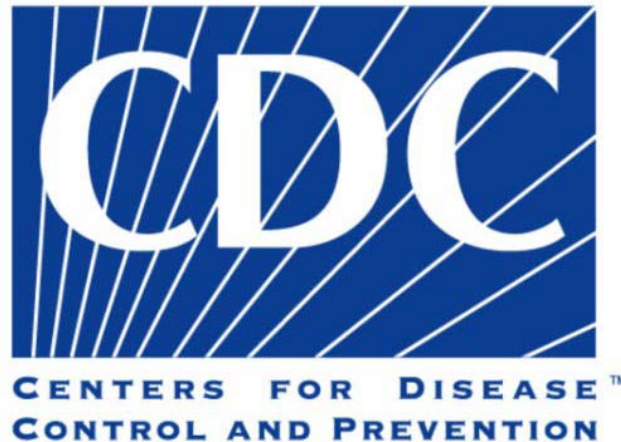


**User Guide
to the
2008 Period Linked
Birth/Infant Death
Public Use File**



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
Division of Vital Statistics

2008 Period Linked Birth/Infant Death Data Set

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Introduction

The linked birth/infant death data set (linked file) is released in two formats - period data and birth cohort data. This documentation is for the 2008 period linked file. Differences between period and birth cohort data are outlined below.

Period data - The numerator for the 2008 period linked file consists of all infant deaths occurring in 2008 linked to their corresponding birth certificates, whether the birth occurred in 2007 or 2008. The denominator file for this data set is the 2008 natality file, that is, all births occurring in 2008.

Birth cohort data - The numerator for the 2008 birth cohort linked file consists of deaths to infants born in 2008 whether the death occurred in 2008 or 2009. The denominator file is the 2008 natality file, that is, all births occurring in 2008.

The 2008 period linked birth/infant death data set includes several data files. The first file includes all US infant deaths which occurred in the 2008 data year linked to their corresponding birth certificates, whether the birth occurred in 2007 or 2008 - referred to as the numerator file. The second file contains information from the death certificate for all US infant death records which could not be linked to their corresponding birth certificates - referred to as the unlinked death file. The third file is the 2008 NCHS natality file for the US, which is used to provide denominators for rate computations. These same three data files are also available for Puerto Rico, the Virgin Islands, and Guam.

In addition, NCHS accepted a small number of late-filed birth records needed to link to infant deaths. This reduced the number of unlinked records and increases the number of births in the denominator file.

1989 and 2003 Revisions of the U.S. Standard Certificate of Live Birth and Certificate of Death

This data file includes birth data based on both the 1989 Revision of the U.S. Standard Certificate of Live Birth (unrevised) and the 2003 revision of the U.S. Standard Certificate of Live Birth (revised). The 2003 revision is described in detail elsewhere. (See the 2003 Revision website at: http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm .

Twenty-seven states and one territory, California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Montana, Nebraska, New Hampshire, New Mexico, New York (including New York City), North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington, Wyoming, and Puerto Rico, implemented the 2003 revision on or before January 1, 2008. Where comparable, revised data are combined with data from the remaining reporting areas. (Revised data are denoted by "R;" unrevised data are denoted by "U" in the "Rev" column of the documentation.) Where data for the 1989 and 2003 certificate revisions are not comparable (e.g., educational attainment of the mother), unrevised and revised data are given in separate fields in the data file.

This file includes mortality data for thirty states (Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Michigan, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Washington, and Wyoming) and the District of Columbia, which implemented the 2003 revision of the U.S. Standard Certificate of Death as of January 1, 2008. Data from all other areas are based on the 1989 revision. Most of the variables from the death certificate in this file are comparable despite changes to item wording and format in the 2003 revision. See more about the 2003 Revision at: http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm .

Incomplete National Reporting - Using Reporting Flags

As a result of the delayed, phased transition to the 2003 U.S. Standard Certificate of Live Birth, the 2008 linked file includes data for reporting areas that use the 2003 revision of the U.S. Standard Certificate of Live Birth (revised) and data for reporting areas that use the 1989 Standard Certificate of Live Birth (unrevised) (see the [2008 Natality User Guide](#)). Although many data items are comparable across certificate revisions and are available for the entire United States, many items have more limited reporting areas. In addition, the 2008 linked file contains information on infants born in both 2007 and 2008 (see description of the period linked file above). As reporting areas changed between 2007 and 2008, this complicates the file. Also, birth data are collected by place of occurrence but are typically tabulated by mother's place of residence. Reporting flags were developed to help the user more readily identify reporting areas for items with less than national reporting for the entirety of 2007 and 2008. Reporting flags are included in the file to assist in accurately excluding records from areas that do not report items when tabulating data by mother's place of residence. Reporting flags are available for most items on the file.

Reporting areas for the 2008 linked file are different from those for the 2008 birth file, as items had to be reported by a state in both 2007 and 2008 to be able to provide complete data. Thus, data for non-comparable items from states that revised in 2008 are excluded from all tabulations. Positions for reporting flags are noted along with each data item in the file layout. Reporting flags must be invoked to generate accurate numbers by residence for items which are not reported by all states. Where applicable, reporting flags are shown in the column "Reporting Flag Position" in the file layout. Reporting flag codes are "0" (item reported in neither the current or previous year), 1 (item reported in both current and previous year), 2 (item reported in the previous but not in the current year), and 3 (item reported in the current but not in the previous year). When using these data, select reporting flag=1 to get valid and complete data for an item (see SAS code examples below).

Translating "blanks" - In the 2008 linked file, for data items which are not common or comparable across certificate revisions, events to residents of a revised state occurring in an unrevised state, and events to residents in an unrevised state occurring in a revised

state, are represented by “blanks.” Blanks should be treated as “unknowns” for tabulations.

The correct use of reporting flags and translation of blanks will result in an accurate tally of births and infant deaths for items with incomplete national reporting.

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

An example of SAS code that may be used to incorporate the correct use of reporting flags and the translation of blanks is shown below. This example is for the revised prenatal care item. Prenatal care data based on the revised certificate are not considered comparable with data based on the unrevised certificate. Accordingly, use of the reporting flag for this item will produce 2008 data for the month prenatal care began for the twenty-two revised states which had implemented the revised certificate by January 1st 2007. Data for states which implemented the revised certificates in 2007 are excluded, as part of their linked file births (those born in 2007) were reported on the unrevised certificate.

Sample SAS program

```
01 DATA work;
02     INFILE 'C:\VS08LINK.USNUMPUB' LRECL=1259;
03     INPUT
04         restatus 138
05         precare 245-246
06         f_mpcb 668;
07
08     /*Exclude foreign residents*/
09     IF restatus NE 4;
10     /*Select reporting area*/
11     IF f_mpcb=1;
12     /*Convert blanks to unknown*/
13     IF precare=. THEN precare=99;
14
15 PROC FREQ;
16     TABLE precare;
17 RUN;
```

In this example, “restatus” is used to exclude births to foreign residents (this is standard practice for all NCHS tabulations). Also in this example, blanks are represented by numeric values SAS code = (.). However, for some items in the file, e.g., obstetric procedures, blanks are represented by character values for which the SAS code is empty single quotes (‘ ’).

Alternatives to the use of reporting flags - The use of reporting flags provides a relatively quick, accurate way to select records for all areas reporting comparable data for a given item in a particular year. However, should a limited reporting area be needed, specific state(s) of residence may also be selected, or unselected. This approach may be useful,

for example, in trend analysis where reporting areas have changed over time. See Table B in the “Natality Technical Appendix” for state-specific information on reporting areas. This approach may also be used to limit the reporting area to only states reporting multiple or single race data (see multiple race section below).

Example of SAS code using state of residence (and translating blanks)

```
01 DATA work;
02     INFILE 'C:\VS08LINK.USNUMPUB ' LRECL=1259;
03     INPUT
04         restatus 138
05         xmrstate $ 107-108
06         precare 245-246;
07
08     /*Exclude foreign residents*/
09     IF restatus NE 4;
10     /*Select reporting area*/
11     IF xmrstate in ('ID','KY','NY','PA','SC','TN','WA');
12     /*Convert blanks to unknown*/
13     IF precare=. THEN precare=99;
14
15 PROC FREQ;
16     TABLE precare;
17 RUN;
```

Single, Multiple, and Bridged Race

In 1997, the Office of Management and Budget (OMB) issued revised standards requiring Federal collection programs to allow respondents to select *one or more race categories*. In 2008 data, thirty areas reported multiple race data: California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, and Wyoming. For the 2008 period linked file, complete data for both 2007 and 2008 births are available from 27 states: California, Colorado, Delaware, Florida, Georgia (for births after January 1 only), Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan (for most facilities), Minnesota, Nebraska, New Hampshire, New York State (excluding New York City), North Dakota, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, and Wyoming.

In 2008, multiple race data were reported on the death certificates of Arkansas, California, Connecticut, Delaware, the District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Maine, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont (for deaths

starting July 1st), Washington, Wisconsin, and Wyoming. In order to provide uniformity and comparability of the data before all or most of the data are available in the new multiple-race format, it was necessary to “bridge” the responses of those for whom more than one race was reported (multiple race) to one, single race. See the “Technical Notes” of [Births: Final Data for 2008](#) and [Deaths: Final Data for 2008](#).

Weighting

Beginning with the 1995 linked file, a weight was added to the linked numerator file to correct in part for biases in percent of records linked by major characteristics (see section below on Percent of records linked). The number of infant deaths in the linked file are weighted to equal the sum of the linked plus unlinked infant deaths by age at death and state. The formula for computing the weights is as follows:

$$\frac{\text{number of linked infant deaths} + \text{number of unlinked infant deaths}}{\text{number of linked infant deaths}}$$

A separate weight is computed for each state of residence of birth and each age at death category (<7 days, 7-27 days, 28 days-1 year). Thus, weights are 1.0 for states which link all of their infant deaths. The denominator file is not weighted. Weights are not computed for the Puerto Rico, Virgin Islands, and Guam file.

Birthweight

Beginning with the 1995 linked file, an imputation for not-stated birthweight was added to the data set, to reduce potential bias in the computation of birthweight-specific infant mortality rates. Basically, if birthweight is not stated and the period of gestation is known, birthweight is assigned the value from the previous record with the same period of gestation, race, sex, and plurality. Imputed values are flagged. The addition of this imputation has reduced the percent of not-stated responses for birthweight from 3.26 to 0.48 in the numerator file, and from 0.10 to 0.02 in the denominator file, thus greatly reducing the potential for underestimation when computing birthweight-specific infant mortality rates.

Comparisons of infant mortality data from the linked file with infant mortality data from the vital statistics mortality file

Although the time periods are the same, numbers of infant deaths and infant mortality rates by characteristics are not always identical between the period linked file and the vital statistics mortality file. Differences in numbers of infant deaths between the two data sources are primarily due to geographic coverage differences. For the vital statistics mortality file, all deaths occurring in the 50 states and the District of Columbia are included regardless of the place of birth of the infant. In contrast, to be included in the linked file, both the birth and death must occur in the 50 states and the District of Columbia. Also, although every effort has been made to design weights that will accurately reflect the distribution of deaths by characteristics, weighting may contribute to small differences in

numbers and rates by specific variables between these two data sets. In most cases, differences between numbers of infant deaths and infant mortality rates between the linked file and those computed from the vital statistics mortality file are negligible.

Methodology

The methodology used to create the national file of linked birth and infant death records takes advantage of two existing data sources:

1. State linked files for the identification of linked birth and infant death certificates; and
2. NCHS natality and mortality computerized statistical files, the source of computer records for the two linked certificates.

States routinely link infant death certificates to their corresponding birth certificates for legal and statistical purposes. When the birth and death of an infant occur in different states, copies of the records are exchanged by the state of death and state of birth in order to effect a link. In addition, if a third state is identified as the state of residence at the time of birth or death, that state is also sent a copy of the appropriate certificate by the state where the birth or death occurred.

The NCHS natality and mortality files, produced annually, include statistical data from birth and death certificates that are provided to NCHS by states under the Vital Statistics Cooperative Program (VSCP). The data have been coded according to uniform coding specifications, have passed rigid quality control standards, have been edited and reviewed, and are the basis for official U.S. birth and death statistics.

To initiate processing, NCHS obtained matching birth certificate numbers from states for all infant deaths that occurred in their jurisdiction. We used this information to extract final, edited mortality and natality data from the NCHS natality and mortality statistical files. Individual birth and death records were selected from their respective files and linked into a single statistical record, thereby establishing a national linked record file.

After the initial linkage NCHS returns to the states where the death occurred and provides computer lists of unlinked infant death certificates for follow up linking. If the birth occurred in a state different from the state of death, the state of birth identified on the death certificate was contacted to obtain the linking birth certificate. State additions and corrections were incorporated, and a final, national linked file was produced. Characteristics of the natality and mortality data from which the linked file is constructed are described in detail in the User Guide and Final Reports linked in this document.

Characteristics of Unlinked File

For the 2008 linked file 1.3% of all infant death records could not be linked to their corresponding birth certificates. Unlinked records are included in a separate data file in this data set. The unlinked record file uses the same record layout as the numerator file of

linked birth and infant death records. However, except as noted below, locations reserved for information from the matching birth certificate are blank since no matching birth certificate could be found for these records. The sex field contains the sex of infant as reported on the death certificate, rather than the sex of infant from the birth certificate, which is not available. The race field contains the race of the decedent as reported on the death certificate rather than the race of mother as reported on the birth certificate as is the case with the linked record file. The race of mother on the birth certificate is generally considered to be more accurate than the race information from the death certificate (see section on Race and Hispanic origin in "Deaths: Final Data for 2008" included in this documentation). Also, date of birth as reported on the death certificate is used to generate age at death. This information is used in place of date of birth from the birth certificate, which is not available. Documentation table 6 shows counts of unlinked records by race and age at death for each state of residence. The user is cautioned in using table 6 that the race and residence items are based on information reported on the death certificate, whereas tables 1-5 present data from the linked file in which the race and residence items are based on information reported on the birth certificate.

Percent of Records Linked

The 2008 linked file for the 50 States and D.C. includes 27,748 linked infant death records and 359 unlinked infant death records. The linked file is weighted to the sum of linked plus unlinked records, thus the total number of weighted infant deaths by place of occurrence is 28,107. While the overall percent linked for infant deaths in the 2008 file is 98.7%, there are differences in percent linked by certain variables. These differences have important implications for how the data is analyzed.

Table 1 below shows the percent of infant deaths linked by state of occurrence of death. While many states link all of their infant deaths, linkage rates for some states are below the national average. Note in particular the percent linked for Louisiana (96.0), Texas (95.0), and Utah (96.2). When a high percentage of deaths remain unlinked, unweighted infant mortality rates computed for these states are underestimated. It is for this reason that weights were added to the file to correct for biases in the data due to poor data linkage for particular states.

Table 1. Percent of infant deaths linked by state of occurrence of death: United States, 2008 linked file

United States	98.7	Nebraska	99.4
Alabama	100.0	Nevada	100.0
Alaska	98.4	New Hampshire	100.0
Arizona	97.5	New Jersey	98.9
Arkansas	100.0	New Mexico	98.1
California	97.5	New York State	100.0
Colorado	100.0	New York City	99.3
Connecticut	100.0	North Carolina	99.7
Delaware	100.0	North Dakota	100.0

District of Columbia	98.2	Ohio	98.6
Florida	99.8	Oklahoma	97.7
Georgia	98.6	Oregon	99.6
Hawaii	100.0	Pennsylvania	99.8
Idaho	100.0	Rhode Island	98.8
Illinois	98.7	South Carolina	100.0
Indiana	99.7	South Dakota	100.0
Iowa	99.5	Tennessee	100.0
Kansas	100.0	Texas	95.0
Kentucky	99.4	Utah	96.2
Louisiana	96.0	Vermont	100.0
Maine	100.0	Virginia	99.3
Maryland	100.0	Washington	100.0
Massachusetts	100.0	West Virginia	99.4
Michigan	99.7	Wisconsin	99.8
Minnesota	100.0	Wyoming	100.0
Mississippi	99.5	Puerto Rico	98.7
Missouri	99.3	Virgin Islands	75.0
Montana	100.0	Guam	93.3

While the weighting protocol has been designed to correct for possible bias due to variations in match rates by characteristics, no statistical method can correct perfectly for data limitations. Therefore, slight variations in the percent of records linked should be taken into consideration when comparing infant mortality rates by detailed characteristics.

Confidentiality

To minimize the risk of disclosure of individual or institutional information NCHS public-use data files do not contain the actual day of the birth or the dates of birth of the mother or father. Also, for public-use files from 2005 forward, no U.S. geographic detail is identified.

Documents

The documents listed below describe in detail the procedures employed for demographic classification on both the birth and death records and medical classification on death records. These documents, while not absolutely essential to the proper interpretation of the data for a number of general applications, should nevertheless be studied carefully prior to any detailed analysis of demographic or medical data variables. In particular, there are a number of details about multiple cause-of-death coding which, if not understood and analyzed properly, may result in faulty analysis of the data. Volumes 1, 2 and 3 of the ICD-10 may be purchased from the World Health Organization (WHO) Publication Center USA, see <http://www.cdc.gov/nchs/icd/icd10.htm> . Many of the instruction manuals listed below are available electronically on the NCHS website. The User Guide for natality and the mortality final report for 2008 included linked in this document also provide information on the source of data, coding procedures, quality of the data, etc.

- A. National Center for Health Statistics. Vital statistics, Instructions for Classifying the Underlying Cause-of-Death, 2008. NCHS Instruction Manual, Part 2a. Hyattsville, Maryland: Public Health Service.
- B. National Center for Health Statistics. Vital statistics, Instructions for Classifying Multiple Cause-of-Death, 2008. NCHS Instruction Manual, Part 2b. Hyattsville, Maryland: Public Health Service.
- C. National Center for Health Statistics. Vital statistics, ICD-10 ACME Decision Tables for Classifying Underlying Causes-of-Death, 2008. NCHS Instruction Manual, Part 2c. Hyattsville, Maryland: Public Health Service.
- D. National Center for Health Statistics. Specifications for U.S. Standard Certificate of Birth – 2003 Revision.
- E. National Center for Health Statistics. Specifications for U.S. Standard Certificate of Death – 2003 Revision.
- F. National Center for Health Statistics. Vital statistics, Computer Edits for Natality Data, Effective 1993. NCHS Instruction Manual Part 12. Hyattsville, Maryland: Public Health Service.
- G. National Center for Health Statistics. Vital statistics, Computer Edits for Mortality Data, Effective 2008 and 2009. NCHS Instruction Manual Part 11. Hyattsville, Maryland: Public Health Service.

Instructions manuals are available at:

http://www.cdc.gov/nchs/nvss/instruction_manuals.htm

Also see: http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm for the most recent information about revised certificates.

Underlying Cause of Death Data

Mortality statistics by cause of death are compiled from entries on the medical certification portion of the death certificate. Causes of death include “all those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced these injuries”. The medical certification of death is divided into two sections. In Part I, the physician is asked to provide the causal chain of morbid conditions that led to death, beginning with the condition most proximate to death on line (a) and working backwards to the initiating condition. Part I of the medical certification is designed to facilitate the selection of the underlying cause of death when two or more causes are recorded on the certificate. The underlying cause of death is defined by the WHO in the ICD-10 as “(a) the disease or injury which initiated the chain of morbid events leading directly to death, or (b) the circumstances of the accident or violence that produced the fatal injury” and is generally

considered the most useful cause from a public health standpoint. Part II of the cause-of-death section of the death certificate solicits other conditions that the certifier believed contributed to death, but were not in the causal chain. While some details of the death certificate vary by state, all states use the same general format for medical certification outlined in the U.S. Standard Certificate. The U.S. Standard Certificate, in turn, closely follows the format recommended by the WHO.

For a given death, the underlying cause is selected from the condition or conditions recorded by the certifier in the cause-of-death section of the death certificate. NCHS is bound by international agreement to make the selection of the underlying cause through the use of the ICD-10 classification structure, and the selection and modification rules contained in this revision of the ICD. Additional information on the underlying cause of death can be found at <http://www.cdc.gov/nchs/data/dvs/mort99doc.pdf> .

In addition to changes due to the implementation of a new ICD revision, rules for coding a cause of death may occasionally require modification at other times, when evidence suggests that such modifications will improve the quality of cause-of-death data. These changes may affect comparability of data between years for select causes of death.

Multiple Cause of Death Data

The limitations of the underlying cause concept and the need for more comprehensive data suggested the need for coding and tabulating all conditions listed on the death certificate. Coding all listed conditions on the death certificate was designed with two objectives in mind. First, to facilitate studies of the relationships among conditions reported on the death certificate, which require presenting each condition and its location on the death certificate in the exact manner given by the certifier. Secondly, the coding needed to be carried out in a manner by which the underlying cause-of-death could be assigned using the WHO coding rules. Thus, the approach in developing multiple cause data was to provide two fields: 1) entity axis and 2) record axis. For entity axis, NCHS suspends the provisions of the ICD that create linkages between conditions for the purpose of coding each individual condition, or entity, with minimum regard to other conditions present on the death certificate.

Record axis is designed for the generation of person-based multiple cause statistics. Person-based analysis requires that each condition be coded within the context of every other condition on the same death certificate and modified or linked to such conditions as provided by ICD-10. By definition, the entity data cannot meet this requirement since the linkage provisions modify the character and placement of the information originally recorded by the certifier. Essentially, the axis of the classification has been converted from an entity basis to a record (or person) basis. The record axis codes are assigned in terms of the set of codes that best describe the overall medical certification portion of the death certificate. Additional information on multiple cause data processing can be found at <http://www.cdc.gov/nchs/data/dvs/mort99doc.pdf> .

Entity Axis Codes

The original conditions coded for selection of the underlying cause-of-death are reformatted and edited prior to creating the public-use data file. The following paragraphs describe the format and application of entity axis data.

1. *Format.* Each entity-axis code is displayed as an overall seven byte code with subcomponents as follows:

1. Line indicator: The first byte represents the line of the death certificate on which the code appears. Six lines (1-6) are allowable with the fourth and fifth denoting one or two written in "due to"s beyond the three lines provided in Part I of the U.S. standard death certificate. Line "6" represents Part II of the death certificate.
2. Position indicator: The next byte indicates the position of the code on the line, i.e., it is the first (1), second (2), third (3) eighth (8) code on the line.
3. Cause category: The next four bytes represent the ICD-10 cause code.
4. The last byte is blank.

A maximum of 20 of these seven byte codes are captured on a record for multiple cause purposes. This may consist of a maximum of 8 codes on any given line with up to 20 codes distributed across three or more lines depending on where the subject conditions are located on the certificate. Codes may be omitted from one or more lines, e.g., line 1 with one or more codes, line 2 with no codes, line 3 with one or more codes.

In writing out these codes, they are ordered as follows: line 1 first code, line 1 second code, etc. ----- line 2 first code, line 2 second code, etc. ----- line 3 ---- line 4 ----- line 5 ----- line 6. Any space remaining in the field is left blank. The specifics of locations are contained in the record layout given later in this document.

2. Edit. The original conditions are edited to remove invalid codes, reverify the coding of certain rare causes of death, and assure age/cause and sex/cause compatibility. Detailed information relating to the edit criteria and the sets of cause codes which are valid to underlying cause coding and multiple cause coding are provided in NCHS Instruction Manual Part 11.

3. Entity Axis Applications. The entity axis multiple cause data file is appropriate for analyses that require that each condition be coded as a stand alone entity without linkage to other conditions and/or require information on the placement of such conditions in the death certificate. Within this framework, the entity data are appropriate to examine relationships among conditions and the validity of traditional assumptions in underlying cause selection. Additionally, the entity data provide in certain categories a more detailed

code assignment that could be excluded in creating record axis data. Where such detail is needed for a study, the user should use entity data. Finally, the researcher may not wish to be bound by the assumptions used in the axis translation process.

The main limitation of entity axis data is that it does not necessarily reflect the best code for a condition when considered within the context of the medical certification as a whole. As a result, certain entity codes can be misleading or even contradict other codes in the record. For example, category K80.2 is titled "Calculus of gallbladder without cholecystitis." Within the framework of entity codes this is interpreted to mean that the codable entity itself contained no mention of cholecystitis rather than that cholecystitis was not mentioned anywhere on the record. Tabulation of records with a "K80.2" as a count of persons having Calculus of gallbladder without cholecystitis would therefore be erroneous. This illustrates the fact that under entity coding the ICD-10 titles cannot be taken literally. The user should study the rules for entity coding as they relate to his/her research prior to use of entity data. The user is further cautioned that the inclusion notes in ICD-10 that relate to modifying and combining categories are seldom applicable to entity coding (except where provided in NCHS Instruction Manual Part 2b).

In tabulating the entity axis data, one may count codes with an individual code representing the number of times the condition(s) appears in the file. In this kind of tabulation of morbid conditions, the counts among categories may be added together to produce counts for groups of codes. Alternatively, subject to the limitations given above, one may count persons having mention of the disease represented by a code or codes. In this instance it is not correct to add counts for individual codes to create person counts for groups of codes. Since more than one code in the researcher's interest may appear together on the certificate, totaling must account for higher order interactions among codes. Up to 20 codes may be assigned on a record; therefore, a 20-way interaction is theoretically possible. All totaling must be based on mention of one or more of the categories under investigation.

Record Axis Codes

The following paragraphs describe the format and application of record-axis data. Part 2f of the Instruction Manual Series (ICD-10 TRANSAX Disease Reference Tables for classifying Multiple Causes-of-Death) describes the TRANSAX process for creating record axis data from entity axis data.

1. Format. Each record (or person) axis code is displayed in five bytes. Location information is not relevant. The Code consists of the following components:

1. Cause category: The first four bytes represent the ICD-10 cause code.
2. The last byte is blank.

Again, a maximum of 20 codes are captured on a record for multiple cause purposes. The codes are written in a 100-byte field in ascending code number (5 bytes) order with any unused bytes left blank.

2. Edit. The record axis codes are edited for rare causes and age/cause and sex/cause compatibility. Likewise, individual code validity is checked. The valid code set for record axis coding is the same as that for entity coding.

3. Record Axis Applications. The record axis multiple cause data are the basis for NCHS core multiple cause tabulations. Location of codes is not relevant to this data, and conditions have been linked into the most meaningful categories for the certification. The most immediate consequence for the user is that the codes on the record already represent mention of a disease assignable to that particular ICD-10 category. This is in contrast to the entity code which is assigned each time such a disease is reported on different lines of the certification. Secondly, the linkage implies that within the constraints of ICD-10 the most meaningful code has been assigned. The translation process creates for the user a data file that is edited for contradictions, duplicate codes, and imprecisions. In contrast to entity axis data, record axis data are classified in a manner comparable to underlying cause of death classification thereby facilitating joint analysis of these variables. A potential disadvantage of record axis data is that some detail is sacrificed in a number of the linkages.

The user can take the record axis codes as literally representing the information conveyed in ICD-10 category titles. While knowledge of the rules for combining and linking and coding conditions is useful, it is not a prerequisite to meaningful analysis of the data as long as one is willing to accept the assumptions of the axis translation process. The user is cautioned, however, that due to special rules in mortality coding, not all linkage notes in ICD-10 are used. (NCHS Instruction Manual Part 2f).

The user should proceed with caution in using record axis data to count conditions as opposed to people with conditions, since linkages have been invoked and duplicate codes have been eliminated. As with entity data, person-based tabulations that combine individual cause categories must take into account the possible interaction of up to 20 codes on a single certificate.

Additional Information

In using the NCHS multiple cause data files, the user is urged to review the information in this document and its references. The instructional material does change from year to year and ICD revision to ICD revision. The user is cautioned that coding of specific ICD-10 categories should be checked in the appropriate instruction manual. What may appear on the surface to be the correct code by ICD-10 may in fact not be correct as given in the instruction manuals.

If on the surface it is not obvious whether entity axis or record axis data should be employed in a given application, detailed examination of NCHS Instruction Manual Part 2f

and its attachments will probably provide the necessary information to make a decision. It allows the user to determine the extent of the trade-offs between the two sets of data in terms of specific categories and the assumption of axis translation. In certain situations, a combination of entity and record axis data may be the more appropriate alternative.

2008 Period Linked Birth/Infant Death Data Set

Numerator Files:

United States

A. Record count:	27,748
B. Record length:	1,259
C. Data counts:	a. By occurrence: 27,748 b. By residence: 27,717 c. To foreign residents: 31

Territories

A. Record count:	419
B. Record length:	1,259

Denominator Files:

United States

A. Record count:	4,255,188
B. Record length:	868
C. Data counts:	a. By occurrence: 4,255,188 b. By residence: 4,247,726 c. To foreign residents: 7,462

Territories

A. Record count:	50,991
B. Record length:	868

Unlinked Files:

United States

A. Record count:	359
B. Record length:	1,259

Territories

A. Record count:	9
B. Record length:	1,259

Linked 2008 Data Elements and Locations

Data Items	Denominator File	Numerator File		Unlinked File
		Birth	Death	
General				
Year of birth	15-18	15-18	--	15-18*
Year of death	--	--	1188-91	1188-91
Resident status	138	138	1151	1151
Record weight	--	893	--	--
Flag indicating records included in both numerator and denominator	868	868	--	--
Infant				
Age at death	--	--	872-77	872-77+
Race	--	--	--	139-44*
Sex	436	436	--	436*
Gestation	451-57	451-57	--	--
Birthweight	467-73	467-73	--	--
Plurality	423	423	--	--
Apgar score	415-17	415-17	--	--
Day of week, birth/death	29	29	1187	1187
Month, birth/death	19-20	19-20	1258-59	1258-59
Mother				
Age	89-93	89-93	--	--
Race	139-44	139-44	--	--
Education	155-58	155-58	--	--
Marital status	153	153	--	--
Hispanic origin	148-49	148-49	--	--
Father				
Age	182-87	182-87	--	--
Race	188-91, 199-200	188-91, 199-200	--	--
Hispanic origin	195-96	195-96	--	--

Pregnancy items				
Month pre-care began	245-47, 256-59	245-47, 256-59	--	--
Number prenatal visits	270-73	270-73	--	--
Live birth order	212	212	--	--
Total birth order	217	217	--	--
Month of last live birth	220-21	220-21	--	--
Year of last live birth	222-25	222-25	--	--
Medical and health data				
Method of delivery	390-403	390-403	--	--
Medical risk factors	313-19, 328-37	313-19, 328-37	--	--
Tobacco	284-94	284-94	--	--
Weight gain during preg	276-78	276-78	--	--
Obstetric procedures	351-61	351-61	--	--
Complications / Characteristics of L/D	365-89	365-89	--	--
Abnormal conditions	476-82	476-82	--	--
Congenital anomalies	492-523	492-523	--	--
Underlying cause, death	--	--	884-87	884-87
130 infant cause recode	--	--	889-91	889-91
Multiple conditions	--	--	903-1148	903-1148
Other items				
Residence reporting				
Flags	569-771	569-771	--	--
Late record flag	9	9	--	--
Place of birth	42,59	42,59	--	--
Attendant at birth	410	410	--	--
Place of death and decedent's status	--	--	1186	1186
Place of injury	--	--	882	882
Manner of death	--	--	878	878
Method of disposition	--	--	879	879
Autopsy	--	--	880	880

* For the unlinked file, these items are from the death certificate.

+ For the unlinked file, date of birth as reported on the death certificate is used to generate age at death.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
2008 LINKED FILE PUBLIC-USE RECORD LAYOUT							
1-6	6	FILLER	Filler				
7	1	REVISION	Revision		U,R	R U	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	FILLER	Filler				
9	1	LATEREC	Late Record Flag		U,R	0 1	Not late record Late record
10-14	5	FILLER	Filler				
15-18	4	DOB_YY	Birth Year		U,R	2007 2008	2007 2008
19-20	2	DOB_MM	Birth Month		U,R	01 02 03 04 05 06 07 08 09 10 11 12	January February March April May June July August September October November December
21-28	8	FILLER	Filler				
29	1	DOB_WK	Weekday		U,R	1 2 3 4 5 6 7	Sunday Monday Tuesday Wednesday Thursday Friday Saturday
30-31	2	OSTATE	Occurrence Territory		U,R		
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
		U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
		R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			(This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			<u>Outlying Areas of the U.S.</u>			GU PR VI	Guam Puerto Rico Virgin Islands
32-36	5	FILLER	Filler				
37-39	3	OCNTYFIPS	Occurrence County (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R		
			<u>Puerto Rico</u>			127 999	San Juan County less than 250,000
			<u>Other Outlying Areas of the U.S.</u>			000 999	No county level geography County less than 250,000
40	1	OCNTYPOP	Occurrence County Pop (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R	0 1 2 9	County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County less than 250,000
41	1	BFACIL	Birth Place (Revised)	676	R	1 2 3 4 5 6 7 9 Blank	Hospital Freestanding Birthing Center Home (intended) Home (not intended) Home (unknown if intended) Clinic / Doctor's Office Other Unknown Not on certificate
42	1	UBFACIL	Birth Place		U,R	1 2 3 4 5 9	Hospital Freestanding Birthing Center Clinic / Doctor's Office Residence Other Unknown
43-58	16	FILLER	Filler				
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
		U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
		R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
59	1	BFACIL3	Birth Place Recode		U,R	1 2 3	In Hospital Not in Hospital Unknown or Not Stated
60-86	27	FILLER	Filler				
87	1	MAGE_IMPFLG	Mother's Age Imputed		U,R	Blank 1	Age not imputed Age imputed
88	1	MAGE_REPFLG	Reported Age of Mother Flag		U,R	Blank 1	Reported age not used Reported age used
89-90	2	MAGER	Mother's Age Recode 41		U,R	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	10 – 12 years 13 years 14 years 15 years 16 years 17 years 18 years 19 years 20 years 21 years 22 years 23 years 24 years 25 years 26 years 27 years 28 years 29 years 30 years 31 years 32 years 33 years 34 years 35 years 36 years 37 years 38 years 39 years 40 years 41 years 42 years

* U,R Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						43	43 years
						44	44 years
						45	45 years
						46	46 years
						47	47 years
						48	48 years
						49	49 years
						50	50 -54 years
91-92	2	MAGER14	Mother's Age Recode 14		U,R	01	Under 15 Years
						03	15 years
						04	16 years
						05	17 years
						06	18 years
						07	19 years
						08	20-24 years
						09	25-29 years
						10	30-34 years
						11	35-39 years
						12	40-44 years
						13	45-49 years
						14	50-54 years
93	1	MAGER9	Mother's Age Recode 9		U,R	1	Under 15 years
						2	15-19 years
						3	20-24 years
						4	25-29 years
						5	30-34 years
						6	35-39 years
						7	40-44 years
						8	45-49 years
						9	50-54 years
94-95	2	MBCNTRY	Mother's Birth Country (This item is available in the territory file only, geographic codes are not available in the U.S.file)		R**	AA-ZZ	A complete list is shown in the Geographic Code Outline.

** Also includes unrevised territories/possessions that use new geographic coding.

96-108 13 FILLER **Filler**

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
109-110	2	MR TERR	Mother's Residence (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R	GU PR VI CC CU MX US XX ZZ	Guam Puerto Rico Virgin Islands Canada Cuba Mexico United States Not Applicable Not Classifiable
111-113	3	FILLER	Filler				
114-116	3	MRCNTY	Mother's County of residence (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			<u>Puerto Rico</u>			127 999	San Juan County of less than 250,000 or foreign resident
			<u>Other Outlying Areas of the US</u>			000 999	No county level geography County of less than 250,000 or foreign resident
117-131	15	FILLER	Filler				
132	1	RCNTY_POP	Population of Residence County (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R	0 1 2 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 less than 250,000 Foreign resident
133-136	4	FILLER	Filler				
137	1	RECTYPE	Record Type (This item is available in the territory file only, geographic codes are not		U,R	1 2	RESIDENT: State and county of occurrence and residence are the same. NONRESIDENT: State and county of occurrence and
* U,R			Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
U			Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
R			Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			available in the U.S.file)				residence are different.
138	1	RESTATUS	Residence Status <u>United States</u>		U,R	1	RESIDENT: State and county of occurrence and residence are the same.
						2	INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different.
						3	INTERSTATE NONRESIDENT: State of occurrence and residence are different but both are one of the 50 US states or District of Columbia.
						4	FOREIGN RESIDENT: The state of residence is not one of the 50 US states or District of Columbia.
			<u>Outlying areas of the US</u>			1	RESIDENT: State and county of occurrence and residence are the same. (Unique to Guam, all US residents are considered residents of Guam and thus are assigned 1.)
						2	INTRATERRITORY NONRESIDENT: Territory of occurrence and residence are the same but county is different.
						2	INTERTERRITORY RESIDENT: Territory of occurrence and residence are different but both are US Territories.
						3	FOREIGN RESIDENT: The residence is not a US Territory.
139-140	2	MBRACE	Mother's Bridged Race Includes only states reporting multiple race. Codes 01-14 used for individuals reporting only one race. Codes 21-24 used for individuals reporting more than one race that have been bridged to a single race. Code 24 also used for individuals reporting more than one Asian/Pacific Islander group; see "Technical Appendix."		R**	01	White – single race
						02	Black – single race
						03	American Indian/Alaska Native – single race
						04	Asian Indian – single race
						05	Chinese – single race
						06	Filipino – single race
						07	Japanese – single race
						08	Korean – single race
						09	Vietnamese – single race
						10	Other Asian – single race
						11	Hawaiian – single race
						12	Guamanian – single race
						13	Samoan – single race
						14	Other Pacific Islander – single race
						21	White – bridged multiple race
						22	Black – bridged multiple race
						23	American Indian / Alaska Native – bridged multiple race
						24	Asian / Pacific Islander – bridged multiple race
						Blank	Not on certificate

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
141-142	2	MRACE	Mother's Race Includes only states exclusively reporting single race. Some areas report additional Asian or Pacific Islander (API) codes for race. Codes 18-68 replace former code 08 for these areas. Code 78 replaces former code 08 for all other areas. See reporting flag at position 650 for API reporting area.		U		
			<u>United States</u>			01 02 03 04 05 06 07 18 28 38 48 58 68 78	White Black American Indian / Alaskan Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Asian Indian Korean Samoan Vietnamese Guamanian Other Asian or Pacific Islander in areas reporting codes 18-58. Combined other Asian or Pacific Islander, includes 18-68 for areas that do not report them separately.
						Blank	Not on certificate
			<u>Puerto Rico</u>			01 02 00 Blank	White Black Other races Not on certificate
			<u>Guam</u>			01 02 03 04 05 06 07 08 58 Blank	White Black American Indian / Alaska Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Guamanian Not on certificate

* U,R Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			<u>All other Outlying Areas of the US</u>			01 02 03 04 05 06 07 08 Blank	White Black American Indian / Alaska Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Not on certificate
143	1	MRACEREC	Mother's Race Recode Includes individuals reporting only one race and individuals reporting more than one race bridged to a single race.		U,R		
			<u>United States and all Outlying Areas of the United States except Puerto Rico</u>			1 2 3 4	White Black American Indian / Alaskan Native Asian / Pacific Islander
			<u>Puerto Rico</u>			1 2 0	White Black Other (not classified as White or Black)
144	1	MRACEIMP	Mother's Race Imputed Flag		U,R	Blank 1 2	Mother's race not imputed Unknown race imputed All other races, formerly coded 09, imputed.
145-147	3	FILLER	Filler				
148	1	UMHISP	Mother's Hispanic Origin	569	U,R	0 1 2 3 4 5 9	Non-Hispanic Mexican Puerto Rican Cuban Central American Other and Unknown Hispanic Origin unknown or not stated
149	1	MRACEHISP	Mother's Race/Hispanic Origin	569	U,R	1 2 3	Mexican Puerto Rican Cuban

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						4	Central or South American
						5	Other and Unknown Hispanic
						6	Non-Hispanic White
						7	Non-Hispanic Black
						8	Non-Hispanic Other Races
						9	Origin unknown or not stated
150-152	3	FILLER	Filler				
153	1	MAR	Mother's Marital Status		U,R		
			<u>United States and all Outlying Areas of the US except Puerto Rico</u>			1	Yes
						2	No
						9	Unknown or not Stated
			<u>Puerto Rico</u>			1	Yes
						2	Unmarried parents living together
						3	Unmarried parents not living together
						9	Unknown or not stated
154	1	MAR_IMP	Mother's Marital Status Imputed Flag		U,R	Blank	Marital Status not imputed
						1	Marital Status imputed
155	1	MEDUC	Mother's Educ –Revised	571	R	1	8 th grade or less
						2	9 th through 12 th grade with no diploma
						3	High school graduate or GED completed
						4	Some college credit, but not a degree.
						5	Associate degree (AA,AS)
						6	Bachelor's degree (BA, AB, BS)
						7	Master's degree (MA, MS, MEng, MEd, MSW, MBA)
						8	Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD)
						9	Unknown
						Blank	Not on certificate
156-157	2	UMEDUC	Mother's Educ –Unrevised	647	U	00	No formal education
						01-08	Years of elementary school
						09	1 year of high school
						10	2 years of high school
						11	3 years of high school
						12	4 years of high school
						13	1 year of college
						14	2 years of college
						15	3 years of college

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			Code 24 also used for individuals reporting more than one Asian/Pacific Islander group; see "Technical Appendix."			06 07 08 09 10 11 12 13 14 21 22 23 24 99	Filipino – single race Japanese – single race Korean – single race Vietnamese – single race Other Asian – single race Hawaiian – single race Guamanian – single race Samoan – single race Other Pacific Islander – single race White – bridged multiple race Black – bridged multiple race American Indian / Alaska Native – bridged multiple race Asian / Pacific Islander – bridged multiple race Unknown or not stated, also includes states not reporting multiple race.
			** Also includes unrevised states that report multiple race.			Blank	Not on certificate
190	1	FILLER	Filler				
191	1	FRACEREC	Father's Race Recode Includes individuals reporting only one race and individuals reporting more than one race bridged to a single race.		U,R		
			<u>United States and all Outlying Areas of the US except Puerto Rico</u>			1 2 3 4 9	White Black American Indian / Alaskan Native Asian / Pacific Islander Unknown or not stated
			<u>Puerto Rico</u>			1 2 9 0	White Black Unknown or not stated Other (not classified as White or Black)
192-194	3	FILLER	Filler				
195	1	UFHISP	Father's Hispanic Origin				
				570	U,R	0 1 2 3 4	Non-Hispanic Mexican Puerto Rican Cuban Central American

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						5	Other and Unknown Hispanic
						9	Origin unknown or not stated
196	1	FRACEHISP	Father's Race/Hispanic Origin	570	U,R	1	Mexican
						2	Puerto Rican
						3	Cuban
						4	Central or South American
						5	Other and Unknown Hispanic
						6	Non-Hispanic White
						7	Non-Hispanic Black
						8	Non-Hispanic Other Races
						9	Origin unknown or not stated
197-198	2	FILLER	Filler				
199-200	2	UFRACE	Father's Race (Unrevised)		U		
			<u>United States</u>			01	White
						02	Black
						03	American Indian / Alaska Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						18	Asian Indian
						28	Korean
						38	Samoan
						48	Vietnamese
						58	Guamanian
						68	Other Asian or Pacific Islander in areas reporting codes 18-58.
						78	Combined other Asian or Pacific Islander, includes 18-68 for areas that do not report them separately.
						99	Unknown or not stated
						Blank	Not on certificate
			<u>Puerto Rico</u>			01	White
						03	Black
						00	Other races not classified white or black
						99	Unknown or not stated
						Blank	Not on certificate
			<u>Guam</u>			01	White
						02	Black

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U Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.

R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						03	American Indian / Alaska Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						08	Other Asian or Pacific Islander
						58	Guamanian
						99	Unknown or not stated
						Blank	Not on certificate
			<u>All other Outlying Areas of the US</u>			01	White
						02	Black
						03	American Indian / Alaska Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						08	Other Asian or Pacific Islander
						99	Unknown or not stated
						Blank	Not on certificate
201-211	11	FILLER	Filler				
212	1	LBO	Live Birth Order		U,R	1-7	Number of live birth order.
						8	8 or more live births
						9	Unknown or not stated
213-216	4	FILLER	Filler				
217	1	TBO	Total Birth Order		U,R	1-7	Number of total birth order.
						8	Total birth order of 8 or more
						9	Unknown or not stated
218-219	2	FILLER	Filler				
220-221	2	DLLB_MM	Date of Last Live Birth Month		R	01	January
						02	February
						03	March
						04	April
						05	May
						06	June
						07	July
						08	August
						09	September

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						10	October
						11	November
						12	December
						88	Not applicable
						99	Unknown or not stated
222-225	4	DLLB_YY	Date of Last Live Birth Year		R	nnnn 8888 9999	Year of last live birth Not applicable Unknown or not stated
226-244	19	FILLER	Filler				
245-246	2	PRECARE	Month Prenatal Care Began (Revised)				
			668		R	00 01-10 99 Blank	No prenatal care Month prenatal care began Unknown or not stated Not on certificate
247	1	PRECARE_REC	Month Prenatal Care Began Recode (Revised)				
			668		R	1 2 3 4 5 Blank	1 st to 3 rd month 4 th to 6 th month 7 th to final month No prenatal care Unknown or not stated Not on certificate
248-255	8	FILLER	Filler				
256-257	2	MPCB	Month Prenatal Care Began (Unrevised)				
			669		U	00 01-10 99 Blank	No prenatal care Month prenatal care began Unknown or not stated Not on certificate
258	1	MPCB_REC6	Month Prenatal Care Began Recode 6 (Unrevised)				
			669		U	1 2 3 4 5 6 Blank	1 st to 2 nd month 3 rd month 4 th to 6 th month 7 th to final month No prenatal care Unknown or not stated Not on certificate
259	1	MPCB_REC5	Month Prenatal Care Began Recode 5 (Unrevised)				
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
		U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
		R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
				669	U	1 2 3 4 5 Blank	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) No prenatal care Unknown or not stated Not on certificate
260-269	10	FILLER	Filler				
270-271	2	UPREVIS	Number of Prenatal Visits		U,R	00-49 99	Number of prenatal visits Unknown or not stated
272-273	2	PREVIS_REC	Number of Prenatal Visits Recode		U,R	01 02 03 04 05 06 07 08 09 10 11 12	No visits 1 to 2 visits 3 to 4 visits 5 to 6 visits 7 to 8 visits 9 to 10 visits 11 to 12 visits 13 to 14 visits 15 to 16 visits 17 to 18 visits 19 or more visits Unknown or not stated
274-275	2	FILLER	Filler				
276-277	2	WTGAIN	Weight Gain	648	U,R	00-97 98 99	Weight gain in pounds 98 pounds and over Unknown or not stated
278	1	WTGAIN_REC	Weight Gain Recode	648	U,R	1 2 3 4 5 6 7 8 9	Less than 16 pounds 16 to 20 pounds 21 to 25 pounds 26 to 30 pounds 31 to 35 pounds 36 to 40 pounds 41 to 45 pounds 46 or more pounds Unknown or not stated
279	1	FILLER	Filler				
280	1	DFPC_IMP	Day of Date First Prenatal Care Imputed		R	Blank	Day of date first prenatal care not imputed
					* U,R		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).
					U		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.
					R		Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						1	Day of date first prenatal care imputed
281-283	3	FILLER	Filler				
284-285	2	CIG_1	Cigarettes 1st Trimester	575	R	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 2nd Trimester	575	R	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 3rd Trimester	575	R	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	667	U	1 2 9 Blank	Yes No Unknown or not stated Not on certificate
291-292	2	CIGS	Cigarettes per Day	667	U	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
293	1	UCIG_REC6	Cigarette Recode	667	U	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	Cigarette Recode	575	R	Y N U Blank	Yes No Unknown or not stated Not on certificate
295-312	18	FILLER	Filler				
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
		U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
		R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
313-319	7	<u>Risk Factors (Revised)</u> The checkbox items below follow this code structure:				Y N U Blank	Yes No Unknown or not stated Not on certificate
313	1	RF_DIAB	Prepregnancy Diabetes	582	R		
314	1	RF_GEST	Gestational Diabetes	583	R		
315	1	RF_PHYP	Prepregnancy Hypertesion	584	R		
316	1	RF_GHYP	Gestational Hypertension	585	R		
317	1	RF_ECLAM	Eclampsia	586	R		
318	1	RF_PPTERM	Previous Preterm Birth	587	R		
319	1	RF_PPOUTC	Poor Pregnancy Outcome	588	R		
320-323	4	FILLER	Filler				
324	1	RF_CESAR	Previous Cesarean Deliveries	593	R	Y N U Blank	Yes No Unknown or not stated Not on certificate
325-326	2	RF_CESARN	Number of Previous Cesarean Deliveries	594	R	00 01-30 99 Blank	None Number of previous cesareans Unknown or not stated Not on certificate
327-330	4	FILLER	Filler				
331-337	7	<u>Risk Factors in this Pregnancy</u> The checkbox items indented below follow this structure: The version is all 1989 Standard unless otherwise noted.				U	
331	1	URF_DIAB	Diabetes	684	U,R	1 2 9 Blank	Yes No Unknown Not on certificate
332-334	3	FILLER	Filler				
335	1	URF_CHYPER	Chronic Hypertension	688	U,R		
336	1	URF_PHYPER	Prepregnancy Associated Hypertension	689	U,R		
337	1	URF_ECLAM	Eclampsia	690	U,R		
338-350	13	FILLER	Filler				
351-354	4	<u>Obstetric Procedures (Revised)</u> The checkbox items indented below follow this structure:				Y	Yes
* U,R		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).					
U		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.					
R		Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.					

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						N	No
						U	Unknown or not stated
						Blank	Not on certificate
351	1	OP_CERV	Cervical Cerclage	601	R		
352	1	OP_TOCOL	Tocolysis	602	R		
353	1	OP_ECVS	Successful External Cephalic Version	603	R		
354	1	OP_ECVF	Failed External Cephalic Version	604	R		
355-361	7	<u>Obstetric Procedures (Unrevised)</u>					
		The checkbox items indented below follow this structure:				1	Yes
		The version is all 1989 Standard unless otherwise noted.				2	No
						9	Unknown or not stated
						Blank	Not on certificate
355-356	2	FILLER	Filler				
357	1	UOP_INDUC	Induction of Labor	703	U,R		
358	1	FILLER	Filler				
359	1	UOP_TOCOL	Tocolysis	705	U,R		
360-361	2	FILLER	Filler				
362-364	3	<u>Onset of Labor</u>					
		The checkbox items below follow this structure:				Y	Yes
						N	No
						U	Unknown or not stated
						Blank	Not on certificate
362	1	ON_RUPTR	Premature Rupture of Membrane	605	R		
363	1	ON_PRECIP	Precipitous Labor	606	R		
364	1	ON_PROL	Prolonged Labor	607	R		
365-373	9	<u>Characteristics of Labor and Delivery (Revised)</u>					
		The checkbox items below follow this structure:				Y	Yes
						N	No
						U	Unknown or not stated
						Blank	Not on certificate
365	1	LD_INDL	Induction of Labor	608	R		
366	1	LD_AUGM	Augmentation of Labor	609	R		
367	1	LD_NVPR	Non-Vertex Presentation	610	R		
368	1	LD_STER	Steroids	611	R		
369	1	LD_ANTI	Antibiotics	612	R		
370	1	LD_CHOR	Chorioamnionitis	613	R		
371	1	LD_MECS	Meconium Staining	614	R		
372	1	LD_FINT	Fetal Intolerance	615	R		
373	1	LD_ANES	Anesthesia	616	R		

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
374-389	16	<u>Complications of Labor and Delivery</u> The checkbox items indented below follow this structure:				1 2 9 Blank	Yes No Unknown or not stated Not on certificate
374	1	FILLER	Filler				
375	1	ULD_MECO	Meconium	712	U,R		
376-380	5	FILLER	Filler				
381	1	ULD_PRECIP	Precipitous Labor	718	U,R		
382-383	2	FILLER	Filler				
384	1	ULD_BREECH	Breech	721	U,R		
385-389	5	FILLER	Filler				

390-394	5	<u>Method of Delivery (Revised)</u>					
390	1	ME_ATTf	Attempted Forceps	617	R	Y N U Blank	Yes No Unknown Not on certificate
391	1	ME_ATTv	Attempted Vacuum	618	R	Y N U Blank	Yes No Unknown Not on certificate
392	1	ME_PRES	Fetal Presentation	619	R	1 2 3 9 Blank	Cephalic Breech Other Unknown Not on certificate
393	1	ME_ROUT	Route & Method of Delivery	620	R	1 2 3 4 9 Blank	Spontaneous Forceps Vacuum Cesarean Unknown Not on certificate
394	1	ME_TRIAL	Trial of Labor Attempted	621	R	Y N X U Blank	Yes No Not applicable Unknown Not on certificate

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R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
395-400	6	<u>Method of Delivery (Unrevised)</u> The checkbox items indented below follow this structure:				1 2 9	Yes No Unknown or not stated
395	1	UME_VAG	Vaginal	730	U		
396	1	UME_VBAC	Vaginal after C-Section	731	U		
397	1	UME_PRIMC	Primary C-Section	732	U		
398	1	UME_REPEC	Repeat C-Section	733	U		
399	1	UME_FORCP	Forceps	734	U,R		
400	1	UME_VAC	Vacuum	735	U,R		
401	1	RDMETH_REC	Delivery Method Recode (Revised) 679		R	1 2 3 4 5 6 9	Vaginal (excludes vaginal after previous C-section) Vaginal after previous c-section Primary C-section Repeat C-section Vaginal (unknown if previous c-section) (2003 Standard only) C-section (unknown if previous c-section) (2003 Standard only) Not stated
402	1	UDMETH_REC	Delivery Method Recode (Unrevised) 680		U	1 2 3 4 9	Vaginal (excludes vaginal after previous C-section) Vaginal after previous c-section Primary C-section Repeat C-section Not stated
403	1	DMETH_REC			U,R	1 2 9	Vaginal C-Section Unknown
404-409	6	FILLER	Filler				
410	1	ATTEND	Attendant		U,R	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
* U,R		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).					
U		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.					
R		Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.					

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
411-414	4	FILLER	Filler				
415	2	APGAR5	Five Minute APGAR Score 574		U,R	00-10 99	A score of 0-10 Unknown or not stated
417	1	APGAR5R	Five Minute APGAR Recode 574		U,R	1 2 3 4 5	A score of 0-3 A score of 4-6 A score of 7-8 A score of 9-10 Unknown or not stated
418-422	5	FILLER	Filler				
423	1	DPLURAL	Plurality Recode		U,R	1 2 3 4 5	Single Twin Triplet Quadruplet Quintuplet or higher
424	1	FILLER	Filler				
425	1	IMP_PLUR	Plurality Imputed		U,R	Blank 1	Plurality is imputed Plurality is not imputed
426-435	10	FILLER	Filler				
436	1	SEX	Sex of Infant		U,R	M F	Male Female
437	1	IMP_SEX	Imputed Sex		U,R	Blank 1	Infant Sex not Imputed Infant Sex is Imputed
438-439	2	DLMP_MM	Last Normal Menses Month		U,R	01 02 03 04 05 06 07 08 09 10	January February March April May June July August September October

* U,R Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						11 12 99	November December Unknown or not stated
440-441	2	DLMP_DD	Last Normal Menses Day		U,R	01-31 99	As applicable to month of LMP Unknown or not stated
442-445	4	DLMP_YY	Last Normal Menses Year		U,R	nnnn 9999	Year of last normal menses Unknown or not stated
446-447	2	ESTGEST	Obstetric/Clinical Gestation Est.	573	U,R	0-98 99	0 through 98 th week of gestation Unknown or not stated
448-450	3	FILLER	Filler				
451-452	2	COMBGEST	Gestation – Detail in Weeks		U,R	17-47 99	17 th through 47 th week of gestation Unknown
453-454	2	GESTREC10	Gestation Recode 10		U,R	01 02 03 04 05 06 07 08 09 10	Under 20 weeks 20-27 weeks 28-31 weeks 32-35 weeks 36 weeks 37-39 weeks 40 weeks 41 weeks 42 weeks and over Unknown
455	1	GESTREC3	Gestation Recode 3		U,R	1 2 3	Under 37 weeks 37 weeks and over Not stated
456	1	OBGEST_FLG	Clinical Estimate of Gestation Used Flag		U,R	Blank 1	Clinical Estimate is not used Clinical Estimate is used
457	1	GEST_IMP	Gestation Imputed Flag		U,R	Blank 1	Gestation is not imputed Gestation is imputed
458-466	9	FILLER	Filler				
467-470	4	BRTHWGT	Imputed Birthweight		U,R	0227-8165 9999	Number of grams Not stated birthweight
471-472	2	BWTR14	Birthweight Recode 14		U,R	01	499 grams or less
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						02	500 – 749 grams
						03	750 - 999 grams
						04	1000 - 1249 grams
						05	1250 – 1499 grams
						06	1500 – 1999 grams
						07	2000 – 2499 grams
						08	2500 – 2999 grams
						09	3000 – 3400 grams
						10	3500 – 3999 grams
						11	4000 – 4499 grams
						12	4500 – 4999 grams
						13	5000 – 8165 grams
						14	Not Stated
473	1	BWTR4	Birthweight Recode 4		U,R	1	1499 grams or less
						2	1500 – 2499 grams
						3	2500 grams or more
						4	Unknown or not stated
474	1	FILLER	Filler				
475	1	BWTIMP	Imputed Birth Weight Flag		U,R	Blank	Birth Weight is not imputed
						1	Birth Weight is imputed
476-482	7	<u>Abnormal Conditions of the Newborn (Revised)</u>					
		The checkbox items below follow this structure:				Y	Yes, Complication reported
						N	No Complication reported
						U	Unknown or not stated
						Blank	Not on certificate
476	1	AB_AVEN1	Assisted Ventilation	628	R		
477	1	AB_AVEN6	Assisted Ventilation >6 hrs	629	R		
478	1	AB_NICU	Admission to NICU	630	R		
479	1	AB_SURF	Surfactant	631	R		
480	1	AB_ANTI	Antibiotics	632	R		
481	1	AB_SEIZ	Seizures	633	R		
482	1	AB_BINJ	Birth Injury	634	R		
483-491	9	FILLER	Filler				
492-503	12	<u>Congenital Anomalies of the Newborn (Revised)</u>					
		The checkbox items below follow this structure:				Y	Yes, anomaly reported
						N	No, anomaly not reported
						U	Unknown
* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).						
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R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.						

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition	
						Blank	Not on certificate	
492	1	CA_ANEN	Anencephaly	635	R			
493	1	CA_MNSB	Meningocele/Spina Bifida	636	R			
494	1	CA_CCHD	Cyanotic Congenital Heart Disease	637	R			
495	1	CA_CDH	Congenital Diaphragmatic Hernia	638	R			
496	1	CA_OMPH	Omphalocele	639	R			
497	1	CA_GAST	Gastroschisis	640	R			
498	1	CA_LIMB	Limb Reduction Defect	641	R			
499	1	CA_CLEFT	Cleft Lip w/ or w/o Cleft Palate	642	R			
500	1	CA_CLPAL	Cleft Palate alone	643	R			
501	1	CA_DOWN	Downs Syndrome	644	R	C P N U Blank	Confirmed Pending No Unknown Not on certificate	
502	1	CA_DISOR	Suspected Chromosomal Disorder	645	R	C P N U Blank	Confirmed Pending No Unknown Not on certificate	
503	1	CA_HYPO	Hypospadias	646	R	Y N U Blank	Yes, Anomaly reported No, Anomaly not reported Unknown Not on certificate	
504-523	20	<u>Congenital Anomalies of the Newborn</u> The checkbox items indented below follow this structure: The version is all 1989 Standard unless otherwise noted.				1 2 9 Blank	Anomaly reported Anomaly not reported Anomaly not classifiable Not on certificate	
504	1	UCA_ANEN	Anencephalus	752	U,R			
505	1	UCA_SPINA	Spina Bifida / Meningocele	753	U,R			
506-512	7	FILLER	Filler					
513	1	UCA_OMPHA	Omphalocele / Gastroschisis	761	U,R			
514-517	4	FILLER	Filler					
518	1	UCA_CELFTLP	Cleft Lip / Palate	766	U,R			
519-522	4	FILLER	Filler					
523	1	UCA_DOWNS	Downs Syndrome	771	U,R			
524-568	45	FILLER	Filler					
* U,R		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).						
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R		Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.						

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition	
569-771	203	<u>Flag File for Reporting Flags</u>						
		The reporting flags indented below follow this coding structure:				0	Not reporting	
						1	Reporting	
569	1	F_MORIGIN	Origin of Mother		U,R			
570	1	F_FORIGIN	Origin of Father		U,R			
571	1	F_MEDUC	Education of Mother		R			
572	1	FILLER	Filler					
573	1	F_CLINEST	Clinical Estimate of Gestation		U,R			
574	1	F_APGAR5	Five minute APGAR		U,R			
575	1	F_TOBACO	Tobacco use		R			
576-581	6	FILLER	Filler					
582	1	F_RF_PDIAB	Prepregnancy Diabetes		R			
583	1	F_RF_GDIAB	Gestational Diabetes		R			
584	1	F_RF_PHYPER	Prepregnancy Hypertension		R			
585	1	F_RF_GHYPER	Gestational Hypertension		R			
586	1	F_RF_ECLAMP	Eclampsia		R			
587	1	F_RF_PPB	Previous Preterm Birth		R			
588	1	F_RF_PPO	Poor Pregnancy Outcome		R			
589-592	4	FILLER	Filler					
593	1	F_RF_CESAR	Previous Cesarean		R			
594	1	F_RF_NCESAR	Number of Previous Cesareans		R			
595-600	6	FILLER	Filler					
601	1	F_OB_CERVIC	Cervical Cerclage		R			
602	1	F_OB_TOCO	Tocolysis		R			
603	1	F_OB_SUCC	Successful External Cephalic Version		R			
604	1	F_OB_FAIL	Failed External Cephalic Version		R			
605	1	F_OL_RUPTURE	Premature Rupture of Membranes		R			
606	1	F_OL_PRECIP	Precipitous Labor		R			
607	1	F_OL_PROLONG	Prolonged Labor		R			
608	1	F_LD_INDUCT	Induction of Labor		R			
609	1	F_LD_AUGMENT	Augmentation of Labor		R			
610	1	F_LD_NVRTX	Non-Vertex Presentation		R			
611	1	F_LD_STEROIDS	Steroids		R			
612	1	F_LD_ANTIBIO	Antibiotics		R			
613	1	F_LD_CHORIO	Chorioamnionitis		R			
614	1	F_LD_MECON	Meconium Staining		R			
615	1	F_LD_FINTOL	Fetal Intolerance		R			
616	1	F_LD_ANESTH	Anesthesia		R			
617	1	F_MD_ATTFOR	Attempted Forceps		R			
618	1	F_MD_ATTVAC	Attempted Vacuum		R			
619	1	F_MD_PRESENT	Fetal Presentation		R			
620	1	F_MD_ROUTE	Final Route and Method of Delivery		R			
621	1	F_MD_TRIAL	Trial of Labor Attempted		R			
* U,R		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).						
U		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.						
R		Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.						

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
622-627	6	FILLER	Filler				
628	1	F_AB_VENT	Assisted Ventilation		R		
629	1	F_AB_VENT6	Assisted Ventilation >6 hrs		R		
630	1	F_AB_NICU	Admission to NICU		R		
631	1	F_AB_SURFAC	Surfactant		R		
632	1	F_AB_ANTIBIO	Antibiotics		R		
633	1	F_AB_SEIZ	Seizures		R		
634	1	F_AB_INJ	Birth Injury		R		
635	1	F_CA_ANEN	Anencephaly		R		
636	1	F_CA_MENIN	Meningomyelocele/Spina Bifida		R		
637	1	F_CA_HEART	Cyanotic Congenital Heart Disease		R		
638	1	F_CA_HERNIA	Congenital Diaphragmatic Hernia		R		
639	1	F_CA_OMPHA	Omphalocele		R		
640	1	F_CA_GASTRO	Gastroschisis		R		
641	1	F_CA_LIMB	Limb Reduction Defect		R		
642	1	F_CA_CLEFTLP	Cleft Lip w/ or w/o Cleft Palate		R		
643	1	F_CA_CLEFT	Cleft Palate Alone		R		
644	1	F_CA_DOWNS	Downs Syndrome		R		
645	1	F_CA_CHROM	Suspected Chromosomal Disorder		R		
646	1	F_CA_HYPOS	Hypospadias		R		
647	1	F_MED	Mother's Education		U		
648	1	F_WTGAIN	Weight Gain		U,R		
649-666	18	FILLER	Filler				
667	1	F_TOBAC	Tobacco Use		U		
668	1	F_MPCB	Month Prenatal Care Began		R		
669	1	F_MPCB_U	Month Prenatal Care Began		U		
670-683	14	FILLER	Filler				
684	1	F_URF_DIABETES	Diabetes		U		
685-687	3	FILLER	Filler				
688	1	F_URF_CHYPER	Chronic Hypertension		U		
689	1	F_URF_PHYPER	Pregnancy Associated Hypertension		U		
690	1	F_URF_ECLAMP	Eclampsia		U		
691-702	12	FILLER	Filler				
703	1	F_UOB_INDUCT	Induction of Labor		U		
704	1	FILLER	Filler				
705	1	F_UOB_TOCOL	Tocolysis		U		
706-711	6	FILLER	Filler				
712	1	F_ULD_MECONIUM	Meconium		U		
713-717	5	FILLER	Filler				
718	1	F_ULD_PRECIP	Precipitous Labor		U		
719-720	2	FILLER	Filler				
721	1	F_ULD_BREECH	Breech		U		
722-729	8	FILLER	Filler				
730	1	F_U_VAGINAL	Vaginal		U		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
731	1	F_U_VBAC	Vaginal after C-Section		U		
732	1	F_U_PRIMAC	Primary C-Section		U		
733	1	F_U_REPEAC	Repeat C-Section		U		
734	1	F_U_FORCEP	Forceps		U		
735	1	F_U_VACUUM	Vacuum		U		
736-751	16	FILLER	Filler				
752	1	F_UCA_ANEN	Anencephalus		U		
753	1	F_UCA_SPINA	Spina Bifida / Meningocele		U		
754-760	7	FILLER	Filler				
761	1	F_UCA_OMPHALO	Omphalocele / Gastroschisis		U		
762-765	4	FILLER	Filler				
766	1	F_UCA_CLEFTLP	Cleft Lip / Palate		U		
767-770	4	FILLER	Filler				
771	1	F_UCA_DOWNS	Downs Syndrome		U		
772-867	96	FILLER	Filler				
868	1	FLGND	Flag indicating records in both numerator and denominator file			1 Blank	Record in both files Record not in numerator file

Here ends the Denominator file. Documentation of the Mortality Section of the Numerator (Linked) file begins below.

869-871	3	FILLER	Filler				
872-874	3	AGED	Age at Death in Days			000-365	Number of days
875	1	AGER5	Infant age recode 5			1 2 3 4 5	Under 1 hour 1 – 23 hours 1 – 6 days 7 – 27 days (late neonatal) 28 days and over (postneonatal)
876-877	2	AGER22	Infant age recode 22			Blank 01 02 03 04 05 06	Age 1 year and over or not stated Under 1 hour (includes not stated hours and minutes) 1 – 23 hours 1 day (includes not stated days) 2 days 3 days 4 days

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						07	5 days
						08	6 days
						09	7-13 days
						10	14 – 20 days
						11	21 – 27 days
						12	1 month (includes not stated months)
						13	2 months
						14	3 months
						15	4 months
						16	5 months
						17	6 months
						18	7 months
						19	8 months
						20	9 months
						21	10 months
						22	11 months
878	1	MANNER	Manner of Death			1	Accident
						2	Suicide
						3	Homicide
						4	Pending investigation
						5	Could not determine
						6	Self-inflicted
						7	Natural
						Blank	Not specified
879	1	DISPO	Method of Disposition			B	Burial
						C	Cremation
						O	Other
						U	Unknown
880	1	AUTOPSY	Autopsy			Y	Yes
						N	No
						U	Unknown
881	1	FILLER	Filler				
882	1	PLACE	Place of injury for causes W00-Y34, except Y06.- and Y07.-			0	Home
						1	Residential institution
						2	School, other institution and public administrative area
						3	Sports and athletics area
						4	Street and highway
						5	Trade and service area
						6	Industrial and construction area

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						7	Farm
						8	Other Specified Places
						9	Unspecified place
						Blank	Cause other than W00-Y34, except Y06.- and Y07.-
883	1	FILLER	Filler				
884-887	4	UCOD	ICD Code (10th Revision) See the <u>International Classification of Diseases, 1992</u> Revision, Volume 1.				
888	1	FILLER	Filler				
889-891	3	UCODR130	130 Infant Cause Recode			001-158	Code Range
892	1	FILLER	Filler				
893-900	8	RECWT	Record Weight (no weights computed for possessions file) 1.XXXXXXX				
901-902	2	FILLER	Filler				
903-904	2	EANUM	Number of Entity-Axis Conditions			00-20	Code range
905-1044	140	ENTITY	Entity-Axis Conditions Space has been provided for a maximum of 20 conditions. Each condition takes 7 positions in the record. The 7 th position will be blank. Records that do not have 20 conditions are blank in the unused area. Position 1: Part/line number on certificate 1 ... Part I, line 1 (a) 2 ... Part I, line 2 (b) 3 ... Part I, line 3 (c) 4 ... Part I, line 4 (d) 5 ... Part I, line 5 (e) 6 ... Part II Position 2: Sequence of condition within part/line 1-7 ... Code range Position 3 – 6: Condition code See Table 1 for a complete list of codes				

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
905-911	7		1 st Condition				
912-918	7		2 nd Condition				
919-925	7		3 rd Condition				
926-932	7		4 th Condition				
933-939	7		5 th Condition				
940-946	7		6 th Condition				
947-953	7		7 th Condition				
954-960	7		8 th Condition				
961-967	7		9 th Condition				
968-974	7		10 th Condition				
975-981	7		11 th Condition				
982-988	7		12 th Condition				
989-995	7		13 th Condition				
996-1002	7		14 th Condition				
1003-1009	7		15 th Condition				
1010-1016	7		16 th Condition				
1017-1023	7		17 th Condition				
1024-1030	7		18 th Condition				
1031-1037	7		19 th Condition				
1038-1044	7		20 th Condition				
1045-1046	2	FILLER	Filler				
1047-1048	2	RANUM	Number of Record-Axis Conditions			00-20	Code range
1049-1148	100	RECORD	Record-Axis Conditions Space has been provided for a maximum of 20 conditions. Each condition takes 5 positions in the record. The 5 th position will be blank. Records that do not have 20 conditions are blank in the unused area. Positions 1 – 4: Condition Code See Table 1 for a complete list of codes				
1049-1053	5		1 st Condition				
1054-1058	5		2 nd Condition				
1059-1063	5		3 rd Condition				
1064-1068	5		4 th Condition				
1069-1073	5		5 th Condition				
1074-1078	5		6 th Condition				
1079-1083	5		7 th Condition				
1084-1088	5		8 th Condition				
1089-1093	5		9 th Condition				
1094-1098	5		10 th Condition				
* U,R			Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
	1099-1103	5	11 th Condition				
	1104-1108	5	12 th Condition				
	1109-1113	5	13 th Condition				
	1114-1118	5	14 th Condition				
	1119-1123	5	15 th Condition				
	1124-1128	5	16 th Condition				
	1129-1133	5	17 th Condition				
	1134-1138	5	18 th Condition				
	1139-1143	5	19 th Condition				
	1144-1148	5	20 th Condition				
1149-1150	2	FILLER	Filler				
1151	1	D_RESTATUS	Death Resident Status				
			United States Occurrence			1	RESIDENTS State and County of Occurrence and Residence are the same.
						2	INTRASTATE NONRESIDENTS State of Occurrence and Residence are the same, but County is different.
						3	INTERSTATE NONRESIDENTS State of Occurrence and Residence are different, but both are in the U.S.
						4	FOREIGN RESIDENTS State of Occurrence is one of the 50 States or the District of Columbia, but Place of Residence is outside of the U.S.
			Puerto Rico Occurrence			1	RESIDENTS Territory and County-equivalent of Occurrence and Residence are the same.
						2	INTRASTATE NONRESIDENTS Territory of Occurrence and Residence are the same, but County-equivalent is different.
						3	INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but both are a Territory.
						4	FOREIGN RESIDENTS Occurred in Puerto Rico to a resident of any other place.
			Virgin Islands Occurrence			1	RESIDENTS Territory and County-equivalent of Occurrence and Residence are the same.
						2	INTRASTATE NONRESIDENTS
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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
							Territory of Occurrence and Residence are the same, but County-equivalent is different.
					3		INTERTERRITORY NONRESIDENTS
							Territory of occurrence and residence are different, but both are a Territory.
					4		FOREIGN RESIDENTS
			Guam Occurrence				Occurred in Virgin Islands to a resident of any other place.
					1		RESIDENTS
							Occurred in Guam to a resident of Guam or to a resident of the U.S.
					3		INTERTERRITORY NONRESIDENTS
							Territory of occurrence and residence are different, but both are a Territory.
					4		FOREIGN RESIDENTS
							Occurred in Guam to a resident of any place other than Guam or the U.S.
1152-1153	2	STOCCFIPD	State of Occurrence (FIPS) of Death (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
						PR	Puerto Rico
						VI	Virgin Islands
						GU	Guam
1154-1156	3	CNTOCFIPD	County of Occurrence (FIPS) of Death Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document. (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
						001-nnn	Code range
						999	County of less than 250,000
1157-1159	3	FILLER	Filler				

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
1160-1161	2	STRESFIPD	State of Residence (FIPS) (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			Territories			PR VI GU	Puerto Rico Virgin Islands Guam
			Puerto Rico Occurrence			PR US,ZZ	Puerto Rico Foreign residents
			Virgin Islands Occurrence			VI US, ZZ	Virgin Islands Foreign residents
			Guam Occurrence			GU US ZZ	Guam U.S. resident. Also considered a resident of Guam. Foreign residents
1162-1163	2	FILLER	Filler				
1164-1165	2	DRCNTY	State/Country of Residence of Death Recode (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			Territorial residents			PR VI GU	Puerto Rico Virgin Islands Guam
			Foreign residents			CC MX CU YY	Canada Mexico Cuba Remainder of the world
			Puerto Rico Occurrence			PR US,ZZ	Puerto Rico Foreign residents
			Virgin Islands Occurrence			VI US, ZZ	Virgin Islands Foreign residents
			Guam Occurrence			GU US	Guam U.S. resident. Also considered a resident of Guam

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						ZZ	Foreign residents
1166-1167	3	CNTYRFPD	County of Residence (FIPS) of Death Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document. (This item is available in the territory file only, geographic codes are not available in the U.S.file)			000 001-nnn 999	Foreign residents Code range County of less than 250,000
1169-1181	13	FILLER	Filler				
1182	1	CNTRSPPD	Population Size of County of Residence of Death Based on the results of the 2000 Census (This item is available in the territory file only, geographic codes are not available in the U.S.file)			0 1 2 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 less than 250,000 Foreign residents
1183-1185	3	FILLER	Filler				
1186	1	HOSPPD	Place of Death and Decedent's Status			1 2 3 4 5 6 7 9	Hospital, clinic or Medical Center – Inpatient Hospital, clinic or Medical Center – Outpatient or admitted to Emergency Room Hospital, clinic or Medical Center – Dead on Arrival Decedent's home Hospice facility Nursing home/long term care Other Place of death unknown
1187	1	WEEKDAYD	Day of Week of Death			1	Sunday
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
		U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
		R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						2	Monday
						3	Tuesday
						4	Wednesday
						5	Thursday
						6	Friday
						7	Saturday
						9	Unknown
1188-1191	4	DTHYR	Death Year			2008	2008
1192-1257	66	FILLER	Filler				
1258-1259	2	DOD_MM	Month of Death			01	January
						02	February
						03	March
						04	April
						05	May
						06	June
						07	July
						08	August
						09	September
						10	October
						11	November
						12	December

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Documentation Table 1. Live births and infant deaths by state of occurrence of birth and by state of residence at birth United States, Puerto Rico, Virgin Islands, and Guam, 2008 Period Data.
(Residence of birth is of the mother)

State	Live births		Infant deaths			
	Occurrence	Residence	Unweighted Occurrence	Unweighted Residence	Weighted 1/ Occurrence	Weighted 1/ Residence
United States /2	4255188	4247726	27748	27717	28107	28075
Alabama	63450	64546	604	610	605	611
Alaska	11329	11442	64	68	65	69
Arizona	100089	99442	627	623	639	635
Arkansas	39502	40669	274	298	276	300
California	552643	551804	2756	2756	2822	2822
Colorado	70527	70031	454	434	455	435
Connecticut	40930	40399	231	239	231	239
Delaware	12545	12090	106	101	106	101
Dist of Columbia	14499	9130	147	101	148	102
Florida	231652	231445	1708	1680	1712	1684
Georgia	147799	146603	1152	1155	1168	1171
Hawaii	19463	19484	110	110	110	110
Idaho	24676	25149	130	142	132	144
Illinois	173412	176797	1193	1257	1209	1273
Indiana	89345	88742	616	606	617	607
Iowa	40281	40224	214	229	214	229
Kansas	42568	41833	309	307	309	307
Kentucky	56622	58376	364	402	366	404
Louisiana	65075	65270	561	563	589	590
Maine	13500	13609	75	74	75	74
Maryland	74615	77289	588	612	591	615
Massachusetts	77543	77022	387	387	388	388
Michigan	120172	121127	893	893	896	896
Minnesota	72220	72421	437	428	438	429
Mississippi	44139	44947	427	446	428	447
Missouri	81992	80963	616	573	622	578
Montana	12551	12594	88	89	89	90
Nebraska	27082	26989	159	146	161	148
Nevada	39192	39506	209	205	216	212
New Hampshire	13630	13683	55	53	55	53
New Jersey	109703	112710	581	613	587	619
New Mexico	29572	30173	149	159	158	168
New York	124681	128133	704	755	711	762
New York City	127680	122251	677	619	677	619
North Carolina	132106	130839	1082	1075	1086	1079
North Dakota	10312	8938	58	52	58	52
Ohio	149346	148821	1167	1127	1187	1146
Oklahoma	53720	54781	378	386	386	394
Oregon	49499	49096	259	252	259	252
Pennsylvania	148460	149273	1121	1097	1125	1101
Rhode Island	12812	12048	85	71	85	71
South Carolina	60401	63071	473	506	475	508
South Dakota	12632	12072	107	100	107	100
Tennessee	90885	85560	763	698	763	698
Texas	412127	405554	2408	2391	2519	2501
Utah	56787	55634	275	260	276	261
Vermont	5957	6339	23	29	23	29
Virginia	104990	106686	721	729	726	734
Washington	90318	90321	492	490	494	492
West Virginia	21441	21501	153	166	154	167
Wisconsin	71272	72261	480	499	481	500
Wyoming	7444	8038	38	56	38	56
Foreign Residents	-	7462	-	31	-	31
Puerto Rico	45683	45620	385	384	385	384
Virgin Islands	1844	1784	6	7	6	7
Guam	3464	3455	28	27	28	27

1/ Figures are based on weighted data rounded to the nearest infant, so categories may not add to totals

2/ Excludes data for Puerto Rico, Virgin Islands and Guam.

Documentation Table 2. Live births, infant deaths and infant mortality rates by race of mother, sex and birthweight of child: United States, 2008 Period Data.

[Infant death are weighted. Rates are per 1000 live births]

Race of mother and sex	Total	<500 grams	500-749 grams	750-999 grams	1000-1249 grams	1250-1499 grams	1500-1999 grams	2000-2499 grams	2500 grams or more	Not Stated
All races										
Both sexes										
Live births.....	4,247,726	7,225	11,282	12,330	14,465	17,541	67,232	218,468	3,898,189	994
Infant deaths.....	28,075	6,276	5,071	1,771	1,007	793	1,842	2,246	8,935	134
Infant mortality rate....	6.61	868.65	449.48	143.63	69.62	45.21	27.40	10.28	2.29	134.81
Male										
Live births.....	2,173,409	3,755	5,774	6,350	7,317	8,858	32,912	100,201	2,007,706	536
Infant deaths.....	15,689	3,323	2,944	1,106	584	439	947	1,163	5,085	98
Infant mortality rate....	7.22	884.95	509.87	174.17	79.81	49.56	28.77	11.61	2.53	182.84
Female										
Live births.....	2,074,317	3,470	5,508	5,980	7,148	8,683	34,320	118,267	1,890,483	458
Infant deaths.....	12,386	2,953	2,127	665	423	354	896	1,084	3,850	35
Infant mortality rate....	5.97	851.01	386.17	111.20	59.18	40.77	26.11	9.17	2.04	76.42
White										
Both sexes										
Live births.....	3,274,194	3,971	6,608	7,654	9,271	11,687	45,664	149,102	3,039,454	783
Infant deaths.....	18,214	3,466	3,058	1,148	655	542	1,285	1,578	6,392	89
Infant mortality rate....	5.56	872.83	462.77	149.99	70.65	46.38	28.14	10.58	2.10	113.67
Male										
Live births.....	1,676,736	2,077	3,374	3,969	4,773	5,946	22,554	68,746	1,564,883	414
Infant deaths.....	10,139	1,834	1,761	711	372	303	665	807	3,622	65
Infant mortality rate....	6.05	883.00	521.93	179.14	77.94	50.96	29.48	11.74	2.31	157.00
Female										
Live births.....	1,597,458	1,894	3,234	3,685	4,498	5,741	23,110	80,356	1,474,571	369
Infant deaths.....	8,075	1,632	1,298	437	283	239	620	772	2,770	24
Infant mortality rate....	5.05	861.67	401.36	118.59	62.92	41.63	26.83	9.61	1.88	65.04
Black										
Both sexes										
Live births.....	670,811	2,861	4,078	3,967	4,346	4,781	17,040	53,090	580,492	156
Infant deaths.....	8,301	2,467	1,765	535	291	214	445	543	2,006	35
Infant mortality rate....	12.37	862.29	432.81	134.86	66.96	44.76	26.12	10.23	3.46	224.36
Male										
Live births.....	340,887	1,477	2,077	2,019	2,099	2,320	8,091	23,761	298,951	92
Infant deaths.....	4,656	1,310	1,030	341	173	113	226	286	1,151	26
Infant mortality rate....	13.66	886.93	495.91	168.90	82.42	48.71	27.93	12.04	3.85	282.61
Female										
Live births.....	329,924	1,384	2,001	1,948	2,247	2,461	8,949	29,329	281,541	64
Infant deaths.....	3,646	1,157	735	194	118	101	219	256	856	9
Infant mortality rate....	11.05	835.98	367.32	99.59	52.51	41.04	24.47	8.73	3.04	*

Documentation Table 2. Live births, infant deaths and infant mortality rates by race of mother, sex and birthweight of child: United States, 2008 Period Data.

[Infant death are weighted. Rates are per 1000 live births]

Race of mother and sex	Total	<500 grams	500-749 grams	750-999 grams	1000-1249 grams	1250-1499 grams	1500-1999 grams	2000-2499 grams	2500 grams or more	Not Stated
American Indian /1										
Both sexes										
Live births.....	49,537	66	127	130	156	171	734	2,297	45,847	9
Infant deaths.....	417	56	57	23	11	3	34	27	201	4
Infant mortality rate....	8.42	848.48	448.82	176.92	*	*	46.32	11.75	4.38	*
Male										
Live births.....	25,196	36	85	62	93	95	373	1,100	23,347	5
Infant deaths.....	267	31	40	17	10	2	23	17	123	3
Infant mortality rate....	10.60	861.11	470.59	*	*	*	61.66	*	5.27	*
Female										
Live births.....	24,341	30	42	68	63	76	361	1,197	22,500	4
Infant deaths.....	150	25	17	6	1	1	10	10	78	1
Infant mortality rate....	6.16	833.33	*	*	*	*	*	*	3.47	*
Asian or Pacific Islander										
Both sexes										
Live births.....	253,184	327	469	579	692	902	3,794	13,979	232,396	46
Infant deaths.....	1,143	287	191	65	50	33	79	98	335	5
Infant mortality rate....	4.51	877.68	407.25	112.26	72.25	36.59	20.82	7.01	1.44	*
Male										
Live births.....	130,590	165	238	300	352	497	1,894	6,594	120,525	25
Infant deaths.....	627	149	114	38	29	20	32	53	189	4
Infant mortality rate....	4.80	903.03	478.99	126.67	82.39	40.24	16.90	8.04	1.57	*
Female										
Live births.....	122,594	162	231	279	340	405	1,900	7,385	111,871	21
Infant deaths.....	516	138	77	27	20	13	47	46	146	1
Infant mortality rate....	4.21	851.85	333.33	96.77	58.82	*	24.74	6.23	1.31	*

* Figure does not meet standard of reliability or precision; based on fewer than 20 deaths in the numerator

- Quantity zero

/1 Includes Aleut and Eskimos

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
All races										
Total										
Live births	4,247,726	31,585	52,645	66,648	372,162	2,310,514	809,678	357,865	240,795	5,834
Infant deaths	28,075	12,562	2,216	1,172	2,753	6,114	1,605	751	648	255
Infant mortality rate	6.61	397.72	42.09	17.58	7.40	2.65	1.98	2.10	2.69	43.71
Less than 2,500 grams										
Live births	348,543	30,367	39,666	43,814	116,379	93,931	11,932	5,342	6,459	653
Infant deaths	19,007	12,548	2,097	994	1,553	1,308	164	131	120	92
Infant mortality rate	54.53	413.21	52.87	22.69	13.34	13.93	13.74	24.52	18.58	140.89
Less than 500 grams										
Live births	7,225	6,881	226	23	15	20	4	2	2	52
Infant deaths	6,276	6,031	155	13	11	17	4	1	2	41
Infant mortality rate	868.65	876.47	685.84	*	*	*	*	*	*	788.46
500-749 grams										
Live births	11,282	9,708	1,343	61	57	42	14	2	9	46
Infant deaths	5,071	4,630	354	24	18	15	3	1	6	19
Infant mortality rate	449.48	476.93	263.59	393.44	*	*	*	*	*	*
750-999 grams										
Live births	12,330	7,655	3,978	309	115	146	54	16	21	36
Infant deaths	1,771	1,329	351	48	20	10	2	1	1	9
Infant mortality rate	143.63	173.61	88.24	155.34	173.91	*	*	*	*	*
1,000-1,249 grams										
Live births	14,465	3,428	7,933	1,598	759	431	122	54	103	37
Infant deaths	1,007	350	441	94	65	31	9	8	5	4
Infant mortality rate	69.62	102.10	55.59	58.82	85.64	71.93	*	*	*	*
1,250-1,499 grams										
Live births	17,541	1,006	9,187	3,737	2,335	757	226	87	169	37
Infant deaths	793	102	329	144	136	58	8	7	6	3
Infant mortality rate	45.21	101.39	35.81	38.53	58.24	76.62	*	*	*	*
1,500-1,999 grams										
Live births	67,232	971	12,653	19,965	23,020	8,113	1,031	488	874	117
Infant deaths	1,842	87	362	408	499	379	43	24	32	7
Infant mortality rate	27.40	89.60	28.61	20.44	21.68	46.72	41.71	49.18	36.61	*
2,000-2,499 grams										
Live births	218,468	718	4,346	18,121	90,078	84,422	10,481	4,693	5,281	328
Infant deaths	2,246	18	105	263	804	797	95	88	68	9
Infant mortality rate	10.28	*	24.16	14.51	8.93	9.44	9.06	18.75	12.88	*
2,500-2,999 grams										
Live births	788,641	1,218	4,637	9,501	125,078	479,664	95,666	38,039	33,817	1,021
Infant deaths	3,311	14	69	104	701	1,739	359	168	150	7
Infant mortality rate	4.20	*	14.88	10.95	5.60	3.63	3.75	4.42	4.44	*
3,000-3,499 grams										
Live births	1,664,369	-	5,681	8,638	89,836	997,160	329,797	134,959	96,524	1,774
Infant deaths	3,443	-	33	53	347	1,943	593	241	223	10
Infant mortality rate	2.07	-	5.81	6.14	3.86	1.95	1.80	1.79	2.31	*

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]-Cont

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
All races										
3,500-3,999 grams										
Live births	1,121,186	-	2,661	3,869	33,070	589,158	282,830	130,678	77,894	1,026
Infant deaths	1,680	-	16	17	114	888	369	157	115	4
Infant mortality rate	1.50	-	*	*	3.45	1.51	1.30	1.20	1.48	*
4,000-4,499 grams										
Live births	280,415	-	-	697	6,544	130,737	78,151	41,742	22,242	302
Infant deaths	382	-	-	3	20	182	100	46	28	3
Infant mortality rate	1.36	-	-	*	3.06	1.39	1.28	1.10	1.26	*
4,500-4,999 grams										
Live births	39,131	-	-	109	1,066	17,630	10,350	6,439	3,484	53
Infant deaths	89	-	-	-	12	44	17	7	8	1
Infant mortality rate	2.27	-	-	-	*	2.50	*	*	*	*
5,000 grams or more										
Live births	4,447	-	-	20	189	2,234	952	666	375	11
Infant deaths	28	-	-	1	7	10	3	1	3	3
Infant mortality rate	6.30	-	-	*	*	*	*	*	*	*
Not stated										
Live births	994	-	-	-	-	-	-	-	-	994
Infant deaths	134	-	-	-	-	-	-	-	-	134
Infant mortality rate	134.81	-	-	-	-	-	-	-	-	134.81
White										
Total										
Live births	3,274,194	18,717	35,475	46,566	272,759	1,783,294	637,548	285,574	190,056	4,205
Infant deaths	18,214	7,337	1,445	820	1,953	4,357	1,138	538	464	161
Infant mortality rate	5.56	392.00	40.73	17.61	7.16	2.44	1.78	1.88	2.44	38.29
Less than 2,500 grams										
Live births	233,957	17,938	26,521	30,531	80,741	61,995	7,899	3,635	4,306	391
Infant deaths	11,733	7,328	1,364	699	1,094	904	122	98	75	49
Infant mortality rate	50.15	408.52	51.43	22.89	13.55	14.58	15.44	26.96	17.42	125.32
Less than 500 grams										
Live births	3,971	3,776	133	11	13	13	4	-	-	21
Infant deaths	3,466	3,333	86	5	10	10	4	-	-	16
Infant mortality rate	872.83	882.68	646.62	*	*	*	*	-	-	*
500-749 grams										
Live births	6,608	5,626	827	48	35	28	9	1	6	28
Infant deaths	3,058	2,772	232	19	12	7	2	1	4	9
Infant mortality rate	462.77	492.71	280.53	*	*	*	*	*	*	*
750-999 grams										
Live births	7,654	4,662	2,502	216	67	105	44	15	17	26
Infant deaths	1,148	860	222	35	13	6	2	1	1	7
Infant mortality rate	149.99	184.47	88.73	162.04	*	*	*	*	*	*
1,000-1,249 grams										
Live births	9,271	2,198	5,092	1,026	488	273	79	33	60	22
Infant deaths	655	220	277	62	52	25	8	6	3	2
Infant mortality rate	70.65	100.09	54.40	60.43	106.56	91.58	*	*	*	*

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]-Cont

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
White										
1,250-1,499 grams										
Live births	11,687	655	6,183	2,440	1,542	526	151	58	110	22
Infant deaths	542	70	219	103	93	40	5	5	4	2
Infant mortality rate	46.38	106.87	35.42	42.21	60.31	76.05	*	*	*	*
1,500-1,999 grams										
Live births	45,664	562	8,906	13,700	15,436	5,385	708	329	566	72
Infant deaths	1,285	59	253	279	348	270	33	19	18	5
Infant mortality rate	28.14	104.98	28.41	20.36	22.54	50.14	46.61	*	*	*
2,000-2,499 grams										
Live births	149,102	459	2,878	13,090	63,160	55,665	6,904	3,199	3,547	200
Infant deaths	1,578	13	75	195	564	547	67	66	45	7
Infant mortality rate	10.58	*	26.06	14.90	8.93	9.83	9.70	20.63	12.69	*
2,500-2,999 grams										
Live births	552,834	779	2,940	6,434	91,609	334,087	65,965	26,520	23,838	662
Infant deaths	2,302	9	47	72	508	1,200	235	118	108	5
Infant mortality rate	4.16	*	15.99	11.19	5.55	3.59	3.56	4.45	4.53	*
3,000-3,499 grams										
Live births	1,279,155	-	3,949	6,011	68,150	768,697	252,282	104,261	74,517	1,288
Infant deaths	2,452	-	21	37	243	1,400	415	170	158	8
Infant mortality rate	1.92	-	5.32	6.16	3.57	1.82	1.64	1.63	2.12	*
3,500-3,999 grams										
Live births	928,391	-	2,065	2,929	25,982	489,020	234,131	108,726	64,734	804
Infant deaths	1,249	-	13	9	79	670	270	111	94	3
Infant mortality rate	1.35	-	*	*	3.04	1.37	1.15	1.02	1.45	*
4,000-4,499 grams										
Live births	241,553	-	-	556	5,281	112,566	67,455	36,182	19,286	227
Infant deaths	298	-	-	3	14	142	77	34	24	3
Infant mortality rate	1.23	-	-	*	*	1.26	1.14	0.94	1.24	*
4,500-4,999 grams										
Live births	33,797	-	-	88	849	15,097	8,991	5,681	3,050	41
Infant deaths	69	-	-	-	9	34	16	6	3	1
Infant mortality rate	2.04	-	-	-	*	2.25	*	*	*	*
5,000 grams or more										
Live births	3,724	-	-	17	147	1,832	825	569	325	9
Infant deaths	21	-	-	1	6	7	3	-	2	2
Infant mortality rate	5.64	-	-	*	*	*	*	-	*	*
Not stated										
Live births	783	-	-	-	-	-	-	-	-	783
Infant deaths	89	-	-	-	-	-	-	-	-	89
Infant mortality rate	113.67	-	-	-	-	-	-	-	-	113.67
Black										
Total										
Live births	670,811	11,194	13,973	15,985	74,570	356,761	113,515	48,083	35,549	1,181
Infant deaths	8,301	4,569	653	302	643	1,380	354	164	157	79
Infant mortality rate	12.37	408.17	46.73	18.89	8.62	3.87	3.12	3.41	4.42	66.89

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]-Cont

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Black										
Less than 2,500 grams										
Live births	90,163	10,825	10,752	10,630	27,357	24,069	3,158	1,363	1,792	217
Infant deaths	6,260	4,566	621	255	371	311	29	26	40	39
Infant mortality rate	69.43	421.80	57.76	23.99	13.56	12.92	9.18	19.08	22.32	179.72
Less than 500 grams										
Live births	2,861	2,722	86	12	2	7	-	2	2	28
Infant deaths	2,467	2,361	66	8	1	7	-	1	2	21
Infant mortality rate	862.29	867.38	767.44	*	*	*	-	*	*	750.00
500-749 grams										
Live births	4,078	3,589	429	10	15	11	3	1	3	17
Infant deaths	1,765	1,633	108	4	4	5	-	-	2	9
Infant mortality rate	432.81	455.00	251.75	*	*	*	-	-	*	*
750-999 grams										
Live births	3,967	2,579	1,220	80	39	29	9	1	2	8
Infant deaths	535	405	105	12	7	3	-	-	-	2
Infant mortality rate	134.86	157.04	86.07	*	*	*	-	-	-	*
1,000-1,249 grams										
Live births	4,346	1,056	2,372	459	210	136	39	18	41	15
Infant deaths	291	114	129	26	10	5	1	1	2	2
Infant mortality rate	66.96	107.95	54.38	56.64	*	*	*	*	*	*
1,250-1,499 grams										
Live births	4,781	302	2,459	1,053	638	182	59	26	50	12
Infant deaths	214	23	93	36	36	17	3	2	2	1
Infant mortality rate	44.76	76.16	37.82	34.19	56.43	*	*	*	*	*
1,500-1,999 grams										
Live births	17,040	354	2,986	5,037	5,864	2,103	273	127	257	39
Infant deaths	445	24	93	110	121	73	7	3	12	1
Infant mortality rate	26.12	67.80	31.15	21.84	20.63	34.71	*	*	*	*
2,000-2,499 grams										
Live births	53,090	223	1,200	3,979	20,589	21,601	2,775	1,188	1,437	98
Infant deaths	543	5	27	59	192	201	18	19	20	2
Infant mortality rate	10.23	*	22.50	14.83	9.33	9.31	*	*	13.92	*
2,500-2,999 grams										
Live births	168,316	369	1,396	2,463	25,010	102,018	20,894	8,306	7,583	277
Infant deaths	831	3	21	24	160	443	99	40	38	2
Infant mortality rate	4.94	*	15.04	9.74	6.40	4.34	4.74	4.82	5.01	*
3,000-3,499 grams										
Live births	259,470	-	1,388	2,070	15,984	152,673	51,112	20,443	15,457	343
Infant deaths	783	-	10	14	79	424	140	56	57	2
Infant mortality rate	3.02	-	*	*	4.94	2.78	2.74	2.74	3.69	*
3,500-3,999 grams										
Live births	124,484	-	437	704	5,168	64,595	30,839	13,993	8,615	133
Infant deaths	314	-	1	8	25	159	70	33	17	-
Infant mortality rate	2.52	-	*	*	4.84	2.46	2.27	2.36	*	-

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]-Cont

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Black										
4,000-4,499 grams										
Live births	24,428	-	-	98	872	11,517	6,582	3,488	1,826	45
Infant deaths	62	-	-	-	4	33	15	8	2	-
Infant mortality rate	2.54	-	-	-	*	2.87	*	*	*	-
4,500-4,999 grams										
Live births	3,342	-	-	17	151	1,613	861	445	247	8
Infant deaths	12	-	-	-	3	6	1	-	2	-
Infant mortality rate	*	-	-	-	*	*	*	-	*	-
5,000 grams or more										
Live births	452	-	-	3	28	276	69	45	29	2
Infant deaths	4	-	-	-	-	3	-	-	-	1
Infant mortality rate	*	-	-	-	-	*	-	-	-	*
Not stated										
Live births	156	-	-	-	-	-	-	-	-	156
Infant deaths	35	-	-	-	-	-	-	-	-	35
Infant mortality rate	224.36	-	-	-	-	-	-	-	-	224.36
American Indian ¹										
Total										
Live births	49,537	363	702	860	4,799	25,454	9,397	4,434	3,447	81
Infant deaths	417	131	25	16	44	123	39	18	15	5
Infant mortality rate	8.42	360.88	35.61	*	9.17	4.83	4.15	*	*	*
Less than 2,500 grams										
Live births	3,681	340	460	456	1,227	933	114	59	82	10
Infant deaths	211	131	22	12	21	18	3	2	-	1
Infant mortality rate	57.32	385.29	47.83	*	17.11	*	*	*	-	*
Less than 500 grams										
Live births	66	64	2	-	-	-	-	-	-	-
Infant deaths	56	56	-	-	-	-	-	-	-	-
Infant mortality rate	848.48	875.00	-	-	-	-	-	-	-	-
500-749 grams										
Live births	127	110	14	1	-	2	-	-	-	-
Infant deaths	57	52	3	-	-	2	-	-	-	-
Infant mortality rate	448.82	472.73	*	-	-	*	-	-	-	-
750-999 grams										
Live births	130	77	48	-	3	2	-	-	-	-
Infant deaths	23	17	6	-	-	-	-	-	-	-
Infant mortality rate	176.92	*	*	-	-	-	-	-	-	-
1,000-1,249 grams										
Live births	156	50	77	12	10	5	-	1	1	-
Infant deaths	11	4	6	-	1	-	-	-	-	-
Infant mortality rate	*	*	*	-	*	-	-	-	-	-
1,250-1,499 grams										
Live births	171	8	88	34	25	8	6	-	2	-
Infant deaths	3	-	2	-	1	-	-	-	-	-
Infant mortality rate	*	-	*	-	*	-	-	-	-	-

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]-Cont

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
American Indian ¹										
1,500-1,999 grams										
Live births	734	21	147	189	238	102	13	7	14	3
Infant deaths	34	2	5	8	7	8	1	1	-	1
Infant mortality rate	46.32	*	*	*	*	*	*	*	-	*
2,000-2,499 grams										
Live births	2,297	10	84	220	951	814	95	51	65	7
Infant deaths	27	-	-	4	12	8	2	1	-	-
Infant mortality rate	11.75	-	-	*	*	*	*	*	-	-
2,500-2,999 grams										
Live births	8,457	23	84	152	1,422	4,837	1,052	454	425	8
Infant deaths	49	-	1	3	9	24	7	2	2	-
Infant mortality rate	5.79	-	*	*	*	4.96	*	*	*	-
3,000-3,499 grams										
Live births	18,660	-	96	154	1,344	10,398	3,747	1,597	1,300	24
Infant deaths	83	-	-	1	7	49	15	6	5	-
Infant mortality rate	4.45	-	-	*	*	4.71	*	*	*	-
3,500-3,999 grams										
Live births	13,959	-	62	75	619	7,059	3,272	1,671	1,178	23
Infant deaths	52	-	2	-	4	28	12	4	2	-
Infant mortality rate	3.73	-	*	-	*	3.97	*	*	*	-
4,000-4,499 grams										
Live births	3,975	-	-	19	147	1,864	1,027	534	379	5
Infant deaths	9	-	-	-	2	2	1	2	2	-
Infant mortality rate	*	-	-	-	*	*	*	*	*	-
4,500-4,999 grams										
Live births	682	-	-	4	34	309	158	101	74	2
Infant deaths	6	-	-	-	-	2	-	1	3	-
Infant mortality rate	*	-	-	-	-	*	-	*	*	-
5,000 grams or more										
Live births	114	-	-	-	6	54	27	18	9	-
Infant deaths	2	-	-	-	-	-	-	1	1	-
Infant mortality rate	*	-	-	-	-	-	-	*	*	-
Not stated										
Live births	9	-	-	-	-	-	-	-	-	9
Infant deaths	4	-	-	-	-	-	-	-	-	4
Infant mortality rate	*	-	-	-	-	-	-	-	-	*
Asian or Pacific Islander										
Total										
Live births	253,184	1,311	2,495	3,237	20,034	145,005	49,218	19,774	11,743	367
Infant deaths	1,143	524	91	33	113	254	74	30	12	10
Infant mortality rate	4.51	399.69	36.47	10.19	5.64	1.75	1.50	1.52	*	*
Less than 2,500 grams										
Live births	20,742	1,264	1,933	2,197	7,054	6,934	761	285	279	35
Infant deaths	803	522	89	27	67	74	10	4	5	4
Infant mortality rate	38.71	412.97	46.04	12.29	9.50	10.67	*	*	*	*

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]-Cont

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Asian or Pacific Islander										
Less than 500 grams										
Live births	327	319	5	-	-	-	-	-	-	3
Infant deaths	287	281	3	-	-	-	-	-	-	3
Infant mortality rate	877.68	880.88	*	-	-	-	-	-	-	*
500-749 grams										
Live births	469	383	73	2	7	1	2	-	-	1
Infant deaths	191	174	11	1	2	1	1	-	-	1
Infant mortality rate	407.25	454.31	*	*	*	*	*	-	-	*
750-999 grams										
Live births	579	337	208	13	6	10	1	-	2	2
Infant deaths	65	47	18	-	-	1	-	-	-	-
Infant mortality rate	112.26	139.47	*	-	-	*	-	-	-	-
1,000-1,249 grams										
Live births	692	124	392	101	51	17	4	2	1	-
Infant deaths	50	11	28	6	2	1	-	1	-	-
Infant mortality rate	72.25	*	71.43	*	*	*	-	*	-	-
1,250-1,499 grams										
Live births	902	41	457	210	130	41	10	3	7	3
Infant deaths	33	8	15	4	5	1	-	-	-	-
Infant mortality rate	36.59	*	*	*	*	*	-	-	-	-
1,500-1,999 grams										
Live births	3,794	34	614	1,039	1,482	523	37	25	37	3
Infant deaths	79	2	11	11	22	28	1	1	2	-
Infant mortality rate	20.82	*	*	*	14.84	53.54	*	*	*	-
2,000-2,499 grams										
Live births	13,979	26	184	832	5,378	6,342	707	255	232	23
Infant deaths	98	-	3	5	35	41	8	2	3	-
Infant mortality rate	7.01	-	*	*	6.51	6.46	*	*	*	-
2,500-2,999 grams										
Live births	59,034	47	217	452	7,037	38,722	7,755	2,759	1,971	74
Infant deaths	129	2	-	5	23	72	18	7	2	-
Infant mortality rate	2.19	*	-	*	3.27	1.86	*	*	*	-
3,000-3,499 grams										
Live births	107,084	-	248	403	4,358	65,392	22,656	8,658	5,250	119
Infant deaths	125	-	2	1	17	71	22	9	3	-
Infant mortality rate	1.17	-	*	*	*	1.09	0.97	*	*	-
3,500-3,999 grams										
Live births	54,352	-	97	161	1,301	28,484	14,588	6,288	3,367	66
Infant deaths	65	-	-	-	5	30	17	9	2	1
Infant mortality rate	1.20	-	-	-	*	1.05	*	*	*	*
4,000-4,499 grams										
Live births	10,459	-	-	24	244	4,790	3,087	1,538	751	25
Infant deaths	13	-	-	-	-	5	7	1	-	-
Infant mortality rate	*	-	-	-	-	*	*	*	-	-

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:
United states, 2008 period data

[Infant deaths weighted. Rates are per 1000 live births]-Cont

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Asian or Pacific Islander										
4,500-4,999 grams										
Live births	1,310	-	-	-	32	611	340	212	113	2
Infant deaths	2	-	-	-	-	2	-	-	-	-
Infant mortality rate	*	-	-	-	-	*	-	-	-	-
5,000 grams or more										
Live births	157	-	-	-	8	72	31	34	12	-
Infant deaths	1	-	-	-	1	-	-	-	-	-
Infant mortality rate	*	-	-	-	*	-	-	-	-	-
Not stated										
Live births	46	-	-	-	-	-	-	-	-	46
Infant deaths	5	-	-	-	-	-	-	-	-	5
Infant mortality rate	*	-	-	-	-	-	-	-	-	*

-/ Quality zero.

*/Figure does not meet standard of reliability or precision; based on fewer than 20 death in the numerator.

¹/ Includes Aleuts and Eskimos.

Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2008 period data

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 1000 live births]

Birthweight and race of mother	Live Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post-Neonatal
All races						
Total (all birthweights).....	4,247,726	28,075	18,238	14,648	3,590	9,837
Rate.....		6.61	4.29	3.45	0.85	2.32
Less than 2,500 grams.....	348,543	19,007	15,206	12,787	2,419	3,801
Rate.....		54.53	43.63	36.69	6.94	10.91
Less than 500 grams.....	7,225	6,276	6,103	5,933	170	173
Rate.....		868.65	844.71	821.18	23.53	23.94
500-749 grams.....	11,282	5,071	4,264	3,405	859	807
Rate.....		449.48	377.95	301.81	76.14	71.53
750-999 grams.....	12,330	1,771	1,288	858	430	484
Rate.....		143.63	104.46	69.59	34.87	39.25
1,000-1,249 grams.....	14,465	1,007	678	475	203	329
Rate.....		69.62	46.87	32.84	14.03	22.74
1,250-1,499 grams.....	17,541	793	557	404	153	236
Rate.....		45.21	31.75	23.03	8.72	13.45
1,500-1,999 grams.....	67,232	1,842	1,193	921	272	649
Rate.....		27.40	17.74	13.70	4.05	9.65
2,000-2,499 grams.....	218,468	2,246	1,123	791	332	1,124
Rate.....		10.28	5.14	3.62	1.52	5.14
2,500-2,999 grams.....	788,641	3,311	1,229	758	471	2,082
Rate.....		4.20	1.56	0.96	0.60	2.64
3,000-3,499 grams.....	1,664,369	3,443	1,023	583	440	2,421
Rate.....		2.07	0.61	0.35	0.26	1.45
3,500-3,999 grams.....	1,121,186	1,680	470	280	190	1,210
Rate.....		1.50	0.42	0.25	0.17	1.08
4,000-4,499 grams.....	280,415	382	123	75	47	260
Rate.....		1.36	0.44	0.27	0.17	0.93
4,500-4,999 grams.....	39,131	89	42	28	14	47
Rate.....		2.27	1.07	0.72	*	1.20
5,000 grams or more.....	4,447	28	17	11	6	11
Rate.....		6.30	*	*	*	*
Not stated.....	994	134	129	126	3	5
Rate.....		134.81	129.78	126.76	*	*

See footnotes at end of table.

Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 1000 live births]

Birthweight and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Total (all birthweights).....	3,274,194	18,214	11,826	9,472	2,354	6,388
Rate.....		5.56	3.61	2.89	0.72	1.95
Less than 2,500 grams.....	233,957	11,733	9,536	8,036	1,499	2,197
Rate.....		50.15	40.76	34.35	6.41	9.39
Less than 500 grams.....	3,971	3,466	3,385	3,300	84	81
Rate.....		872.83	852.43	831.02	21.15	20.40
500-749 grams.....	6,608	3,058	2,667	2,173	494	391
Rate.....		462.77	403.60	328.84	74.76	59.17
750-999 grams.....	7,654	1,148	876	599	277	272
Rate.....		149.99	114.45	78.26	36.19	35.54
1,000-1,249 grams.....	9,271	655	478	346	132	178
Rate.....		70.65	51.56	37.32	14.24	19.20
1,250-1,499 grams.....	11,687	542	411	310	102	131
Rate.....		46.38	35.17	26.53	8.73	11.21
1,500-1,999 grams.....	45,664	1,285	891	715	176	394
Rate.....		28.14	19.51	15.66	3.85	8.63
2,000-2,499 grams.....	149,102	1,578	827	593	235	751
Rate.....		10.58	5.55	3.98	1.58	5.04
2,500-2,999 grams.....	552,834	2,302	924	587	337	1,378
Rate.....		4.16	1.67	1.06	0.61	2.49
3,000-3,499 grams.....	1,279,155	2,452	765	452	313	1,688
Rate.....		1.92	0.60	0.35	0.24	1.32
3,500-3,999 grams.....	928,391	1,249	369	221	148	881
Rate.....		1.35	0.40	0.24	0.16	0.95
4,000-4,499 grams.....	241,553	298	103	62	41	194
Rate.....		1.23	0.43	0.26	0.17	0.80
4,500-4,999 grams.....	33,797	69	33	24	9	36
Rate.....		2.04	0.98	0.71	*	1.07
5,000 grams or more.....	3,724	21	11	7	4	10
Rate.....		5.64	*	*	*	*
Not stated.....	783	89	85	82	3	4
Rate.....		113.67	108.56	104.73	*	*

See footnotes at end of table.

Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 1000 live births]

Birthweight and race of mother	Live Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post-Neonatal
Black						
Total (all birthweights).....	670,811	8,301	5,425	4,371	1,054	2,876
Rate.....		12.37	8.09	6.52	1.57	4.29
Less than 2,500 grams.....	90,163	6,260	4,860	4,058	802	1,400
Rate.....		69.43	53.90	45.01	8.90	15.53
Less than 500 grams.....	2,861	2,467	2,381	2,303	77	87
Rate.....		862.29	832.23	804.96	26.91	30.41
500-749 grams.....	4,078	1,765	1,382	1,058	324	383
Rate.....		432.81	338.89	259.44	79.45	93.92
750-999 grams.....	3,967	535	347	208	139	188
Rate.....		134.86	87.47	52.43	35.04	47.39
1,000-1,249 grams.....	4,346	291	159	102	57	132
Rate.....		66.96	36.59	23.47	13.12	30.37
1,250-1,499 grams.....	4,781	214	122	76	45	93
Rate.....		44.76	25.52	15.90	9.41	19.45
1,500-1,999 grams.....	17,040	445	236	155	81	209
Rate.....		26.12	13.85	9.10	4.75	12.27
2,000-2,499 grams.....	53,090	543	233	155	78	309
Rate.....		10.23	4.39	2.92	1.47	5.82
2,500-2,999 grams.....	168,316	831	243	132	111	588
Rate.....		4.94	1.44	0.78	0.66	3.49
3,000-3,499 grams.....	259,470	783	192	93	99	590
Rate.....		3.02	0.74	0.36	0.38	2.27
3,500-3,999 grams.....	124,484	314	74	40	34	240
Rate.....		2.52	0.59	0.32	0.27	1.93
4,000-4,499 grams.....	24,428	62	12	9	3	50
Rate.....		2.54	*	*	*	2.05
4,500-4,999 grams.....	3,342	12	6	2	4	6
Rate.....		*	*	*	*	*
5,000 grams or more.....	452	4	3	2	1	1
Rate.....		*	*	*	*	*
Not stated.....	156	35	35	35	-	-
Rate.....		224.36	224.36	224.36	-	-

See footnotes at end of table.

Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 1000 live births]

Birthweight and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
American Indian ¹						
Total (all birthweights).....	49,537	417	207	166	41	210
Rate.....		8.42	4.18	3.35	0.83	4.24
Less than 2,500 grams.....	3,681	211	159	138	21	53
Rate.....		57.32	43.19	37.49	5.70	14.40
Less than 500 grams.....	66	56	56	55	1	-
Rate.....		848.48	848.48	833.33	*	-
500-749 grams.....	127	57	51	41	10	6
Rate.....		448.82	401.57	322.83	*	*
750-999 grams.....	130	23	19	16	3	4
Rate.....		176.92	*	*	*	*
1,000-1,249 grams.....	156	11	8	7	1	3
Rate.....		*	*	*	*	*
1,250-1,499 grams.....	171	3	1	-	1	2
Rate.....		*	*	-	*	*
1,500-1,999 grams.....	734	34	15	12	3	18
Rate.....		46.32	*	*	*	*
2,000-2,499 grams.....	2,297	27	8	6	2	19
Rate.....		11.75	*	*	*	*
2,500-2,999 grams.....	8,457	49	10	5	5	39
Rate.....		5.79	*	*	*	4.61
3,000-3,499 grams.....	18,660	83	18	9	9	65
Rate.....		4.45	*	*	*	3.48
3,500-3,999 grams.....	13,959	52	10	7	3	42
Rate.....		3.73	*	*	*	3.01
4,000-4,499 grams.....	3,975	9	3	2	1	6
Rate.....		*	*	*	*	*
4,500-4,999 grams.....	682	6	2	1	1	4
Rate.....		*	*	*	*	*
5,000 grams or more.....	114	2	2	1	1	-
Rate.....		*	*	*	*	-
Not stated.....	9	4	3	3	-	1
Rate.....		*	*	*	-	*

See footnotes at end of table.

Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 1000 live births]

Birthweight and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Asian or Pacific Islander						
Total (all birthweights).....	253,184	1,143	780	639	141	363
Rate.....		4.51	3.08	2.52	0.56	1.43
Less than 2,500 grams.....	20,742	803	652	556	96	151
Rate.....		38.71	31.43	26.81	4.63	7.28
Less than 500 grams.....	327	287	281	274	7	6
Rate.....		877.68	859.33	837.92	*	*
500-749 grams.....	469	191	164	132	31	27
Rate.....		407.25	349.68	281.45	66.10	57.57
750-999 grams.....	579	65	46	35	11	19
Rate.....		112.26	79.45	60.45	*	*
1,000-1,249 grams.....	692	50	33	20	13	16
Rate.....		72.25	47.69	28.90	*	*
1,250-1,499 grams.....	902	33	23	18	5	10
Rate.....		36.59	25.50	*	*	*
1,500-1,999 grams.....	3,794	79	51	39	12	28
Rate.....		20.82	13.44	10.28	*	7.38
2,000-2,499 grams.....	13,979	98	54	37	17	44
Rate.....		7.01	3.86	2.65	*	3.15
2,500-2,999 grams.....	59,034	129	52	34	18	77
Rate.....		2.19	0.88	0.58	*	1.30
3,000-3,499 grams.....	107,084	125	48	28	19	77
Rate.....		1.17	0.45	0.26	*	0.72
3,500-3,999 grams.....	54,352	65	17	12	5	47
Rate.....		1.20	*	*	*	0.86
4,000-4,499 grams.....	10,459	13	4	2	2	9
Rate.....		*	*	*	*	*
4,500-4,999 grams.....	1,310	2	1	1	-	1
Rate.....		*	*	*	-	*
5,000 grams or more.....	157	1	1	1	-	-
Rate.....		*	*	*	-	-
Not stated.....	46	5	5	5	-	-
Rate.....		*	*	*	-	-

See footnotes at end of table.

* / Figure does not meet standard of reliability or precision; based on fewer than 20 death in the numerator

- / Quantity zero

¹ / Includes Aleuts and Eskimos

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
All birthweights						
All Causes	4,247,726	28,075 660.9	18,238 429.4	14,648 344.8	3,590 84.5	9,837 231.6
Congenital malformations (Q00-Q99).....		5,681 133.7	3,997 94.1	3,133 73.8	864 20.3	1,684 39.6
Short gestation and low birthweight nec (P07).....		4,757 112.0	4,636 109.1	4,506 106.1	130 3.1	121 2.8
Sudden infant death syndrome (R95).....		2,350 55.3	207 4.9	34 0.8	174 4.1	2,143 50.5
Maternal complications of pregnancy (P01).....		1,775 41.8	1,755 41.3	1,729 40.7	26 0.6	20 0.5
Accidents (unintentional injures) (V01-X59).....		1,314 30.9	128 3.0	27 0.6	101 2.4	1,185 27.9
Complications of placenta, cord, membranes (P02).....		1,068 25.1	1,056 24.9	1,020 24.0	36 0.8	12 *
Bacterial sepsis of newborn (P36).....		702 16.5	675 15.9	304 7.2	371 8.7	27 0.6
Respiratory distress of newborn (P22).....		636 15.0	623 14.7	494 11.6	129 3.0	13 *
Diseases of the circulatory system (I00-I99).....		595 14.0	107 2.5	54 1.3	53 1.2	488 11.5
Neonatal hemorrhage (P50-P52, P54).....		555 13.1	541 12.7	366 8.6	175 4.1	14 *
All other causes.....		8,641 203.4	4,513 106.2	2,982 70.2	1,530 36.0	4,129 97.2
Less than 2,500 grams						
All Causes	348,543	19,007 5,453.3	15,206 4,362.7	12,787 3,668.7	2,419 694.0	3,801 1,090.5
Congenital malformations (Q00-Q99).....		3,378 969.2	2,631 754.9	2,220 636.9	411 117.9	747 214.3
Short gestation and low birthweight nec (P07).....		4,668 1,339.3	4,549 1,305.1	4,422 1,268.7	127 36.4	119 34.1
Sudden infant death syndrome (R95).....		511 146.6	31 8.9	5 *	26 7.5	480 137.7
Maternal complications of pregnancy (P01).....		1,725 494.9	1,706 489.5	1,681 482.3	25 7.2	18 *
Accidents (unintentional injures) (V01-X59).....		227 65.1	29 8.3	12 *	17 *	198 56.8
Complications of placenta, cord, membranes (P02).....		985 282.6	976 280.0	946 271.4	30 8.6	9 *
Bacterial sepsis of newborn (P36).....		597 171.3	573 164.4	242 69.4	331 95.0	23 6.6
Respiratory distress of newborn (P22).....		623 178.7	610 175.0	484 138.9	126 36.2	13 *
Diseases of the circulatory system (I00-I99).....		277 79.5	60 17.2	36 10.3	24 6.9	218 62.5

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Neonatal hemorrhage (P50-P52, P54).....		513 147.2	499 143.2	332 95.3	166 47.6	14 *
All other causes.....		5,504 1,579.1	3,541 1,015.9	2,406 690.3	1,135 325.6	1,962 562.9
2,500 grams or more						
All Causes	3,898,189	8,935 229.2	2,904 74.5	1,736 44.5	1,168 30.0	6,031 154.7
Congenital malformations (Q00-Q99).....		2,297 58.9	1,360 34.9	907 23.3	453 11.6	936 24.0
Short gestation and low birthweight nec (P07).....		36 0.9	34 0.9	32 0.8	2 *	2 *
Sudden infant death syndrome (R95).....		1,837 47.1	175 4.5	28 0.7	148 3.8	1,662 42.6
Maternal complications of pregnancy (P01).....		23 0.6	21 0.5	20 0.5	1 *	2 *
Accidents (unintentional injuries) (V01-X59).....		1,087 27.9	99 2.5	15 *	84 2.2	988 25.3
Complications of placenta, cord, membranes (P02).....		74 1.9	71 1.8	65 1.7	6 *	3 *
Bacterial sepsis of newborn (P36).....		105 2.7	101 2.6	61 1.6	40 1.0	4 *
Respiratory distress of newborn (P22).....		12 *	12 *	9 *	3 *	- -
Diseases of the circulatory system (I00-I99).....		318 8.2	47 1.2	18 *	29 0.7	270 6.9
Neonatal hemorrhage (P50-P52, P54).....		41 1.1	41 1.1	32 0.8	9 *	- -
All other causes.....		3,104 79.6	941 24.1	547 14.0	393 10.1	2,164 55.5
Not stated birthweight						
All Causes	994	134 13,480.9	129 12,977.9	126 12,676.1	3 *	5 *
Congenital malformations (Q00-Q99).....		6 *	5 *	5 *	- -	1 *
Short gestation and low birthweight nec (P07).....		54 5,432.6	54 5,432.6	53 5,332.0	1 *	- -
Sudden infant death syndrome (R95).....		2 *	1 *	1 *	- -	1 *
Maternal complications of pregnancy (P01).....		27 2,716.3	27 2,716.3	27 2,716.3	- -	- -
Accidents (unintentional injuries) (V01-X59).....		- -	- -	- -	- -	- -
Complications of placenta, cord, membranes (P02).....		9 *	9 *	9 *	- -	- -
Bacterial sepsis of newborn (P36).....		- -	- -	- -	- -	- -

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Respiratory distress of newborn (P22).....		1 *	1 *	1 *	-	-
Diseases of the circulatory system (I00-I99).....		-	-	-	-	-
Neonatal hemorrhage (P50-P52, P54).....		1 *	1 *	1 *	-	-
All other causes.....		33	30	28	2	3
		3,319.9	3,018.1	2,816.9	*	*
White						
All birthweights						
All Causes	3,274,194	18,214 556.3	11,826 361.2	9,472 289.3	2,354 71.9	6,388 195.1
Congenital malformations (Q00-Q99).....		4,321 132.0	3,101 94.7	2,449 74.8	652 19.9	1,220 37.3
Short gestation and low birthweight nec (P07).....		2,643 80.7	2,579 78.8	2,510 76.7	69 2.1	64 2.0
Sudden infant death syndrome (R95).....		1,549 47.3	145 4.4	26 0.8	120 3.7	1,404 42.9
Maternal complications of pregnancy (P01).....		1,118 34.1	1,102 33.7	1,085 33.1	16 *	16 *
Accidents (unintentional injuries) (V01-X59).....		879 26.8	86 2.6	22 0.7	63 1.9	793 24.2
Complications of placenta, cord, membranes (P02).....		693 21.2	684 20.9	658 20.1	26 0.8	9 *
Bacterial sepsis of newborn (P36).....		438 13.4	425 13.0	197 6.0	227 6.9	13 *
Respiratory distress of newborn (P22).....		397 12.1	390 11.9	312 9.5	78 2.4	7 *
Diseases of the circulatory system (I00-I99).....		376 11.5	75 2.3	35 1.1	40 1.2	301 9.2
Neonatal hemorrhage (P50-P52, P54).....		358 10.9	350 10.7	247 7.5	103 3.1	8 *
All other causes.....		5,443 166.2	2,891 88.3	1,931 59.0	960 29.3	2,552 77.9
Less than 2,500 grams						
All Causes	233,957	11,733 5,015.0	9,536 4,076.0	8,036 3,434.8	1,499 640.7	2,197 939.1
Congenital malformations (Q00-Q99).....		2,550 1,089.9	2,038 871.1	1,733 740.7	305 130.4	511 218.4
Short gestation and low birthweight nec (P07).....		2,595 1,109.2	2,532 1,082.3	2,466 1,054.0	66 28.2	63 26.9
Sudden infant death syndrome (R95).....		286 122.2	20 8.5	3 *	17 *	265 113.3
Maternal complications of pregnancy (P01).....		1,078 460.8	1,064 454.8	1,048 447.9	16 *	14 *

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Accidents (unintentional injuries) (V01-X59).....		138	18	10	8	120
		59.0	*	*	*	51.3
Complications of placenta, cord, membranes (P02).....		628	621	600	21	7
		268.4	265.4	256.5	9.0	*
Bacterial sepsis of newborn (P36).....		360	349	149	200	11
		153.9	149.2	63.7	85.5	*
Respiratory distress of newborn (P22).....		385	378	303	75	7
		164.6	161.6	129.5	32.1	*
Diseases of the circulatory system (I00-I99).....		163	39	22	17	124
		69.7	16.7	9.4	*	53.0
Neonatal hemorrhage (P50-P52, P54).....		324	316	221	96	8
		138.5	135.1	94.5	41.0	*
All other causes.....		3,226	2,160	1,481	679	1,066
		1,378.9	923.2	633.0	290.2	455.6
2,500 grams or more						
All Causes	3,039,454	6,392	2,205	1,354	851	4,187
		210.3	72.5	44.5	28.0	137.8
Congenital malformations (Q00-Q99).....		1,766	1,059	712	347	708
		58.1	34.8	23.4	11.4	23.3
Short gestation and low birthweight nec (P07).....		18	17	15	2	1
		*	*	*	*	*
Sudden infant death syndrome (R95).....		1,262	124	21	102	1,138
		41.5	4.1	0.7	3.4	37.4
Maternal complications of pregnancy (P01).....		19	17	17	-	2
		*	*	*	-	*
Accidents (unintentional injuries) (V01-X59).....		741	67	12	55	674
		24.4	2.2	*	1.8	22.2
Complications of placenta, cord, membranes (P02).....		61	59	54	5	2
		2.0	1.9	1.8	*	*
Bacterial sepsis of newborn (P36).....		78	76	49	27	2
		2.6	2.5	1.6	0.9	*
Respiratory distress of newborn (P22).....		11	11	8	3	-
		*	*	*	*	-
Diseases of the circulatory system (I00-I99).....		213	35	12	23	177
		7.0	1.2	*	0.8	5.8
Neonatal hemorrhage (P50-P52, P54).....		33	33	26	7	-
		1.1	1.1	0.9	*	-
All other causes.....		2,189	706	426	279	1,483
		72.0	23.2	14.0	9.2	48.8
Not stated birthweight						
All Causes	783	89	85	82	3	4
		11,366.5	10,855.7	10,472.5	*	*
Congenital malformations (Q00-Q99).....		5	4	4	-	1
		*	*	*	-	*
Short gestation and low birthweight nec (P07).....		29	29	28	1	-
		3,703.7	3,703.7	3,576.0	*	-

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Sudden infant death syndrome (R95).....		2 *	1 *	1 *	-	1 *
Maternal complications of pregnancy (P01).....		20 2,554.3	20 2,554.3	20 2,554.3	-	-
Accidents (unintentional injuries) (V01-X59).....		-	-	-	-	-
Complications of placenta, cord, membranes (P02).....		4 *	4 *	4 *	-	-
Bacterial sepsis of newborn (P36).....		-	-	-	-	-
Respiratory distress of newborn (P22).....		1 *	1 *	1 *	-	-
Diseases of the circulatory system (I00-I99).....		-	-	-	-	-
Neonatal hemorrhage (P50-P52, P54).....		-	-	-	-	-
All other causes.....		27 3,448.3	25 3,192.8	23 2,937.4	2 *	2 *
Black						
All birthweights						
All Causes	670,811	8,301 1,237.5	5,425 808.7	4,371 651.6	1,054 157.1	2,876 428.7
Congenital malformations (Q00-Q99).....		1,034 154.1	678 101.1	510 76.0	168 25.0	356 53.1
Short gestation and low birthweight nec (P07).....		1,860 277.3	1,809 269.7	1,753 261.3	57 8.5	51 7.6
Sudden infant death syndrome (R95).....		696 103.8	53 7.9	5 *	48 7.2	643 95.9
Maternal complications of pregnancy (P01).....		565 84.2	561 83.6	553 82.4	8 *	4 *
Accidents (unintentional injuries) (V01-X59).....		366 54.6	35 5.2	5 *	30 4.5	331 49.3
Complications of placenta, cord, membranes (P02).....		314 46.8	311 46.4	301 44.9	10 *	3 *
Bacterial sepsis of newborn (P36).....		224 33.4	212 31.6	91 13.6	121 18.0	12 *
Respiratory distress of newborn (P22).....		220 32.8	215 32.1	166 24.7	49 7.3	5 *
Diseases of the circulatory system (I00-I99).....		172 25.6	24 3.6	15 *	9 *	148 22.1
Neonatal hemorrhage (P50-P52, P54).....		163 24.3	157 23.4	96 14.3	61 9.1	6 *
All other causes.....		2,686 400.4	1,369 204.1	876 130.6	493 73.5	1,317 196.3
Less than 2,500 grams						
All Causes	90,163	6,260 6,943.0	4,860 5,390.2	4,058 4,500.7	802 889.5	1,400 1,552.7

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Black						
Congenital malformations (Q00-Q99).....		631	452	368	85	178
		699.8	501.3	408.1	94.3	197.4
Short gestation and low birthweight nec (P07).....		1,825	1,774	1,718	57	50
		2,024.1	1,967.5	1,905.4	63.2	55.5
Sudden infant death syndrome (R95).....		210	10	1	9	200
		232.9	*	*	*	221.8
Maternal complications of pregnancy (P01).....		556	552	545	7	4
		616.7	612.2	604.5	*	*
Accidents (unintentional injures) (V01-X59).....		84	10	2	8	74
		93.2	*	*	*	82.1
Complications of placenta, cord, membranes (P02).....		300	298	289	9	2
		332.7	330.5	320.5	*	*
Bacterial sepsis of newborn (P36).....		200	189	81	109	11
		221.8	209.6	89.8	120.9	*
Respiratory distress of newborn (P22).....		219	214	165	49	5
		242.9	237.3	183.0	54.3	*
Diseases of the circulatory system (I00-I99).....		96	15	11	4	81
		106.5	*	*	*	89.8
Neonatal hemorrhage (P50-P52, P54).....		156	150	89	60	6
		173.0	166.4	98.7	66.5	*
All other causes.....		1,984	1,194	789	405	790
		2,200.5	1,324.3	875.1	449.2	876.2
2,500 grams or more						
All Causes	580,492	2,006	530	278	252	1,476
		345.6	91.3	47.9	43.4	254.3
Congenital malformations (Q00-Q99).....		403	225	141	83	178
		69.4	38.8	24.3	14.3	30.7
Short gestation and low birthweight nec (P07).....		16	15	15	-	1
		*	*	*	-	*
Sudden infant death syndrome (R95).....		487	43	4	39	443
		83.9	7.4	*	6.7	76.3
Maternal complications of pregnancy (P01).....		3	3	2	1	-
		*	*	*	*	-
Accidents (unintentional injures) (V01-X59).....		282	25	3	22	257
		48.6	4.3	*	3.8	44.3
Complications of placenta, cord, membranes (P02).....		11	10	9	1	1
		*	*	*	*	*
Bacterial sepsis of newborn (P36).....		23	22	10	12	1
		4.0	3.8	*	*	*
Respiratory distress of newborn (P22).....		1	1	1	-	-
		*	*	*	-	-
Diseases of the circulatory system (I00-I99).....		77	9	4	5	68
		13.3	*	*	*	11.7
Neonatal hemorrhage (P50-P52, P54).....		6	6	5	1	-
		*	*	*	*	-
All other causes.....		697	170	82	88	527
		120.1	29.3	14.1	15.2	90.8

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Black						
Not stated birthweight						
All Causes	156	35	35	35	-	-
		22,435.9	22,435.9	22,435.9	-	-
Congenital malformations (Q00-Q99).....		1	1	1	-	-
		*	*	*	-	-
Short gestation and low birthweight nec (P07).....		19	19	19	-	-
		*	*	*	-	-
Sudden infant death syndrome (R95).....		-	-	-	-	-
		-	-	-	-	-
Maternal complications of pregnancy (P01).....		6	6	6	-	-
		*	*	*	-	-
Accidents (unintentional injures) (V01-X59).....		-	-	-	-	-
		-	-	-	-	-
Complications of placenta, cord, membranes (P02).....		3	3	3	-	-
		*	*	*	-	-
Bacterial sepsis of newborn (P36).....		-	-	-	-	-
		-	-	-	-	-
Respiratory distress of newborn (P22).....		-	-	-	-	-
		-	-	-	-	-
Diseases of the circulatory system (I00-I99).....		-	-	-	-	-
		-	-	-	-	-
Neonatal hemorrhage (P50-P52, P54).....		1	1	1	-	-
		*	*	*	-	-
All other causes.....		5	5	5	-	-
		*	*	*	-	-
American Indian¹						
All birthweights						
All Causes	49,537	417	207	166	41	210
		841.8	417.9	335.1	82.8	423.9
Congenital malformations (Q00-Q99).....		75	48	42	6	27
		151.4	96.9	84.8	*	54.5
Short gestation and low birthweight nec (P07).....		44	42	42	-	2
		88.8	84.8	84.8	-	*
Sudden infant death syndrome (R95).....		45	3	1	2	42
		90.8	*	*	*	84.8
Maternal complications of pregnancy (P01).....		14	14	13	1	-
		*	*	*	*	-
Accidents (unintentional injures) (V01-X59).....		34	5	-	5	29
		68.6	*	-	*	58.5
Complications of placenta, cord, membranes (P02).....		20	20	20	-	-
		40.4	40.4	40.4	-	-
Bacterial sepsis of newborn (P36).....		6	6	2	4	-
		*	*	*	*	-
Respiratory distress of newborn (P22).....		9	9	8	1	-
		*	*	*	*	-

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
American Indian ¹						
Diseases of the circulatory system (I00-I99).....		14 *	- -	- -	- -	14 *
Neonatal hemorrhage (P50-P52, P54).....		7 *	7 *	6 *	1 *	- -
All other causes.....		147 296.7	53 107.0	32 64.6	21 42.4	94 189.8
Less than 2,500 grams						
All Causes	3,681	211 5,732.1	159 4,319.5	138 3,749.0	21 570.5	53 1,439.8
Congenital malformations (Q00-Q99).....		39 1,059.5	24 652.0	23 624.8	1 *	14 *
Short gestation and low birthweight nec (P07).....		43 1,168.2	41 1,113.8	41 1,113.8	- -	2 *
Sudden infant death syndrome (R95).....		8 *	- -	- -	- -	8 *
Maternal complications of pregnancy (P01).....		14 *	14 *	13 *	1 *	- -
Accidents (unintentional injuries) (V01-X59).....		3 *	1 *	- -	1 *	2 *
Complications of placenta, cord, membranes (P02).....		18 *	18 *	18 *	- -	- -
Bacterial sepsis of newborn (P36).....		6 *	6 *	2 *	4 *	- -
Respiratory distress of newborn (P22).....		9 *	9 *	8 *	1 *	- -
Diseases of the circulatory system (I00-I99).....		4 *	- -	- -	- -	4 *
Neonatal hemorrhage (P50-P52, P54).....		7 *	7 *	6 *	1 *	- -
All other causes.....		60 1,630.0	38 1,032.3	26 706.3	12 *	23 624.8
2,500 grams or more						
All Causes	45,847	201 438.4	45 98.2	25 54.5	20 43.6	156 340.3
Congenital malformations (Q00-Q99).....		37 80.7	23 50.2	18 *	5 *	13 *
Short gestation and low birthweight nec (P07).....		- -	- -	- -	- -	- -
Sudden infant death syndrome (R95).....		37 80.7	3 *	1 *	2 *	34 74.2
Maternal complications of pregnancy (P01).....		- -	- -	- -	- -	- -
Accidents (unintentional injuries) (V01-X59).....		31 67.6	4 *	- -	4 *	27 58.9
Complications of placenta, cord, membranes (P02).....		- -	- -	- -	- -	- -

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
American Indian¹						
Bacterial sepsis of newborn (P36).....	-	-	-	-	-	-
Respiratory distress of newborn (P22).....	-	-	-	-	-	-
Diseases of the circulatory system (I00-I99).....	10	-	-	-	-	10
	*	-	-	-	-	*
Neonatal hemorrhage (P50-P52, P54).....	-	-	-	-	-	-
All other causes.....	86	15	6	9	71	
	187.6	*	*	*	*	154.9
Not stated birthweight						
All Causes	9	4	3	3	-	1
		*	*	*	-	*
Congenital malformations (Q00-Q99).....	-	-	-	-	-	-
Short gestation and low birthweight nec (P07).....	1	1	1	-	-	-
	*	*	*	-	-	-
Sudden infant death syndrome (R95).....	-	-	-	-	-	-
Maternal complications of pregnancy (P01).....	-	-	-	-	-	-
Accidents (unintentional injuries) (V01-X59).....	-	-	-	-	-	-
Complications of placenta, cord, membranes (P02).....	2	2	2	-	-	-
	*	*	*	-	-	-
Bacterial sepsis of newborn (P36).....	-	-	-	-	-	-
Respiratory distress of newborn (P22).....	-	-	-	-	-	-
Diseases of the circulatory system (I00-I99).....	-	-	-	-	-	-
Neonatal hemorrhage (P50-P52, P54).....	-	-	-	-	-	-
All other causes.....	1	-	-	-	-	1
	*	-	-	-	-	*
Asian or Pacific Islander						
All birthweights						
All Causes	253,184	1,143	780	639	141	363
		451.5	308.1	252.4	55.7	143.4
Congenital malformations (Q00-Q99).....		250	170	132	38	81
		98.7	67.1	52.1	15.0	32.0
Short gestation and low birthweight nec (P07).....		211	207	202	5	4
		83.3	81.8	79.8	*	*
Sudden infant death syndrome (R95).....		59	6	2	4	53
		23.3	*	*	*	20.9

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Asian or Pacific Islander						
Maternal complications of pregnancy (P01).....		78	78	77	1	-
		30.8	30.8	30.4	*	-
Accidents (unintentional injures) (V01-X59).....		34	2	-	2	32
		13.4	*	-	*	12.6
Complications of placenta, cord, membranes (P02).....		41	41	41	-	-
		16.2	16.2	16.2	-	-
Bacterial sepsis of newborn (P36).....		34	32	13	19	2
		13.4	12.6	*	*	*
Respiratory distress of newborn (P22).....		10	9	8	1	1
		*	*	*	*	*
Diseases of the circulatory system (I00-I99).....		32	8	4	4	24
		12.6	*	*	*	9.5
Neonatal hemorrhage (P50-P52, P54).....		27	27	17	10	-
		10.7	10.7	*	*	-
All other causes.....		365	199	143	56	166
		144.2	78.6	56.5	22.1	65.6
Less than 2,500 grams						
All Causes	20,742	803	652	556	96	151
		3,871.4	3,143.4	2,680.6	462.8	728.0
Congenital malformations (Q00-Q99).....		159	116	96	20	43
		766.6	559.3	462.8	96.4	207.3
Short gestation and low birthweight nec (P07).....		206	202	197	5	4
		993.2	973.9	949.8	*	*
Sudden infant death syndrome (R95).....		8	1	1	-	7
		*	*	*	-	*
Maternal complications of pregnancy (P01).....		76	76	75	1	-
		366.4	366.4	361.6	*	-
Accidents (unintentional injures) (V01-X59).....		2	-	-	-	2
		*	-	-	-	*
Complications of placenta, cord, membranes (P02).....		39	39	39	-	-
		188.0	188.0	188.0	-	-
Bacterial sepsis of newborn (P36).....		30	29	11	18	1
		144.6	139.8	*	*	*
Respiratory distress of newborn (P22).....		10	9	8	1	1
		*	*	*	*	*
Diseases of the circulatory system (I00-I99).....		14	5	2	3	9
		*	*	*	*	*
Neonatal hemorrhage (P50-P52, P54).....		25	25	16	9	-
		120.5	120.5	*	*	-
All other causes.....		233	149	110	39	83
		1,123.3	718.3	530.3	188.0	400.2
2,500 grams or more						
All Causes	232,396	335	123	78	44	212
		144.2	52.9	33.6	18.9	91.2
Congenital malformations (Q00-Q99).....		91	54	36	18	37
		39.2	23.2	15.5	*	15.9

See footnotes at end of table.

Documentation Table 5

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2008 period data -Cont

[Infant deaths are weighted. Infant deaths are under 1 year. Neonatal deaths are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Rates are per 100,000 live births]

Cause of death, birthweight, and race of mother	Live	Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal
Asian or Pacific Islander					
Short gestation and low birthweight nec (P07).....		1	1	1	-
		*	*	*	-
Sudden infant death syndrome (R95).....		51	5	1	4
		21.9	*	*	* 19.8
Maternal complications of pregnancy (P01).....		1	1	1	-
		*	*	*	-
Accidents (unintentional injures) (V01-X59).....		32	2	-	2
		13.8	*	-	* 12.9
Complications of placenta, cord, membranes (P02).....		2	2	2	-
		*	*	*	-
Bacterial sepsis of newborn (P36).....		4	3	2	1
		*	*	*	*
Respiratory distress of newborn (P22).....		-	-	-	-
		-	-	-	-
Diseases of the circulatory system (I00-I99).....		18	3	2	1
		*	*	*	* 15
Neonatal hemorrhage (P50-P52, P54).....		2	2	1	1
		*	*	*	*
All other causes.....		132	50	33	17
		56.8	21.5	14.2	* 35.7
Not stated birthweight					
All Causes	46	5	5	5	-
		*	*	*	-
Congenital malformations (Q00-Q99).....		-	-	-	-
		-	-	-	-
Short gestation and low birthweight nec (P07).....		4	4	4	-
		*	*	*	-
Sudden infant death syndrome (R95).....		-	-	-	-
		-	-	-	-
Maternal complications of pregnancy (P01).....		1	1	1	-
		*	*	*	-
Accidents (unintentional injures) (V01-X59).....		-	-	-	-
		-	-	-	-
Complications of placenta, cord, membranes (P02).....		-	-	-	-
		-	-	-	-
Bacterial sepsis of newborn (P36).....		-	-	-	-
		-	-	-	-
Respiratory distress of newborn (P22).....		-	-	-	-
		-	-	-	-
Diseases of the circulatory system (I00-I99).....		-	-	-	-
		-	-	-	-
Neonatal hemorrhage (P50-P52, P54).....		-	-	-	-
		-	-	-	-
All other causes.....		-	-	-	-
		-	-	-	-

*/Figure does not meet standard of reliability or precision; based on fewer than 20 death in the numerator.

-/ Quality zero.

1/ Includes Aleuts and Eskimos.

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2008

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2008 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
United States /2					
Total	359	278	257	21	81
White	234	178	165	13	56
Black	104	87	81	6	17
Alabama					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Alaska					
Total	1	1	1	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Arizona					
Total	16	10	9	1	6
White	13	9	8	1	4
Black	-	-	-	-	-
Arkansas					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
California					
Total	71	61	59	2	10
White	51	44	42	2	7
Black	15	14	14	-	1
Colorado					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Connecticut					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Delaware					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Dist of Columbia					
Total	4	4	4	-	-
White	2	2	2	-	-
Black	1	1	1	-	-
Florida					
Total	4	1	-	1	3
White	1	-	-	-	1
Black	3	1	-	1	2
Georgia					
Total	16	11	11	-	5
White	6	4	4	-	2
Black	10	7	7	-	3
Hawaii					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2008

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2008 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Idaho					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Illinois					
Total	16	13	11	2	3
White	9	7	6	1	2
Black	7	6	5	1	1
Indiana					
Total	2	-	-	-	2
White	2	-	-	-	2
Black	-	-	-	-	-
Iowa					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
Kansas					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Kentucky					
Total	2	2	2	-	-
White	2	2	2	-	-
Black	-	-	-	-	-
Louisiana					
Total	24	22	19	3	2
White	11	11	9	2	-
Black	12	10	9	1	2
Maine					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Maryland					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Massachusetts					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Michigan					
Total	3	3	3	-	-
White	2	2	2	-	-
Black	1	1	1	-	-
Minnesota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Mississippi					
Total	2	1	1	-	1
White	-	-	-	-	-
Black	2	1	1	-	1

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2008

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2008 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Missouri					
Total	5	3	3	-	2
White	4	2	2	-	2
Black	1	1	1	-	-
Montana					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Nebraska					
Total	1	1	1	-	-
White	1	1	1	-	-
Black	-	-	-	-	-
Nevada					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
New Hampshire					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
New Jersey					
Total	6	6	6	-	-
White	3	3	3	-	-
Black	3	3	3	-	-
New Mexico					
Total	3	3	2	1	-
White	3	3	2	1	-
Black	-	-	-	-	-
New York					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
New York City					
Total	5	4	3	1	1
White	2	1	1	-	1
Black	2	2	1	1	-
North Carolina					
Total	3	1	1	-	2
White	2	1	1	-	1
Black	1	-	-	-	1
North Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Ohio					
Total	17	10	10	-	7
White	7	2	2	-	5
Black	10	8	8	-	2
Oklahoma					
Total	9	7	7	-	2
White	3	2	2	-	1
Black	3	3	3	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2008

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2008 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Oregon					
Total	1	-	-	-	1
White	-	-	-	-	-
Black	1	-	-	-	1
Pennsylvania					
Total	2	1	1	-	1
White	2	1	1	-	1
Black	-	-	-	-	-
Rhode Island					
Total	1	1	1	-	-
White	1	1	1	-	-
Black	-	-	-	-	-
South Carolina					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
South Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Tennessee					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Texas					
Total	126	101	94	7	25
White	93	72	68	4	21
Black	29	27	25	2	2
Utah					
Total	11	5	2	3	6
White	8	4	2	2	4
Black	1	-	-	-	1
Vermont					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Virginia					
Total	5	5	5	-	-
White	3	3	3	-	-
Black	2	2	2	-	-
Washington					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
West Virginia					
Total	1	1	1	-	-
White	1	1	1	-	-
Black	-	-	-	-	-
Wisconsin					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2008

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2008 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Wyoming					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Foreign Residents					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Puerto Rico					
Total	5	3	3	-	2
White	5	3	3	-	2
Black	-	-	-	-	-
Virgin Islands					
Total	2	1	1	-	1
White	1	-	-	-	1
Black	1	1	1	-	-
Guam					
Total	2	-	-	-	2
White	-	-	-	-	-
Black	-	-	-	-	-

1/ Totals for geographic areas include races other than white and black.

2/ Excludes data for foreign residents, Puerto Rico, Virgin Islands and Guam.