User Guide to the 2006 Fetal Death Public Use File



2006 Fetal Death Data Set

User's Guide

ACKNOWLEDGMENTS

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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.

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

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

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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 r	nore: 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.	Mother a) Age b) Race c) Marital status d) Education e) 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	un aalumm (Man) th	a following and a amply				•

^{*} For the Version column (Ver) the following codes apply: A 2003 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	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 **
			flictudes offuls to women	aged 30 to 04 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 ava		A,s	AA-ZZ	See Geographic Documentation
96-108	13	BLANK					
109-110	2	MRSTATEPSTL	Mother's Territory of Resic (This item is available in the geographic codes are not ava Territories	territory file only,	A,S	AS GU MP PR VI	American Samoa Guam Northern Marianas Puerto Rico Virgin Islands

^{*} 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
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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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 reportin 01-14 used for individuals a Codes 21-24 used for indiv one race that have been brid Code 24 also used for indiv more than one Asian/Pacific see "Technical Appendix." ** Also includes unrevised race.	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

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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					

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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 Use	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 (R	evised)	A	09-98 99	Father's combined age in years Unknown or not stated
184-185	2	UFAGECOMB	Father's Combined Age (U	nrevised)	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 55-98 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

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

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
259	1	MPCB_REC5	Month Prenatal Care Bega	an 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 * For #	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

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

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Position	Len	Field	Description	Reporting Flag Position	Vers*	Values	Definition
						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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S 1989 Version of US Standard Birth 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				Diank	Not on certificate
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	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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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
463-466	4	DBWT	Birth Weight – Detail in G	rams` A,S	0001-81	65 Numbe 9999	r 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 0350 – 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 structure);	A	Y N	Yes, anomaly reported No, anomaly not reported
492 493 494 495 496 497 498 499	1 1 1 1 1 1 1 or the Versio	CA_ANEN CA_MNSB CA_CCHD CA_CDH CA_OMPH CA_GAST CA_LIMB CA_CLEFT on column (Ver) th	Anencephaly Meningomyelocele / Spina H Cyanotic Congenital Heart I Congenital Diaphragmatic H Omphalocele Gastroschisis Limb Reduction Defect Cleft Lip w/ or w/o Cleft Pal e following codes apply:	Disease 637 Jernia 638 639 640 641		U	Unknown

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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		

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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
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		A		
677	1	BLANK	•				
678	1	DelMethRecF	Delivery Method Recode Fla	ıg	A,S		
679-683	5	BLANK					
684	1	F_URF_DIABETES	Diabetes Flag		A,S		
685-687	3	BLANK					
688	1	F_URF_CHYPER			A,S		
689	1	F_URF_PHYPER	Prep Hyper Flag		A,S		
690	1	F_URF_ECLAMP	Eclampsia		A,S		
691-703	12	BLANK					
703	1	F_UOB_INDUCT	Induction Flag		A,S		
704	1	BLANK					
705	1	F_UOB_TOCOL	Tocolysis Flag		A,S		
706	15	BLANK					
721	1	F_ULD_ BREECH	IBreech Flag		A,S		
722-729		BLANK					
730	1	F_U_VAGINAL	Vaginal Flag (Unrevised)		S		
731	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					
752	1	F_UCA_ANEN	Anencephalus Flag		A,S		
753	1	F_UCA_SPINA	Spina Bifida Flag		A,S		
754-760		BLANK	0 1 1 5				
761	1	F_UCA_OMPHALO	Omphalo Flag		A,S		
762-765		BLANK	CL C. I. El		A G		
766	1	F_UCA_CLEFTLP	Cleft Lip Flag		A,S		
767-770		BLANK	D 0 1 E		A C		
771	1		Downs Syndrome Flag		A,S		
772-779		BLANK	M-4h-n²- M-nit-1 Ctata-		A C		
780	1	F_MS_u	Mother's Marital Status		A,S		
781-793 794		BLANK	Cigarattas par Day (Unravias))	S		
794 795	1	F_CIG/DAY_u	Cigarettes per Day (Unrevise	cu)	S A		
	1	F_NPREV	Number of prenatal visits		A		
796		BLANK					
			following codes apply:				
A	2003 V	ersion of US Stand	ard Birth Certificate				

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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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- 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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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;

```
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 of Occurrence, and TABFLAG is the Tabulation Flag variable.

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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 the box that best describes the highest degree or level of school completed a the time of delivery) 	the box that best describes whether the	otino)
	and anne or denivery,	□ No, not Spanish/Hispanic/Latina	□ Black or African American □ American Indian or Alaska Native
	□ 8th grade or less	☐ Yes, Mexican, Mexican American, Chicana	(Name of the enrolled or principal tribe)
	□ 9th - 12th grade, no diploma	□ Yes, Puerto Rican	☐ Asian Indian☐ Chinese
	 High school graduate or GED completed 	□ Yes, Cuban	□ Filipino
	□ Some college credit but no degree	□ Yes, other Spanish/Hispanic/Latina	☐ Japanese☐ Korean
	□ Associate degree (e.g., AA, AS)	(Specify)	□ Vietnamese
	□ Bachelor's degree (e.g., BA, AB, BS		□ Other Asian (Specify)
	□ Master's degree (e.g., MA, MS,		□ Native Hawaiian□ Guamanian or Chamorro
	MEng, MEd, MSW, MBA)		□ Samoan
	 Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS DVM, LLB, JD) 	;,	□ Other Pacific Islander (Specify) □ Other (Specify)
	22. MOTHER MARRIED? 23 (At delivery, conception, or anytime	3a. DATE OF FIRST PRENATAL CARE VISIT	23b. DATE OF LAST PRENATAL CARE VISIT 24. TOTAL NUMBER OF PRENATAL VISITS FOR THIS PREGNANCY
	between) □ Yes □ No □	M M D D YYYY No Prenatal Care	(If none, enter "0".)
		R'S PREPREGNANCY WEIGHT 27. MOTHER'S WE	CIGHT AT DELIVERY 28. DID MOTHER GET WIC FOOD FOR HERSELF DURING THIS PREGNANCY? Ves No. 1711
	29. NUMBER OF PREVIOUS LIVE BIRTHS	OUTCOMES (spontaneous or induced For each	TE SMOKING BEFORE AND DURING PREGNANCY time period, enter either the number of cigarettes or the number of packs of s smoked. IF NONE, ENTER "0".
	29a. Now Living 29b. Now Dead 30	0a. Other Outcomes	
	Number Number N	Number (Do not include this fetus)	mber of cigarettes or packs of cigarettes smoked per day. # of cigarettes # of packs
	□ None □ None	□ None First Three Second Th	ths Before Pregnancy OR Months of Pregnancy OR ree Months of Pregnancy OR seter of Pregnancy OR
	29c. DATE OF LAST LIVE BIRTH	30b. DATE OF LAST OTHER 32. DATE L	AST NORMAL 33. PLURALITY - Single, 34. IF NOT SINGLE BIRTH- ES BEGAN Twin, Triplet, etc. Born First, Second, Third, etc.
	MM YYYY	/	J
			Y Y Y Y (Specify)(Specify)
		TERNAL MEDICAL OR FETAL INDICATIONS FOR DE Y MOTHER TRANSFERRED FROM:	LIVERY?
MEDICAL	36. RISK FACTORS IN THIS PREGNANC	CY (Check all that apply):	INFECTIONS PRESENT AND/OR TREATED DURING THIS PREGNANCY (Check all that apply)
AND	Diabetes □ Prepregnancy (Diagnosis prior to t	this pregnancy)	□ Gonorrhea
HEALTH	□ Gestational (Diagnosis in this pre	egnancy)	□ Syphilis
	Hypertension		
NFORMATION	Prepregnancy (Chronic)Gestational (PIH, preeclampsia)		□ Chlamydia
	□ Eclampsia		 Listeria
	 Previous preterm birth 		□ Group B Streptococcus
	 Other previous poor pregnancy outcom growth restricted birth) 	ne (Includes perinatal death, small-for-gestational age/in	trauterine
	 Pregnancy resulted from infertility trea 	atment-If yes, check all that apply:	□ Toxoplasmosis
	 Fertility-enhancing drugs, Artificial Intrauterine insemination 	insemination or	None of the above
		and the standard front the standard sta	
	, , ,	e.g., in vitro fertilization (IVF), gamete intrafallopian trans	sfer (GIFT)) Other (Specify)
	Mother had a previous cesarean delive If yes, how many	ery	
	 None of the above 		
	38. METHOD OF DELIVERY A. Was delivery with forceps attempted by	39. MATERNAL MORBIDITY (Check (Complications associated with labout unsuccessful?	
	Yes No	Maternal transfusion	□ Anencephaly□ Meningomyelocele/Spina bifida
	B. Was delivery with vacuum extraction a unsuccessful?	,	
	□ Yes □ No	Ruptured uterus	□ Gastroschisis
	C. Fetal presentation at delivery	□ Unplanned hysterectomy	 Limb reduction defect (excluding congenital amputation and dwarfing syndromes)
	CephalicBreech	 Admission to intensive care unit 	Cleft Lip with or without Cleft PalateCleft Palate alone
	□ Other	 Unplanned operating room proc delivery 	
	D. Final route and method of delivery (Ch □ Vaginal/Spontaneous		Karyotype colliming Suspected chromosomal disorder
	□ Vaginal/Forceps	in the drive	 Karyotype confirmed
	□ Vaginal/Vacuum □ Cesarean		□ Karyotype pending □ Hypospadias
	If cesarean, was a trial of labor atte ☐ Yes ☐ No	empted?	 None of the anomalies listed above
	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			
Aron	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			Х					^	
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			X						
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 attain	
							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	
lowa	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	20.0
Mississippi	432	0.5	3.0	_	3.2	0.2	22.2	
Missouri	456	0.4	4.4	_	2.9	-	13.4	
Montana	54	- 0.4	3.7	_	2.5	_	3.7	
Nebraska	149	_	13.4	_	_	_	5.7	12.8
Nevada	275	1.5	10.9	_	1.5		7.6	12.0
New Hampshire	273 77	1.5	5.2	_	3.9		7.0	11.7
· ·			6.5	0.1	2.7	0.4		11.4
New Jersey New Mexico	783	0.5		0.1			8.3	
	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		6.4	_	1.1	-	6.5	
Oklahoma	301		36.2	-	15.9	13.3		29.2
Oregon	207		1.4	-		0.5	15.0	
Pennsylvania	963		20.4	0.1	16.4	9.1		26.0
Rhode Island	58			-		-	93.1	
South Carolina	589		2.5	-	0.5	-	11.5	
South Dakota	32	-		-	-	-		3.1
Tennessee	400	1.8	2.0	-		0.3	16.8	
Texas	2162		13.8	0.1	0.4	3.7		2.5
Utah	243			-		• • • •		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	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	390	0.5	1.8	-	0.8	_	8.2	
Wisconsin	390	0.5	1.0	_	0.0		0.2	

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 mor	Not re 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
J	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
Journ Danver	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
TCXGO	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	0.2	-	16	243
Can	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
maching con	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	-	2612
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	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.