | 207 | 43 | 33 | - | - | 1 | 9 | 162 | 147 | 5 | 2 |
| Pennsylvania | 963 | 54 | 7 | 30 | - | 4 | 13 | 751 | 509 | 219 | 158 |
| Rhode Island | 58 | - | - | - | - | - | - | 2 | 2 | - | 56 |
| South Carolina | 589 | 28 | 20 | _ | 3 | - | 5 | 558 | 244 | 311 | 3 |
| South Dakota | 32 | - | - | - | - | - | - | 32 | 26 | - | - |
| Tennessee | 400 | 19 | 18 | - | - | 1 | - | 374 | 219 | 148 | 7 |
| Texas | 2,162 | 1,071 | 947 | 7 | 2 | 52 | 63 | 1,082 | 612 | 407 | 9 |
| Utah | 243 | 44 | 29 | 1 | - | 5 | 9 | 199 | 186 | 3 | - |
| Vermont | 34 | - | - | - | - | - | - | 33 | 32 | 1 | 1 |
| Virginia | 658 | 71 | 16 | 4 | - | 19 | 32 | 547 | 301 | 220 | 40 |
| Washington | 495 | 84 | 70 | 2 | - | 7 | 5 | 340 | 257 | 33 | 71 |
| West Virginia | 138 | 2 | 2 | _ | - | - | - | 136 | 127 | 9 | - |
| Wisconsin | 390 | 28 | 20 | 5 | 1 | - | 2 | 359 | 269 | 75 | 3 |
| Wyoming | 42 | 4 | - | - | 1 | - | 3 | 38 | 35 | - | - |
| | | | | | | | | | | | |

Quantity zero

Includes races other then white and black

NOTES: Race and Hispanic origin are reported separately on birth certificates. Race categories are consistent with the 1977

Office of Management and Budget (OMB) standards. Data for states which report multiple-race for mothers were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see "Detailed Technical Notes".

In this table all women (including Hispanic women) are classified only according to their race; see "Detailed Technical Notes".

$\hbox{Fetal Death Documentation Table 4} \\ \hbox{Fetal Deaths by Age of Mother, Race and Hispanic Origin of Mother, and Sex: United States, 2006} \\$

(Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more. Not stated sex imputed for fetal deaths of 20 weeks or more gestation.)

| | | | | P | age of Mothe | er | | | | |
|--------------------|------------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Race and Sex /1 | Total | 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 |
| All races | 25,972 | 85 | 3,153 | 6,444 | 6,557 | 5,156 | 3,439 | 1,046 | 84 | 8 |
| Male Female | 13,717 12,255 | 50 35 | 1,658 1,495 | 3,340 3,104 | 3,434 3,123 | 2,764 2,392 | 1,877 1,562 | 541 505 | 49 35 | 4 |
| Non-Hispanic white | 11,147 | 18 | 1,043 | 2,630 | 2,946 | 2,332 | 1,629 | 501 | 42 | 6 |
| Male Female | 5,795 5,352 | 7 11 | 549 494 | 1,330 1,300 | 1,493 1,453 | 1,229 1,103 | 902 727 | 259 242 | 23 19 | 3 |
| Non-Hispanic black | 6,695 | 34 | 1,051 | 1,896 | 1,641 | 1,129 | 717 | 210 | 15 | 2 |
| Male Female | 3,630 3,065 | 21 13 | 564 487 | 1,015 881 | 919 722 | 593 536 | 402 315 | 104 106 | 11 4 | 1 |
| Hispanic | 5,523 | 25 | 820 | 1,446 | 1,281 | 1,065 | 656 | 214 | 16 | - |
| Male Female | 2,861 2,662 | 20 5 | 412 408 | 733 713 | 653 628 | 574 491 | 346 310 | 115 99 | 8 8 | - |

⁻ Quantity zero.

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

NOTE: Race and Hispanic origin are reported separately on fetal death reports. Race categories are consistent with the 1977 Office of Management and Budget standards. Data for fetal deaths are according to mother's Hispanic origin and reported race; see "Detailed Technical Notes."

Fetal Death Documentation Table 5 Fetal Deaths by Birthweight and Sex: United States, 2006

(Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more. Not stated sex imputed for fetal deaths of 20 weeks or more gestation.)

| | | | | | | В | irthweigh | t | | | | | | |
|---------------|------------------|-----------------------|----------------------|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|----------------|
| Sex | Total | Under 350 grams | 350- 499 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 |
| Total Male | 25,972 13,717 | 3,984 2,077 | 4,075 2,170 | 5,003 2,615 | 2,179 1,171 | 2,050 1,081 | 1,844 979 | 1,744 878 | 1,365 697 | 731 435 | 249 140 | 106 73 | 75 43 | 2,567 1,358 |
| Female | 12,255 | 1,907 | 1,905 | 2,388 | 1,008 | 969 | 865 | 866 | 668 | 296 | 109 | 33 | 32 | 1,209 |

⁻ Quantity zero.

Fetal deaths Documentation Table 6. Fetal deaths by period of gestation and sex: United States, 2006 (Fetal deaths with stated or presumed gestation of 20 weeks or more)

| Weeks of Gestation ¹ | Total | Male | Female |
|---------------------------------|-------|-------|--------|
| Total | 25972 | 13717 | 12255 |
| 20 weeks | 2169 | 1269 | 900 |
| 21 weeks | 2542 | 1406 | 1136 |
| 22 weeks | 2356 | 1253 | 1103 |
| 23 weeks | 1764 | 902 | 862 |
| 24 weeks | 1300 | 662 | 638 |
| 25 weeks | 1073 | 535 | 538 |
| 26 weeks | 922 | 458 | 464 |
| 27 weeks | 866 | 449 | 417 |
| 28 weeks | 853 | 453 | 400 |
| 29 weeks | 792 | 397 | 395 |
| 30 weeks | 829 | 458 | 371 |
| 31 weeks | 781 | 392 | 389 |
| 32 weeks | 811 | 429 | 382 |
| 33 weeks | 824 | 462 | 362 |
| 34 weeks | 944 | 485 | 459 |
| 35 weeks | 914 | 492 | 422 |
| 36 weeks | 1023 | 563 | 460 |
| 37 weeks | 1074 | 556 | 518 |
| 38 weeks | 1185 | 603 | 582 |
| 39 weeks | 965 | 498 | 467 |
| 40 weeks | 702 | 349 | 353 |
| 41 weeks or more | 741 | 350 | 391 |
| Not stated | 542 | 296 | 246 |

⁻ Quantity zero ¹ Expressed in completed weeks

FETAL DEATH DOCUMENTATION TABLE 9
FETAL DEATHS BY WEIGHT GAIN OF MOTHER DURING PREGNANCY, BY STATE:
TOTAL OF 48 REPORTING STATES AND THE DISTRICT OF COLUMBIA, 2006
[FETAL DEATHS INCLUDE ONLY THOSE WITH STATED OR PRESUMED PERIOD OF GESTATION OF 20 WEEKS OR MORE:]

| | | | | | Weight ga | in during | pregnancy | | |
|----------------------|--------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|---------------|
| STATE | Total | Less than 10 pounds | 10-14 pounds | 15-19 pounds | 20-24 pounds | 25-29 pounds | 30-34 pounds | 35 pounds or more | Not Stated |
| United States | 22,870 | 4,555 | 2,685 | 2,084 | 2,053 | 1,309 | 1,246 | 2,117 | 6,821 |
| Alabama | 573 | 113 | 77 | 66 | 62 | 45 | 29 | 57 | 124 |
| Alaska | 60 | 4 | 6 | 5 | 8 | 4 | 1 | 6 | 26 |
| Arizona | 564 | 108 | 81 | 53 | 72 | 31 | 43 | 66 | 110 |
| Arkansas | 308 | 38 | 30 | 26 | 28 | 20 | 19 | 32 | 115 |
| Colorado | 383 | 53 | 37 | 38 | 31 | 17 | 17 | 38 | 152 |
| Connecticut | 234 | 41 | 27 | 27 | 17 | 11 | 23 | 29 | 59 |
| Delaware | 70 | 22 | 2 | 12 | 10 | - | 3 | 17 | 4 |
| District of Columbia | 73 | 3 | 3 | 4 | 4 | 3 | - | 2 | 54 |
| Florida | 1,707 | 407 | 205 | 182 | 142 | 101 | 103 | 195 | 372 |
| Georgia | 1,005 | 275 | 76 | 38 | 38 | 18 | 19 | 42 | 499 |
| Idaho | 104 | 22 | 17 | 11 | 8 | 16 | 6 | 13 | 11 |
| Illinois | 1,042 | 125 | 149 | 82 | 96 | 62 | 57 | 89 | 382 |
| Indiana | 579 | 121 | 72 | 56 | 63 | 52 | 42 | 69 | 104 |
| Iowa | 234 | 55 | 35 | 27 | 23 | 16 | 16 | 25 | 37 |
| Kansas | 202 | 31 | 28 | 16 | 28 | 15 | 23 | 26 | 35 |
| Kentucky | 379 | 125 | 63 | 47 | 29 | 31 | 28 | 35 | 21 |
| Louisiana | 386 | 103 | 62 | 36 | 49 | 23 | 15 | 35 | 63 |
| Maine | 68 | 9 | 8 | 7 | 10 | 5 | 3 | 6 | 20 |
| Maryland | 618 | 146 | 74 | 58 | 72 | 32 | 39 | 81 | 116 |
| Massachusetts | 379 | 48 | 48 | 38 | 49 | 31 | 24 | 36 | 105 |
| Michigan | 707 | 157 | 84 | 81 | 56 | 54 | 49 | 89 | 137 |
| Minnesota | 352 | 46 | 42 | 33 | 28 | 21 | 18 | 38 | 126 |
| Mississippi | 432 | 86 | 42 | 37 | 35 | 23 | 23 | 30 | 156 |
| Missouri | 456 | 84 | 56 | 49 | 53 | 34 | 34 | 64 | 82 |
| Montana | 54 | 6 | 8 | 3 | 11 | 4 | 5 | 5 | 12 |
| Nebraska | 149 | 41 | 13 | 25 | 14 | 8 | 14 | 19 | 15 |
| Nevada | 275 | 16 | 15 | 12 | 15 | 10 | 10 | 16 | 181 |
| New Hampshire | 77 | 17 | 6 | 11 | 10 | 7 | 6 | 14 | 6 |
| New Jersey | 783 | 178 | 154 | 90 | 76 | 54 | 41 | 57 | 133 |
| New Mexico | 73 | 6 | 4 | 2 | 2 | 6 | 7 | 9 | 37 |
| New York | 1,992 | 242 | 190 | 156 | 147 | 87 | 69 | 113 | 988 |
| North Carolina | 852 | 191 | 113 | 80 | 110 | 51 | 70 | 90 | 147 |
| North Dakota | 49 | 9 | 7 | 2 | 1 | 2 | 3 | 4 | 21 |
| Ohio | 939 | 120 | 100 | 89 | 91 | 55 | 53 | 104 | 327 |
| Oklahoma | 301 | 40 | 36 | 22 | 25 | 16 | 5 | 32 | 125 |
| Oregon | 207 | 42 | 30 | 18 | 29 | 9 | 16 | 23 | 40 |
| Pennsylvania | 963 | 166 | 103 | 70 | 78 | 49 | 51 | 88 | 358 |
| Rhode Island | 58 | 2 | - | - | - | - | - | 2 | 54 |
| South Carolina | 589 | 175 | 91 | 79 | 46 | 31 | 22 | 46 | 99 |
| South Dakota | 32 | 7 | 5 | 2 | 6 | 6 | 3 | 2 | 1 |
| Tennessee | 400 | 25 | 25 | 27 | 34 | 21 | 30 | 38 | 200 |
| Texas | 2,162 | 688 | 244 | 217 | 153 | 114 | 103 | 188 | 455 |
| Utah | 243 | 56 | 34 | 19 | 50 | 18 | 20 | 28 | 18 |
| Vermont | 34 | 5 | 4 | 3 | 2 | - | 1 | 5 | 14 |
| Virginia | 658 | 98 | 54 | 30 | 34 | 23 | 18 | 26 | 375 |
| Washington | 495 | 104 | 56 | 38 | 37 | 35 | 20 | 35 | 170 |
| West Virginia | 138 | 23 | 13 | 7 | 9 | 6 | 5 | 5 | 70 |
| Wisconsin | 390 | 70 | 52 | 50 | 54 | 27 | 37 | 44 | 56 |
| Wyoming | 42 | 6 | 4 | 3 | 8 | 5 | 3 | 4 | 9 |

- Quantity zero NOTE: Excludes data for California and Hawaii, which did not report weight gain during pregnancy.

New Table 10. Fetal deaths to mothers with selected risk factors during pregnancy, characteristics of delivery, and congenital anomalies by age of mother: Total of 49 reporting states, 2006

[Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.]

| | | F | Risk facto | r, charac | teristic o | r anomaly | / reported | d | | |
|------------------------------------|-----------|----------|------------|-----------|------------|-----------|------------|-------|----------|---------|
| | | | | Ag | e of moth | ner | | | _ | |
| | | | Under | | | | | | Factor | |
| Risk factors, characteristics, and | All fetal | | 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40-54 | not | Not |
| anomalies | deaths | All ages | years | years | years | years | years | years | reported | stated1 |
| Rick factors in this pregnancy | | | | | | | | | | |
| Diabetes | 25,844 | 1,421 | 60 | 254 | 343 | 373 | 279 | 112 | 22,578 | 1,845 |
| Hypertension, chronic | 25,844 | 1,005 | 32 | 151 | 247 | 275 | 214 | 86 | 22,994 | 1,845 |
| Hypertension, pregnancy-associated | 25,844 | 1,124 | 133 | 278 | 303 | 211 | 151 | 48 | 22,875 | 1,845 |
| Characteristics of delivery | | | | | | | | | | |
| Breech or malpresentation | 25,844 | 4,599 | 620 | 1,170 | 1,108 | 894 | 614 | 193 | 17,334 | 3,911 |
| Congenital anomalies ² | | | | | | | | | | |
| Anencephaly | 23,779 | 298 | 43 | 97 | 83 | 45 | 22 | 8 | 21,671 | 1,810 |
| Meningomyelocele or spina bifida | 23,779 | 103 | 18 | 17 | 30 | 26 | 9 | 3 | 21,866 | 1,810 |
| Omphalocele or gastroschisis | 23,779 | 142 | 28 | 41 | 26 | 20 | 16 | 11 | 21,827 | 1,810 |
| Cleft lip or palate | 23,779 | 195 | 23 | 41 | 50 | 37 | 28 | 16 | 21,774 | 1,810 |
| Down's syndrome | 23,779 | 229 | 12 | 22 | 42 | 43 | 62 | 48 | 21,740 | 1,810 |
| | | | | | | | | | | |

Note: Hawaii does not report these items.

No response reported for specific item.
 New Mexico and New York do not report congenital anomalies.

(New) Table 11.

Fetal deaths to mothers by method of delivery, and by age of mother:

Total of 49 reporting states and the District of Columbia, 2006

[Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.]

| | | | Method of Delivery Reported | | | | | | | |
|---------------------------------------|----------------------------------|----------|-----------------------------|----------------|----------------|----------------|----------------|----------------|-------------------------|--|
| | | | | Ag | e of moth | er | | | | |
| Method of delivery | All fetal deaths ¹ | All ages | Under 20 years | 20-24 years | 25-29 years | 30-34 years | 35-39 years | 40-54 years | Not stated ² | |
| Vaginal delivery | | | | | | | | | | |
| Total vaginal | 25,844 | 20,746 | 2,798 | 5,273 | 5,209 | 3,978 | 2,628 | 860 | 1,442 | |
| Vaginal with forceps | 25,844 | 189 | 19 | 45 | 43 | 38 | 32 | 12 | 3,756 | |
| Vaginal with vacuum | 25,844 | 170 | 23 | 37 | 36 | 41 | 25 | 8 | 3,767 | |
| Cesarean delivery | 25,844 | 3,420 | 251 | 789 | 880 | 786 | 537 | 177 | 1,442 | |
| Hysterectomy/hysterotomy ³ | 24,242 | 235 | 18 | 57 | 56 | 56 | 36 | 12 | 3,581 | |

¹ Total number of fetal deaths to residents of areas reporting respective method of delivery.

Note: Hawaii does not report method of delivery; see "Detailed Technical Notes".

² No response reported for method of delivery.

³ Excludes data for Alaska, Connecticut, New York State (not NYC), Oklahoma, Oregon, and Wyoming which do not report hysterectomy or hysterotomy.

FETAL DEATH DOCUMENTATION TABLE Table 20

FETAL DEATHS BY PLURALITY, BY STATE:
TOTAL OF 50 REPORTING STATES AND THE DISTRICT OF COLUMBIA, 2006
[FETAL DEATHS INCLUDE ONLY THOSE WITH STATED OR PRESUMED PERIOD OF GESTATION OF 20 WEEKS OR MORE:]

| DI | IIRA | TT\ |
|----|------|-----|
| | | |

| STATE | Total | Singleton | Twin | Triplet or higher |
|----------------------|--------|-----------|-------|----------------------|
| United States | 25,972 | 23,599 | 2,191 | 182 |
| Alabama | 573 | 529 | 42 | 2 |
| Alaska | 60 | 52 | 8 | - |
| Arizona | 564 | 519 | 39 | 6 |
| Arkansas | 308 | 283 | 25 | - |
| California | 2,974 | 2,674 | 276 | 24 |
| Colorado | 383 | 336 | 45 | 2 |
| Connecticut | 234 | 198 | 34 | 2 |
| Delaware | 70 | 63 | 7 | - |
| District of Columbia | 73 | 64 | 9 | - |
| Florida | 1,707 | 1,557 | 140 | 10 |
| Georgia | 1,005 | 934 | 68 | 3 |
| Hawaii | 128 | 118 | 9 | 1 |
| Idaho | 104 | 96 | 8 | - |
| Illinois | 1,042 | 937 | 97 | 8 |
| Indiana | 579 | 526 | 52 | 1 |
| Iowa | 234 | 208 | 20 | 6 |
| Kansas | 202 | 183 | 18 | 1 |
| Kentucky | 379 | 357 | 22 | - |
| Louisiana | 386 | 349 | 36 | 1 |
| Maine | 68 | 63 | 2 | 3 |
| Maryland | 618 | 577 | 35 | 6 |
| Massachusetts | 379 | 341 | 35 | 3 |
| Michigan | 707 | 638 | 66 | 3 |
| Minnesota | 352 | 312 | 40 | - |
| Mississippi | 432 | 389 | 40 | 3 |
| Missouri | 456 | 414 | 38 | 4 |
| Montana | 54 | 52 | 2 | - |
| Nebraska | 149 | 135 | 13 | 1 |
| Nevada | 275 | 255 | 19 | 1 |
| New Hampshire | 77 | 70 | 7 | - |
| New Jersey | 783 | 693 | 80 | 10 |
| New Mexico | 73 | 66 | 7 | - |
| New York | 1,992 | 1,768 | 195 | 29 |
| North Carolina | 852 | 794 | 54 | 4 |
| North Dakota | 49 | 45 | 2 | 2 |
| Ohio | 939 | 866 | 66 | 7 |
| Oklahoma | 301 | 287 | 14 | - |
| Oregon | 207 | 190 | 17 | - |
| Pennsylvania | 963 | 899 | 59 | 5 |
| Rhode Island | 58 | 49 | 9 | - |
| South Carolina | 589 | 544 | 44 | 1 |
| South Dakota | 32 | 27 | 5 | - |
| Tennessee | 400 | 366 | 33 | 1 |
| Texas | 2,162 | 1,961 | 185 | 16 |
| Utah | 243 | 209 | 30 | 4 |
| Vermont | 34 | 33 | 1 | - |
| Virginia | 658 | 629 | 28 | 1 |
| Washington | 495 | 430 | 62 | 3 |
| West Virginia | 138 | 122 | 11 | 5 |
| Wisconsin | 390 | 359 | 28 | 3 |
| Wyoming | 42 | 33 | 9 | - |
| | | | | |

⁻ Quantity zero

FETAL DEATH DOCUMENTATION TABLE 22

FETAL DEATHS BY MARITAL STATUS, BY STATE:
TOTAL OF 47 REPORTING STATES AND THE DISTRICT OF COLUMBIA, 2006

[FETAL DEATHS INCLUDE ONLY THOSE WITH STATED OR PRESUMED PERIOD OF GESTATION OF 20 WEEKS OR MORE.]

Includes marital status not stated.

NOTE: Excludes data for California, Nevada and New York which did not report mother's marital status.

⁻ Quantity zero

FETAL DEATH DOCUMENTATION TABLE 24.

FETAL DEATHS BY NUMBER OF PRENATAL VISITS, BY AGE OF MOTHER:UNITED STATES, 2006 [FETAL DEATHS INCLUDE ONLY THOSE WITH STATED OR PRESUMED PERIOD OF GESTATION OF 20 WEEKS OR MORE.]

AGE OF MOTHER NUMBER OF PRENATAL VISITS Total 30-34 50-54 Under 15 15-19 20-24 25-29 35-39 40-44 45-49 years years years years years years years years years 25,972 Total 85 3,153 6,444 6,557 5,156 3,439 1,046 84 8 None 1,717 21 318 488 383 262 167 73 4 1 1 - 2 1,719 13 337 491 374 272 176 8 48 3 - 4 4,190 17 584 1,103 1,038 760 517 14 156 5 - 6 4,666 10 572 1,180 1,187 882 650 168 15 7 – 8 3,154 743 6 342 819 682 429 124 9 - 10 2,781 235 727 629 399 125 5 1 654 6 145 276 72 355 453 362 1 11 - 12 1,671 3 13 - 18 1,669 126 332 468 416 231 89 7 19 or more 484 26 101 120 127 80 27 3 3,921 9 997 988 2 Not stated 468 764 514 164 15

⁻ Quantity zero

Fetal Death Documentation Table 1-R (Revised states). Mothers who smoked anytime during pregnancy and those who quit during pregnancy by age:

Total of 13 reporting areas: Delaware, Idaho, Kansas, Kentucky, Maryland, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, and Washington.

(Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.)

| Tobacco use | All fetal deaths 1 | Under 20 years | 20-24 years | 25-29 years | 30-34 years | 35-39 years | 40-54 years |
|---------------------------|-----------------------|-------------------|----------------|----------------|----------------|----------------|----------------|
| | | | | Number | | | |
| Any time during pregnancy | | | | | | | |
| Total | 5 , 795 | 741 | 1,471 | 1,477 | 1,115 | 747 | 244 |
| Smoker | 715 | 116 | 227 | 177 | 108 | 66 | 21 |
| Non-smoker | 4,350 | 538 | 1,070 | 1,115 | 856 | 584 | 187 |
| Not stated | 730 | 87 | 174 | 185 | 151 | 97 | 36 |
| Quit during pregnancy | | | | | | | |
| Total | 5 , 795 | 741 | 1,471 | 1,477 | 1,115 | 747 | 244 |
| Non-smoker | 4,350 | 538 | 1,070 | 1,115 | 856 | 584 | 187 |
| Quit 3 | 149 | 24 | 54 | 38 | 17 | 12 | 4 |
| Did not quit | 419 | 61 | 123 | 109 | 67 | 45 | 14 |
| Unknown if quit | 147 | 31 | 50 | 30 | 24 | 9 | 3 |
| Not Stated | 730 | 87 | 174 | 185 | 151 | 97 | 36 |

⁻ Quantity zero

NOTE: Excludes Florida and Michigan which do not report tobacco use compatible with either the 1989 Revision or the 2003 Revision to the U.S. Standard Report of Fetal death. Also excludes California which does not report tobacco use.

¹ Total number of fetal deaths to residents of reporting area.

² Mothers who smoked in the three months before pregnancy but reported no smoking during pregnancy.

³ Mothers who smoked in either of the first two trimesters of pregnancy but not in the third trimester.

Fetal Documentation Table 7-NPR (revised states)

Fetal Deaths and Percent Distribution by Mother's Prepregnancy Weight:
Total of 15 Reporting Areas: Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire,
Oklahoma, Pennsylvania, South Dakota, Texas, Utah and Washington, 2006

| State | Group | 50- 74 | 75- 99 | 100- 124 | 125- 149 | 150- 174 | 175- 199 | 200- 249 | 250- 299 | 300- 349 | 350- 400 | Not stated | Total |
|---------------|-------------------|-----------|------------|---------------|---------------|---------------|-------------|-------------|-------------|-------------|-------------|---------------|----------------|
| Delaware | Number Percent | 0.0 | 2 2.9 | 18 26.1 | 18 26.1 | 17 24.6 | 5 7.2 | 6 8.7 | 2 2.9 | 1 1.4 | 0.0 | 10.0 | 70 100.0 |
| Florida | Number Percent | 0.0 | 32 2.2 | 304 21.2 | 396 27.7 | 296 20.7 | 179 12.5 | 160 11.2 | 51 3.6 | 10 0.7 | 3 0.2 | 276 0.0 | 1,707 100.0 |
| Idaho | Number Percent | 0.0 | 4 4.2 | 11 11.5 | 26 27.1 | 25 26.0 | 16 16.7 | 13 13.5 | 1.0 | 0.0 | 0.0 | 8 | 104 100.0 |
| Kansas | Number Percent | 0.0 | 1 0.6 | 30 18.5 | 62 38.3 | 36 22.2 | 9 5.6 | 21 13.0 | 2 1.2 | 1 0.6 | 0.0 | 40 0.0 | 202 100.0 |
| Kentucky | Number Percent | 0.0 | 9 2.6 | 59 17.1 | 97 28.0 | 70 20.2 | 50 14.5 | 46 13.3 | 11 3.2 | 2 0.6 | 2 0.6 | 33 0.0 | 379 100.0 |
| Maryland | Number Percent | 0.0 | 0.0 | 77 15.4 | 161 32.2 | 82 16.4 | 77 15.4 | 67 13.4 | 31 6.2 | 3 0.6 | 2 0.4 | 118 0.0 | 618 100.0 |
| Michigan | Number Percent | 0.0 | 9 1.5 | 94 15.5 | 169 27.8 | 135 22.2 | 78 12.8 | 82 13.5 | 33 5.4 | 5 0.8 | 3 0.5 | 99 0.0 | 707 100.0 |
| Nebraska | Number Percent | 0.0 | 0.0 | 25 19.4 | 46 35.7 | 18 14.0 | 12 9.3 | 19 14.7 | 8 6.2 | 0.8 | 0.0 | 20 0.0 | 149 100.0 |
| New Hampshire | Number Percent | 0.0 | 1 1.5 | 10 14.9 | 24 35.8 | 16 23.9 | 7 10.4 | 6 9.0 | 2 3.0 | 1 1.5 | 0.0 | 10 0.0 | 77 100.0 |
| Oklahoma | Number Percent | 0.0 | 2 1.1 | 33 17.6 | 55 29.4 | 33 17.6 | 29 15.5 | 26 13.9 | 8 4.3 | 1 0.5 | 0.0 | 114 0.0 | 301 100.0 |
| Pennsylvania | Number Percent | 0.0 | 12 1.9 | 110 17.2 | 202 31.5 | 129 20.1 | 76 11.9 | 91 14.2 | 15 2.3 | 4 0.6 | 2 0.3 | 322 0.0 | 963 100.0 |
| South Dakota | Number Percent | 0.0 | 0.0 | 2 6.3 | 8 25.0 | 9 28.1 | 7 21.9 | 6 18.8 | 0.0 | 0.0 | 0.0 | 0.0 | 32 100.0 |
| Texas | Number Percent | 0.1 | 33 1.9 | 320 18.2 | 509 28.9 | 365 20.7 | 242 13.7 | 221 12.5 | 54 3.1 | 16 0.9 | 2 0.1 | 399 0.0 | 2,162 100.0 |
| Utah | Number Percent | 0.0 | 7 3.0 | 38 16.5 | 72 31.2 | 48 20.8 | 28 12.1 | 31 13.4 | 6 2.6 | 1 0.4 | 0.0 | 12 0.0 | 243 100.0 |
| Washington | Number Percent | 0.0 | 5 1.5 | 62 18.3 | 89 26.3 | 75 22.2 | 51 15.1 | 40 11.8 | 12 3.6 | 4 1.2 | 0.0 | 157 0.0 | 495 100.0 |
| Total | Number Percent | 0.0 | 117 1.9 | 1,193 19.1 | 1,934 30.9 | 1,354 21.6 | 866 13.8 | 835 13.3 | 236 3.8 | 50 0.8 | 14 0.2 | 1,609 | 8,209 100.0 |

- Quantity zero. Note: Excludes data for California.

Fetal death documentation table 8-R (Revised States)

Fetal deaths and percent distribution by mother's weight at delivery:
Total of 15 reporting areas: Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan,
Nebraska, New Hampshire, Oaklahoma, Pensylvania, South Dakota, Texas, Utah, and Washington, 2006
[Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.]

| STATE | Group | 50-74 | 75-99 | 100-124 | 125-149 | 150-174 | 175-199 | 200-249 | 250-299 | 300-349 | 350-399 | 400 and m | Not ore Stated | Total |
|---------------|---------|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------------------|-------|
| Delaware | Number | - | - | 7 | 13 | 16 | 19 | 8 | 3 | 1 | - | - | 3 | 70 |
| | Percent | - | - | 10.4 | 19.4 | 23.9 | 28.4 | 11.9 | 4.5 | 1.5 | - | - | 0.0 | 100.0 |
| Florida | Number | - | 12 | 112 | 318 | 362 | 272 | 262 | 65 | 18 | 3 | 2 | 281 | 1,707 |
| | Percent | - | 0.8 | 7.9 | 22.3 | 25.4 | 19.1 | 18.4 | 4.6 | 1.3 | 0.2 | 0.1 | 0.0 | 100.0 |
| Idaho | Number | - | 1 | 6 | 18 | 20 | 21 | 22 | 7 | 1 | - | - | 8 | 104 |
| | Percent | - | 1.0 | 6.3 | 18.8 | 20.8 | 21.9 | 22.9 | 7.3 | 1.0 | - | - | 0.0 | 100.0 |
| Kansas | Number | - | 1 | 5 | 38 | 43 | 36 | 27 | 9 | 1 | 1 | - | 41 | 202 |
| | Percent | - | 0.6 | 3.1 | 23.6 | 26.7 | 22.4 | 16.8 | 5.6 | 0.6 | 0.6 | - | 0.0 | 100.0 |
| Kentucky | Number | - | 1 | 28 | 71 | 86 | 73 | 69 | 15 | 5 | 2 | - | 29 | 379 |
| | Percent | - | 0.3 | 8.0 | 20.3 | 24.6 | 20.9 | 19.7 | 4.3 | 1.4 | 0.6 | - | 0.0 | 100.0 |
| Maryland | Number | 1 | - | 28 | 102 | 131 | 93 | 116 | 44 | 9 | - | 2 | 92 | 618 |
| | Percent | 0.2 | - | 5.3 | 19.4 | 24.9 | 17.7 | 22.1 | 8.4 | 1.7 | - | 0.4 | 0.0 | 100.0 |
| Michigan | Number | - | 2 | 30 | 115 | 161 | 97 | 129 | 38 | 18 | 2 | - | 115 | 707 |
| | Percent | - | 0.3 | 5.1 | 19.4 | 27.2 | 16.4 | 21.8 | 6.4 | 3.0 | 0.3 | - | 0.0 | 100.0 |
| Nebraska | Number | - | - | 9 | 31 | 41 | 17 | 26 | 12 | 2 | - | - | 11 | 149 |
| | Percent | - | - | 6.5 | 22.5 | 29.7 | 12.3 | 18.8 | 8.7 | 1.4 | - | - | 0.0 | 100.0 |
| New Hampshire | Number | - | - | 6 | 11 | 17 | 18 | 12 | 3 | 1 | - | - | 9 | 77 |
| | Percent | - | - | 8.8 | 16.2 | 25.0 | 26.5 | 17.6 | 4.4 | 1.5 | - | - | 0.0 | 100.0 |
| Oklahoma | Number | - | 1 | 13 | 28 | 58 | 39 | 39 | 18 | 3 | - | - | 102 | 301 |
| | Percent | - | 0.5 | 6.5 | 14.1 | 29.1 | 19.6 | 19.6 | 9.0 | 1.5 | - | - | 0.0 | 100.0 |
| Pennsylvania | Number | - | 3 | 38 | 155 | 165 | 124 | 137 | 38 | 9 | 1 | 2 | 291 | 963 |
| | Percent | - | 0.4 | 5.7 | 23.1 | 24.6 | 18.5 | 20.4 | 5.7 | 1.3 | 0.1 | 0.3 | 0.0 | 100.0 |
| South Dakota | Number | - | - | - | 3 | 8 | 8 | 10 | 2 | - | - | - | 1 | 32 |
| | Percent | - | - | - | 9.7 | 25.8 | 25.8 | 32.3 | 6.5 | - | - | - | 0.0 | 100.0 |
| Texas | Number | - | 13 | 152 | 429 | 454 | 334 | 333 | 97 | 21 | 3 | 1 | 325 | 2,162 |
| | Percent | - | 0.7 | 8.3 | 23.4 | 24.7 | 18.2 | 18.1 | 5.3 | 1.1 | 0.2 | 0.1 | 0.0 | 100.0 |
| Utah | Number | - | 2 | 11 | 49 | 64 | 41 | 47 | 10 | 3 | - | - | 16 | 243 |
| | Percent | - | 0.9 | 4.8 | 21.6 | 28.2 | 18.1 | 20.7 | 4.4 | 1.3 | - | - | 0.0 | 100.0 |
| Washington | Number | - | 1 | 26 | 74 | 86 | 66 | 68 | 12 | 7 | 2 | - | 153 | 495 |
| J | Percent | - | 0.3 | 7.6 | 21.6 | 25.1 | 19.3 | 19.9 | 3.5 | 2.0 | 0.6 | - | 0.0 | 100.0 |
| Total | Number | 1 | 37 | 471 | 1,455 | 1,712 | 1,258 | 1,305 | 373 | 99 | 14 | 7 | 1,477 | 8,209 |
| | Percent | 0.0 | 0.5 | 7.0 | 21.6 | 25.4 | 18.7 | 19.4 | 5.5 | 1.5 | 0.2 | 0.1 | 0.0 | 100.0 |

⁻ Quantity zero

Note: Excludes data for California.

Fetal Death Documentation Table 15-R. Number of fetal deaths by education of mother:
Total of 16 reporting areas; California, Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, and Washington, 2006
(Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.)

| | All fetal deaths | 8th grade or less | 9th - 12th grade no diploma | 12th grade grad or GED | Some college no degree | Assoc. degree | Bachelor degree | Master degree | PhD or Prof. | Unknown |
|-------|---------------------|----------------------|-----------------------------------|---------------------------------|---------------------------------|------------------|--------------------|------------------|-----------------|---------|
| Total | 11,183 | 911 | 2,170 | 2,766 | 1,763 | 559 | 1,247 | 346 | 117 | 1,304 |

⁻ Quantity zero

Fetal Death Documentation Table 18_R.(Revised states). Number of fetal deaths according to method of delivery and age of mother: Total of 16 reporting areas: California, Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah and Washington, 2006 [Fetal death indicate only those with stated or presumed period of gestation of 20 weeks or more; see Technical Appendix.]

| Methods of delivery f | Total Tetal deaths | Total reported | Under 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40-54 | Not |
|---|-----------------------|-------------------|----------|----------|---------|---------|--------|--------|--------------|
| | | All ages | Years | Years | Years | Years | Years | Years | stated |
| 211 | 10000 | F.0 | 1.1 | 10 | 1.0 | 1.2 | 0 | _ | 2610 |
| Attempted forceps / unsuccesful ³ Attempted vacuum extraction / unsuccesful ³ | 10882 10882 | 59 41 | 11 7 | 12 11 | 10 8 | 13 6 | 8 7 | 5 2 | 2610 2622 |
| etal presentation at birth | | | | | | | | | |
| Cephalic | 11183 | 5446 | 671 | 1382 | 1384 | 1064 | 728 | 217 | 2885 |
| Breech | 11183 | 2185 | 303 | 543 | 501 | 447 | 287 | 104 | 2885 |
| Other | 11183 | 667 | 89 | 145 | 172 | 137 | 97 | 27 | 2885 |
| inal route and method of delivery | | | | | | | | | |
| Vaginal/Spontaneous | 11183 | 8726 | 1198 | 2195 | 2174 | 1689 | 1100 | 370 | 614 |
| Vaginal/Forceps | 11183 | 129 | 12 | 28 | 29 | 26 | 22 | 12 | 614 |
| Vaginal/Vacuum | 11183 | 101 | 9 | 29 | 23 | 21 | 14 | 5 | 614 |
| Cesarean | 11183 | 1613 | 113 | 350 | 394 | 373 | 287 | 96 | 614 |
| Cesarian delivery/trial of labor attempted | l³ 1559 | 150 | 15 | 29 | 32 | 36 | 29 | 9 | 502 |
| Hysterotomy/Hysterectomy ³ | 10882 | 181 | 16 | 43 | 44 | 42 | 30 | 6 | 2872 |

⁻ Quality zero

¹ total number of fetal deaths to residents of reporting area.

² No response reported.

³ Oklahoma does not report attempted forceps, attempted vacuum extraction, attempted trial of labor or hysterotomy/hysterectomy.

Fetal Death Documentation Table 19_R (Revised states). Number of congenital anomalities of the fetus by age of mother: Total of 16 reporting areas: California, Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah and Washington, 2006 [Fetal death indicate only those with stated or presumed period of gestation of 20 weeks or more; see Technical Appendix.]

| Congenital anomaly | All fetal deaths ¹ | Congenital Anomaly reported, All ages | Under 20 Years | 20-24 Years | 25-29 Years | 30-34 Years | 35-39 Years | 40-54 Years | Not stated ² |
|---|----------------------------------|--|-------------------|----------------|----------------|----------------|----------------|----------------|----------------------------|
| Anencephaly | 11183 | 3 138 | 23 | 44 | 38 | 18 | 12 | 3 | 933 |
| Menigomyelocele/spina bifida | 11183 | 3 59 | 11 | 11 | 16 | 16 | 4 | 1 | 933 |
| Cyanotic congenital heart desease | 11183 | 3 54 | 8 | 11 | 13 | 10 | 5 | 7 | 933 |
| Congenital diaphragmic hemia | 11183 | 3 23 | 5 | 3 | 6 | 4 | 3 | 2 | 933 |
| Omphalocele | 11183 | 3 52 | 6 | 10 | 11 | 10 | 9 | 6 | 933 |
| Gastroschisis | 11183 | 3 63 | 22 | 19 | 11 | 6 | 4 | 1 | 933 |
| Limb reduction defect | 11183 | 3 44 | 12 | 12 | 9 | 5 | 3 | 3 | 933 |
| Clrft lip(with or without cleft palate) | 11183 | 86 | 8 | 18 | 21 | 15 | 16 | 8 | 933 |
| Cleft palate, alone ³ | 10882 | 2 7 | 1 | 2 | 1 | - | 2 | 1 | 662 |
| Down syndrome | 11183 | 3 111 | 1 | 13 | 23 | 23 | 31 | 20 | 933 |
| Suspected chromosomal disorder ³ | 10882 | 2 367 | 33 | 69 | 85 | 63 | 77 | 40 | 662 |
| Hypospadias | 11183 | 9 | - | 1 | 6 | - | 1 | 1 | 933 |

⁻ Quantity zero

¹ Total number of fetal deaths to residents of areas reporting specified congenital anomalities of the fetus.

² No response reported for specified congenital anomaly.

³ Oklahoma does not report cleft palate, alone or suspected chromosomal disorder.

The SAS System

FETAL DEATH DOCUMENTATION TABLE 21-R (REVISED STATES)

FETAL DEATHS BY PLACE OF DELIVERY, BY AGE OF MOTHER:
TOTAL OF 16 REPORTING AREAS: CALIFORNIA, DELAWARE, FLORIDA, IDAHO, KANSAS, KENTUCKY, MARYLAND, MICHIGAN, NEBRASKA,
NEW HAMPSHIRE, OKLAHOMA, PENNSYLVANIA, SOUTH DAKOTA, TEXAS, UTAH, AND WASHINGTON, 2006
[FETAL DEATHS INCLUDE ONLY THOSE WITH STATED OR PRESUMED PERIOD OF GESTATION OF 20 WEEKS OR MORE.]

| | | AGE OF MOTHER | | | | | | | | | | |
|-------------------------------|--------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|--|
| PLACE OF DELIVERY | Total | 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 | 11,183 | 32 | 1,373 | 2,727 | 2,790 | 2,223 | 1,517 | 476 | 40 | 5 | | |
| Hospital | 10,730 | 31 | 1,320 | 2,630 | 2,668 | 2,151 | 1,443 | 444 | 38 | 5 | | |
| Free standing birthing center | 33 | - | 4 | 5 | 11 | 7 | 3 | 3 | - | - | | |
| Home (total) | 122 | - | 19 | 33 | 36 | 11 | 18 | 5 | - | - | | |
| Planned | 16 | - | 1 | 5 | 5 | 2 | 2 | 1 | - | - | | |
| Unplanned | 71 | - | 18 | 19 | 16 | 7 | 10 | 1 | - | - | | |
| Unknown if planned | 35 | - | - | 9 | 15 | 2 | 6 | 3 | - | - | | |
| Clinic/Doctor's office | 29 | _ | 2 | 3 | 6 | 9 | 6 | 2 | 1 | - | | |
| Other | 43 | - | 7 | 11 | 13 | 3 | 7 | 2 | - | - | | |
| Unknown | 226 | 1 | 21 | 45 | 56 | 42 | 40 | 20 | 1 | - | | |

⁻ Quantity zero

Fetal Death Documentation Table 23-R.(Revised States)Fetal deaths by month prenatal care began.

Total of 15 reporting areas,Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska,
New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, and Washington, 2006

[Fetal deaths include only those with states or presumed period of gestation of 20 weeks or more.]

| Month prenatal care began | Total | 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 | 8,209 | 23 | 1,051 | 2,062 | 2,071 | 1,591 | 1,066 | 315 | 25 | 5 |
| First | 450 | - | 45 | 116 | 109 | 96 | 67 | 16 | 1 | - |
| Second | 1,796 | 6 | 155 | 377 | 485 | 406 | 286 | 75 | 6 | - |
| Third | 1,974 | 3 | 223 | 457 | 528 | 415 | 261 | 79 | 6 | 2 |
| Fourth | 824 | - | 129 | 237 | 185 | 133 | 102 | 33 | 5 | - |
| Fifth | 494 | 2 | 82 | 160 | 120 | 70 | 45 | 15 | - | - |
| Six | 268 | - | 48 | 83 | 65 | 40 | 27 | 5 | - | - |
| Seventh | 103 | - | 27 | 25 | 23 | 14 | 11 | 2 | - | 1 |
| Eighth | 65 | - | 12 | 16 | 15 | 15 | 6 | 1 | - | - |
| Nineth | 27 | - | 3 | 4 | 4 | 9 | 5 | 2 | - | - |
| Tenth | 10 | - | - | 3 | 3 | 1 | 2 | - | 1 | - |
| None | 708 | 7 | 141 | 205 | 162 | 111 | 54 | 26 | 1 | 1 |
| Not stated | 1,490 | 5 | 186 | 379 | 372 | 281 | 200 | 61 | 5 | 1 |

⁻ Quantity zero

Note: Excludes data for California.

Fetal Death Documentation Table 7-U. Fetal deaths by smoking status of mother by age:
Total of 33 reporting states and the District of Columbia, 2006
(Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.)

| Smoking status | | Age of mother | | | | | | | | | | | |
|------------------------------------|--------------------------|----------------------|---------------------|-----------------|-------------------|---------------------|---------------------|---------------------|---------------------|------------------|--|--|--|
| | All fetal deaths | Under | 15-19 Years | | | | | | | | | | |
| | | under 15 years | Total | 15-17 years | 18-19 years | 20-24 years | 25-29 years | 30-34 years | 35-39 years | 40-54 years | | | |
| All races | | | | | | | | | | | | | |
| Total | 14,661 | 53 | 1,760 | 583 | 1,177 | 3,690 | 3,740 | 2,905 | 1,906 | 607 | | | |
| Smoker Non-smoker Not stated | 1,942 10,552 2,167 | 2 44 7 | 268 1,269 223 | 65 433 85 | 203 836 138 | 657 2,524 509 | 521 2,672 547 | 252 2,193 460 | 188 1,398 320 | 54 452 101 | | | |

⁻ Quantity zero.

Note: Excludes data for Hawaii which does not report tobacco use. Also excludes data for California, Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, and Washington which implemented the 2003 Revision to the U.S. Standard Report of Fetal Death. This change resulted in a lack of comparability between data based on the 2003 Revision and data based on the 1989 Revision to the U.S. Standard Report of Fetal Death; see "Detailed Technical Notes."

Fetal death documentation table 11_U. Fetal deaths by method of delivery by age of mother: total of 33 reporting states and the District of Columbia, 2006

(Fetal deaths include only those with stated or presumed period of gestation of 20 weeks or more.)

| Age of mother | | | Method of delivery | | | | | | | | | | | |
|---------------|-----------------|--------|---------------------------------|---------|--------|---------------|---------|--------|---------|---------|--------|-------------|---------------|--|
| | All | | | | Vagi | nal | | Ces | Hyster- | | | | | |
| | fetal deaths | Total | Vaginal birth after cesarean | | | Other vaginal | | | Total | Primary | Repeat | otomy or | Not stated | |
| | | | All/1 | forceps | vacuum | All | Forceps | Vacuum | | - | · | ectomy/2 | 2 | |
| ll ages | 14,661 | 11,550 | 450 | 2 | 5 : | 11,100 | 124 | 123 | 1,870 | 1,152 | 718 | 52 | 1,189 | |
| nder 15 years | 53 | 49 | _ | _ | _ | 49 | _ | _ | 2 | 2 | _ | _ | 2 | |
| 5-19 years | 1,760 | 1,518 | 15 | - | - | 1,503 | 8 | 16 | 139 | 120 | 19 | 2 | 101 | |
| 0-24 years | 3,690 | 2,973 | 93 | _ | 3 | 2,880 | 31 | 23 | 453 | 320 | 133 | 13 | 251 | |
| 5-29 years | 3,740 | 2,924 | 113 | 1 | - | 2,811 | 32 | 27 | 499 | 290 | 209 | 12 | 305 | |
| 0-34 years | 2,905 | 2,186 | 103 | _ | - | 2,083 | 25 | 35 | 431 | 254 | 177 | 13 | 275 | |
| 5-39 years | 1,906 | 1,446 | 92 | _ | 2 | 1,354 | 22 | 16 | 263 | 129 | 134 | 6 | 191 | |
| 0-44 years | 561 | 423 | 32 | 1 | - | 391 | 5 | 6 | 74 | 34 | 40 | 6 | 58 | |
| 5-54 years | 46 | 31 | 2 | - | - | 29 | 1 | - | 9 | 3 | 6 | - | 6 | |

⁻ Quantity zero.

NOTE: Excludes data for California, Delaware, Florida, Idaho, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, and Washington, which implemented the 2003 Revision to the U.S. Standard Report of Fetal Death. This change has resulted in a lack of comparability between data based on the 2003 Revision and the data based on the 1989 Revision to the U.S. Standard Report of Fetal Death: see "Detailed Technical Notes."

Also excludes data for Hawaii which does not report method of delivery; see "Detailed Technical Notes."

¹ Includes fetal deaths that were not delivered by forceps or vacuum extraction.

² Excludes data for Alaska, Connecticut, New York, Oregon, and Wyoming which do not report hysterotomy or hysterectomy.