# Public Use Data File Documentation

2006 Period Linked Birth/Infant Death Data Set

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

# 2006 Period Linked Birth/Infant Death Data Set

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User's Guide for the 2006 Natality File

Deaths: Final Data for 2006 (see Technical Notes)

#### 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 2006 period linked file. Differences between period and birth cohort data are outlined below.

Period data - The numerator for the 2006 period linked file consists of all infant deaths occurring in 2006 linked to their corresponding birth certificates, whether the birth occurred in 2005 or 2006. The denominator file for this data set is the 2006 natality file, that is, all births occurring in 2006. In addition, NCHS accepted a small number of late-filed birth certificates needed to link to infant deaths. This reduced the number of unlinked records and slightly increased the number of births in the denominator file.

Birth cohort data - The numerator for the 2006 birth cohort linked file consists of deaths to infants born in 2006 whether the death occurred in 2006 or 2007. The denominator file is the 2006 natality file, that is, all births occurring in 2006.

The 2006 period linked birth/infant death data set includes several data files. The first file includes all US infant deaths which occurred in the 2006 data year linked to their corresponding birth certificates, whether the birth occurred in 2005 or 2006 - 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 2006 NCHS natality file for the US (plus late-filed records mentioned above), 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.

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

This data file includes 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: <a href="http://www.cdc.gov/nchs/nvss/vital\_certificate\_revisions.htm">http://www.cdc.gov/nchs/nvss/vital\_certificate\_revisions.htm</a>. Nineteen states, California (partial revision), Delaware, Florida, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York (excluding New York City), North Dakota, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington and Wyoming and Puerto Rico, implemented the 2003 revision on or before January 1, 2006. 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 data for twenty-one states (California, Connecticut, Florida, Idaho, Kansas, Michigan, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New

York, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Texas, Utah, 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, 2006. 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 2006 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). 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 2006 linked file contains information on infants born in both 2005 and 2006 (see description of the period linked file above). As reporting areas changed between 2005 and 2006, 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 2005 and 2006. Reporting flags are included in the file to assist in accurately excluding records from non-reporting areas when tabulating data by mother's place of residence. Reporting flags are available for most items on the file.

Reporting areas for the 2006 linked file are different from those for the 2006 birth file, as items had to be reported by a state in both 2005 and 2006 to be able to provide complete data. Thus, data for non-comparable items from states that revised in 2006 are excluded from all tabulations. Positions for reporting flags are noted along with each data item in the file layout. Reporting flags <u>must be invoked</u> 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 2006 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 to data based on the unrevised certificate. Accordingly, use of the reporting flag for this item will produce 2006 data for the month prenatal care began for the twelve revised states which had implemented the revised certificate by January 1<sup>st</sup> 2005. Data for states which implemented the revised certificates in 2006 are excluded, as part of their linked file births (those born in 2005) were reported on the unrevised certificate.

#### Sample SAS program

0.00.00	<u></u>
01	DATA work;
02	INFILE 'c:USnum.dat' 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 A 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)

	pie of OAO code daing state of residence (and translat
01	DATA work;
02	INFILE 'c:USnum.dat' 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 2006 data, twenty-three areas reported multiple race data: California, Delaware, Florida, Hawaii, Idaho, Kansas, Kentucky, Michigan (for selected facilities only), 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. For the 2006 period linked file, complete data for both 2005 and 2006 births is available from 12 states: Florida, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York State (excluding New York City), Pennsylvania, South Carolina, Tennessee, Texas, and Washington.

In 2005, multiple race data was reported for the entire year on the death certificates of 21 states: California, Connecticut, Florida, Hawaii, Idaho, Kansas, Maine, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New York, Oklahoma, South Carolina, South Dakota, Utah, 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 2006" and "Deaths: Final Data for 2006".

# 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:

number of linked infant deaths + number of unlinked infant deaths 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 3.10 to 0.54 in the numerator file, and from 0.11 to 0.03 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.

Virtually all 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 returned to the states where the death occurred, 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 Technical Appendix and Final Reports included in this document.

## **Characteristics of Unlinked File**

For the 2006 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 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 2006" 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 2006 linked file for the 50 States and D.C. includes 28,174 linked infant death records and 366 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 28,540. While the overall percent linked for infant deaths in the 2006 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 Alaska (95.8), California (96.3), Louisiana (93.3), New Mexico (97.9), Ohio (97.9), and Texas (96.5). 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, 2006 linked file

United States	98.7	Nebraska	99.4
Alabama	99.8	Nevada	99.6
Alaska	95.8	New Hampshire	100.0
Arizona	99.4	New Jersey	98.9
Arkansas	99.7	New Mexico	97.9
California	96.3	New York State	98.4
Colorado	99.5	New York City	99.7
Connecticut	100.0	North Carolina	99.8
Delaware	99.0	North Dakota	100.0
District of Columbia	100.0	Ohio	97.9
Florida	99.3	Oklahoma	100.0
Georgia	99.8	Oregon	99.7
Hawaii	100.0	Pennsylvania	98.9
Idaho	100.0	Rhode Island	100.0
Illinois	99.0	South Carolina	99.0
Indiana	99.1	South Dakota	100.0
Iowa	99.5	Tennessee	100.0
Kansas	100.0	Texas	96.5
Kentucky	98.9	Utah	99.0
Louisiana	93.3	Vermont	100.0

Maine	100.0	Virginia	100.0
Maryland	100.0	Washington	100.0
Massachusetts	100.0	West Virginia	100.0
Michigan	100.0	Wisconsin	100.0
Minnesota	100.0	Wyoming	100.0
Mississippi	99.5	Puerto Rico	99.8
Missouri	99.6	Virgin Islands	100.0
Montana	100.0	Guam	100.0

In general, a slightly higher percentage of postneonatal (28 days to under 1 year) than neonatal (less than 28 days) deaths were linked (99.1 and 98.5, respectively.) 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, no U.S. geographic detail is identified.

#### **Demographic and Medical Classification**

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 exceptions to the ICD rules in multiple cause-of-death coding which, if not treated 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, 49 Sheridan Avenue, Albany, New York, 12210

(http://www.who.int/whosis/icd10/index.html). Many of the instruction manuals listed below are available electronically on the NCHS website at:

http://www.cdc.gov/nchs/about/major/dvs/im.htm. In addition, users who do not already have access to these documents may request them from the Chief, Mortality Medical Classification Branch, Division of Vital Statistics, National Center for Health Statistics, P.O. Box 12214, Research Triangle Park, North Carolina 27709. The technical appendix for natality and the mortality final report for 2004 included 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 2007. NCHS Instruction Manual Part 11. Hyattsville, Maryland: Public Health Service.

Instructions manuals are available at: <u>http://www.cdc.gov/nchs/about/major/dvs/im.htm</u>

Also see: <u>http://www.cdc.gov/nchs/nvss/vital\_certificate\_revisions.htm</u> 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. The U.S. Standard Certificate of Death is shown in the Mortality Technical Appendix which is included in this documentation. 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. The lines (a) through (d) in Part I are connected by the phrase "due to, or as a consequence of." They were designed to encourage the physician to provide the causally related sequence of medical conditions that resulted in death. Thus, the condition on line (a) should be due to the condition on line (b), and the condition on line (b) should be a consequence of the condition on line (c), etc., until the full sequence is described back to the originating or initiating condition. If only one step in the chain of morbid events is recorded, a single entry on line (a) is adequate. 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.

If the death certificate is properly completed, the disease or condition listed on the lowest used line in Part I is usually accepted as the underlying cause of death. This is an application of "The General Principle." The General Principle is applied unless it is highly improbable that the condition on the lowest line used could have given rise to all of the diseases or conditions listed above it. In some cases, the sequence of morbid events entered on the death certificate is not specified correctly. A variety of errors may occur in completing the medical certification of death. Common problems include the following: The causal chain may be listed in reverse order; the distinction between Part I and Part II may have been ignored so that the causal sequence in Part I is simply extended unbroken into Part II; or the reported underlying cause is unlikely, in an etiological sense, to have caused the condition listed above it. In addition, sometimes the certifier attributes the death to uninformative causes such as cardiac arrest or pulmonary arrest.

To resolve the problems of incorrect or implausible cause-of-death statements, the WHO designed standardized rules to select an underlying cause of death from the information available on the death certificate that is most informative from a public health perspective. The rules for the Tenth Revision as updated by WHO since the publication of ICD-10 are described in NCHS instruction manual Part 2A. Coding rules beyond the General Principle are invoked if the cause-of-death section is completed incorrectly or if their application can improve the specificity and characterization of the cause of death in a manner consistent with the ICD. The rules are applied in two steps: selection of a tentative underlying cause of death, and modification of the tentative underlying cause in view of the other conditions reported on the certificate in either Part I or Part II. Modification involves several considerations by the medical coder: determining whether conditions in Part II could have given rise to the underlying cause, giving preference to specific terms over generalized terms, and creating linkages of conditions that are consistent with the terminology of the ICD.

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. These rules are contained in a computer software program called ACME (Automated Classification of Medical Entities). ACME does exactly what a coder would do to select the underlying cause of death. The ACME program has been used for final mortality data since 1968.

The WHO selection rules take into account the certifier's ordering of conditions and their causal relationships to systematically identify the underlying cause of death. The intent of these rules is to improve the usefulness of mortality statistics by giving preference to certain classification categories over others and consolidating two or more conditions on the certificate into a single classification category.

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. For example, the large decrease in infant deaths from Birth asphyxia (ICD-10 code P21) is largely due to the introduction of a new ICD-10 code P91.6 Hypoxic ischemic encephalopathy of newborn and resulting coding rule change. Many deaths which would have previously been assigned to P21 were instead assigned to P91.6. Also, the decrease in infant deaths from Congenital malformations of respiratory system (Q30-34) was largely due to coding changes recommended by WHO that resulted in fewer deaths being assigned to Q33.6, Hypoplasia and dysplasia of lung.

# **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.

This translation is accomplished by a computer system called TRANSAX (Translation of Axis). TRANSAX selectively uses the traditional linkage and modification rules for

mortality coding. Underlying cause linkages which simply prefer one code over another for purposes of underlying cause selection are not included. Each entity code on the record is examined and modified or deleted as necessary to create a set of codes that are free of contradictions and are the most precise within the constraints of ICD-10 and medical information on the record. Repetitive codes are deleted. The process may 1) combine two entity axis categories together to a new category thereby eliminating a contradiction or standardizing the data; or 2) eliminate one category in favor of another to promote specificity of the data or resolve contradictions. The following examples from ICD-10 illustrate the effect of this translation:

- Case 1: When reported on the same record as separate entities, cirrhosis of liver and alcoholism are coded to K74.6 (Other and unspecified cirrhosis of liver) and F10.2 (Mental and behavioral disorders due to use of alcohol; dependence syndrome), respectively. Tabulation of records with K74.6 would imply that such records had no mention of alcohol. A preferable code would be K70.3 (Alcoholic cirrhosis of liver) in lieu of both K74.6 and F10.2.
- Case 2: If "gastric ulcer" and "bleeding gastric ulcer" are reported on a record they are coded to K25.9 (Gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation) and K25.4 (Gastric ulcer, chronic or unspecified with hemorrhage), respectively. A more concise code is K25.4 which shows both the gastric ulcer and the bleeding.

# **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:

- 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.
   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
- 3. Cause category: The next four bytes represent the ICD-10 cause code.

line.

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.

<u>2. Edit</u>. 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.

<u>3. Entity Axis Applications</u>. 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 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.

<u>1. Format</u>. 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.

<u>2. Edit</u>. 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.

<u>3. Record Axis Applications</u>. 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.

# Numerator Files:

<u>United States</u> A. Record count: B. Record length: C. Data counts:	28,174 1,259 a. By occurrence: 28,174 b. By residence: 28,144 c. To foreign residents: 30
<u>Territories</u> A. Record count: B. Record length:	480 1,259
Denominator Files:	
<u>United States</u> A. Record count: B. Record length: C. Data counts:	4,273,264 868 a. By occurrence: 4,273,264 b. By residence: 4,265,593 c. To foreign residents: 7,671
<u>Territories</u> A. Record count: B. Record length:	53,920 868
Unlinked Files:	
<u>United States</u> A. Record count: B. Record length:	366 1,259
<u>Territories</u> A. Record count: B. Record length:	1 1,259

# Linked 2006 Data Elements and Locations

Data Items	Denominator File	<u>Numerator F</u> Birth	<u>ile</u> Death	Unlinked File	
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,	188-91,			
	199-200	199-200			
Hispanic origin	195-96	195-96			
Pregnancy items					
Month pre-care began	245-47,	245-47,			
	256-59	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,	313-19,		
	328-44	328-44		
Tobacco	284-94	284-94		
Alcohol	295-98	295-98		
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	476-91	476-91		
Congenital anomalies	492-525	492-525		
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	569-773	569-773		
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
-1-2			-	

\* 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
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 2	Not late record Late record Late Vermont record
10-14	5	FILLER	Filler				
15-18	4	DOB_YY	Birth Year		U,R	2005 2006	2005 2006
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

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

Position	]	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
30-31	2	2	OSTATE	Occurrence Territory (This item is available in the only, geographic codes are available in the U.S.file)		U,R		
				Outlying Areas of	<u>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 only, geographic codes are available in the U.S.file)		U,R		
				Puerto Rico			127 999	San Juan County less than 250,000
				Other Outlying A	reas of the U.S.		000 999	No county level geography County less than 250,000
40		1	OCNTYPOP	Occurrence County Pop (This item is available in the only, geographic codes are 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	Hospital Freestanding Birthing Center Clinic / Doctor's Office Residence d the 2002 Revision of the U.S. Cartif

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						5 9	Other Unknown
43-58	16	FILLER	Filler				
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 F	ag	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	10 – 12 years 13 years 14 years 15 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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						36 37 38 39 40 41 42 43 44 45 46 47 48 49	36 years 37 years 38 years 39 years 40 years 41 years 42 years 43 years 44 years 45 years 46 years 47 years 48 years
91-92	2	MAGER14	Mother's Age Recode 14		U,R	50 01 03 04 05 06 07 08 09 10 11 12	49 years 50 -54 years Under 15 Years 15 years 16 years 17 years 18 years 19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years
93	1	MAGER9	Mother's Age Recode 9		U,R	13 14 1 2 3 4 5 6 7 8 9	45-49 years 50-54 years Under 15 years 15-19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years 50-54 years

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

Position	1	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
94-95		2	MBCNTRY	Mother's Birth Country (This item is available in the only, geographic codes are 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	e new geographic co	ding.		
96-108		13	FILLER	Filler				
109-110		2	MRTERR	Mother's Residence (This item is available in the only, geographic codes are 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 reside (This item is available in the only, geographic codes are available in the U.S.file) <u>Puerto Rico</u>	e territory file		127 999	San Juan County of less than 250,000 or foreign resident
				Other Outlying A	reas of the US		000 999	No county level geography County of less than 250,000 or foreign resident
117-131		15	FILLER	Filler				
132		1	RCNTY_POP	<b>Population of Residence C</b> (This item is available in the		U,R		
	<ul> <li>* 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).</li> <li>U Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.</li> <li>R Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.</li> </ul>							

133-136       4       FILLER       File         133-136       4       FILLER       File         133       1       RECTYPE       Record Type county of 1000000 (20) (20) (20) (20) (20) (20) (20	Position		Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
137       1       RECTYPE       Record Type (This item is available in the territory file only, geographic codes are not available in the U.S.file)       U.R       1       RESIDENT: State and county of occurrence and residence are the same.         138       1       RESTATUS       Residence Status United States       U.R       1       RESIDENT: State and county of occurrence and residence are the same.         138       1       RESTATUS       Residence Status United States       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.       2       INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different.         4       FOREIGN RESIDENT: The state of residence is not one of the 50 US states or District of Columbia.       4       FOREIGN RESIDENT: State and county of occurrence and residence are the same. (Unique to Guam, all US residents are considered residence or of Inferent.         139-140       2       MBRACE       Mother's Bridged Race Includes only states reporting multiple race. Codes 01-14 used for individuals reporting only on race. Codes 21-24 used for individuals reporting multiple race. Codes 21-24 used for individuals reporting more than one race that have been bridged to a single race.       1       White - single race 05       American Indian-/Makan Naive - single race 05						e not		1 2 9	County of 500,000 to 1,000,000 County of 250,000 to 500,000 County less than 250,000
138       1       RESTATUS       Residence Status       U,R         1       RESIDENT: State and county of occurrence and residence are different.       Imited States       1         2       INTRASTATE NONRESIDENT: State of occurrence and residence are the same.       Imited States       Imited States         2       INTRASTATE NONRESIDENT: State of occurrence and residence are different but both are one of the 50 US states or District of Columbia.       Imited States or District of Columbia.         3       INTERSTATE NONRESIDENT: State and county of occurrence and residence are the same.       Imited States or District of Columbia.         4       FOREIGN RESIDENT: The state of residence is not one of the 50 US states or District of Columbia.       Imited States or District of Columbia.         5       Outlying areas of the US       1       RESIDENT: State and county of occurrence and residence are the same.         6       Outlying areas of the US       1       RESIDENT: State and county of occurrence and residence are the same.         7       NOREIGN RESIDENT: State and county of occurrence and residence are the same.       Imited States cours of courence and residence are the s	133-136		4	FILLER	Filler				
1       RESIDENT: State and county of occurrence and residence are the same.         2       INTRASTATE NONRESIDENT: State of occurrence and residence are the same.         3       INTERSTATE NONRESIDENT: State of occurrence and residence are the same.         4       FOREIGN RESIDENT: The state of residence is not 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.         6       Outlying areas of the US       1         7       INTRASTATE NONRESIDENT: The state of residence is not one of the 50 US states or District of Columbia.         8       FOREIGN RESIDENT: The state of residence of the 50 US states or District of Columbia.         9       Outlying areas of the US       1         1       RESIDENT: The state of residence is not one of the 50 US states or District of Columbia.         1       US residents are considered residence are the same. (Unique to Guam, all US residents are considered residence are the same but county is different.         2       INTRATERRITORY NONRESIDENT: Territory of occurrence and residence are different but both are US Territory.         139-140       2       MBRACE         149-140       2       MBRACE         140-141       States reporting multiple race. Codes       01         150-140       2       MBRACE         160-140 <td< td=""><td>137</td><td></td><td>1</td><td>RECTYPE</td><td>(This item is available in the only, geographic codes are</td><td></td><td>U,R</td><td></td><td>are the same. NONRESIDENT: State and county of occurrence and</td></td<>	137		1	RECTYPE	(This item is available in the only, geographic codes are		U,R		are the same. NONRESIDENT: State and county of occurrence and
<ul> <li>interval and the second second</li></ul>	138		1	RESTATUS			U,R	2 3	are the same. INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different. INTERSTATE NONRESIDENT: State of occurrence and residence are different but both are one of the 50 US states or District of Columbia. FOREIGN RESIDENT: The state of residence is not one of
Includes only states reporting multiple race. Codes02Black – single race01-14 used for individuals reporting only one race.03American Indian/Alaska Native – single raceCodes 21-24 used for individuals reporting more than04Asian Indian – single raceone race that have been bridged to a single race.05Chinese – single race					<u>Outlying areas o</u>	<u>f the US</u>		2 2	occurrence and residence are the same. (Unique to Guam, all US residents are considered residents of Guam and thus are assigned 1.) INTRATERRITORY NONRESIDENT: Territory of occurrence and residence are the same but county is different. INTERTERRITORY RESIDENT: Territory of occurrence and residence are different but both are US Territories. FOREIGN RESIDENT: The residence is not a US
$\mathbf{U}$ . Includes data based on both the 1707 revision of the $\mathbf{U}$ . Centreate of live birth thinevision, and the 2005 revision of the $\mathbf{U}$ . Centreate of live birth	139-140	* U.R			Includes only states reporti 01-14 used for individuals Codes 21-24 used for indiv one race that have been bri	reporting only one raviduals reporting mor idged to a single race	des ace. e than	02 03 04 05	Black – single race American Indian/Alaska Native – single race Asian Indian – single race Chinese – single race

<sup>(</sup>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
			Code 24 also used for ind more than one Asian/Paci see "Technical Appendix.	fic Islander group;		06 07 08 09 10 11 12 13 14 21 22 23	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
			** Also includes unrevise multiple race.	ed states that report		23 24 Blank	American Indian / Alaska Native – bridged multiple race Asian / Pacific Islander – bridged multiple race Not on certificate
141-142	2	MRACE	Mother's Race Includes only states exclu race. Some areas report ac Pacific Islander (API) coo 18-68 replace former cod Code 78 replaces former of areas. See reporting flag a API reporting area.	dditional Asian or les for race. Codes e 08 for these areas. code 08 for all other	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.

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

Position		Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
							Blank	Not on certificate
				Puerto Rico			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>All other Outlying</u>	g Areas of the US		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	<b>Mother's Race Recode</b> Includes individuals reportinindividuals reporting more to a single race.				
					all Outlying Areas of except Puerto Rico	<u>of</u>	1 2 3 4	White Black American Indian / Alaskan Native Asian / Pacific Islander
	* 11 5	<b>.</b>		Puerto Rico			1 2	White Black
	* U,R	Include	s data based on both	the 1989 Revision of the U.S.	Certificate of Live	Birth (unr	evised), an	d the 2003 Revision of the U.S. Certificate of Live

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						0	Other (not classified as White or Black)
144	1	MRACEIMP	Mother's Race Imputed F	lag	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 (	Drigin 569	U,R	1 2 3 4 5 6 7 8 9	Mexican Puerto Rican Cuban Central or South American Other and Unknown Hispanic Non-Hispanic White Non-Hispanic Black Non-Hispanic Other Races Origin unknown or not stated
150-152	3	FILLER	Filler				
153	1	MAR	Mother's Marital Status United States and the US except Pu Puerto Rico	l all Outlying Areas o erto Rico	U,R <u>of</u>	1 2 9 1	Yes No Unknown or not Stated Yes
						2 3 9	Unmarried parents living together Unmarried parents not living together Unknown or not stated

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
154	1	MAR_IMP	Mother's Marital Status I	Imputed Flag	U,R	Blank 1	Marital Status not imputed Marital Status imputed
155	1	MEDUC	Mother's Educ –Revised	571	R	1 2 3 4 5 6 7 8 9 Blank	8 <sup>th</sup> grade or less 9 <sup>th</sup> through 12 <sup>th</sup> grade with no diploma High school graduate or GED completed Some college credit, but not a degree. Associate degree (AA,AS) Bachelor's degree (BA, AB, BS) Master's degree (MA, MS, MEng, MEd, MSW, MBA) Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD) Unknown Not on certificate
156-157	2	UMEDUC	Mother's Educ –Unrevise	<b>d</b> 647	U	00 01-08 09 10 11 12 13 14 15 16 17 99 Blank	No formal education Years of elementary school 1 year of high school 2 years of high school 3 years of high school 4 years of high school 1 year of college 2 years of college 3 years of college 4 years of college 5 or more years of college Not stated Not on certificate
158	1	MEDUC_REC	Mother's Education Reco	<b>de</b> 647	U	1 2 3 4 5 6 Blank	0 – 8 years 9 – 11 years 12 years 13 – 15 years 16 years and over Not stated Not on certificate
159-174	16	FILLER	Filler				
175	1	FAGERPT_FLG	Father's Reported Age Us	sed	U,R	Blank 1	Father's reported age not used Father's reported age used
* U,R U R	(revise) Include	d). es data based on both	the 1989 Revision of the U.S the 1989 Revision of the U.S the 2003 Revision of the U.S	. Certificate of Live	Birth; exc	ludes data	

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
176-181	6	FILLER	Filler				
182-183	2	FAGECOMB	Father's Combined Age (	Revised)	R	09-98 99 Blank	Father's combined age in years Unknown or not stated Not on certificate
184-185	2	UFAGECOMB	Father's Combined Age (	Unrevised)	U	10-98 99	Father's combined age in years Unknown or not stated
186-187	2	FAGEREC11	Father's Age Recode 11		U,R	01 02 03 04 05 06 07 08 09 10 11	Under 15 years 15-19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years 50-54 years 55-98 years Not stated
188-189	2	FBRACE	Father's Bridged Race Includes only states reporti 01-14 used for individuals Codes 21-24 used for indiv one race that have been bri Code 24 also used for indiv more than one Asian/Pacifi see "Technical Appendix."	reporting only one ra viduals reporting mor dged to a single race viduals reporting ic Islander group;	ice. e than	$\begin{array}{c} 01\\ 02\\ 03\\ 04\\ 05\\ 06\\ 07\\ 08\\ 09\\ 10\\ 11\\ 12\\ 13\\ 14\\ 21\\ 22\\ 23\\ 24\\ 99 \end{array}$	White – single race Black – single race American Indian/Alaska Native – single race Asian Indian – single race Chinese – single race Filipino – single race Japanese – single race Japanese – single race Vietnamese – single race Other Asian – 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 Unknown or not stated, also includes states not reporting

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

Position		Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
				** Also includes unrevised multiple race.	states that report		Blank	multiple race. Not on certificate
190		1	FILLER	Filler				
191		1	FRACEREC	<b>Father's Race Recode</b> Includes individuals reporti individuals reporting more to a single race.		U,R		
				United States and the US except Pu	l all Outlying Areas o erto Rico	<u>f</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-	Unrevised 570	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
196		1	FRACEHISP	Father's Race/Hisp Origin	n 570	U,R	1 2 3 4 5 6 7 8	Mexican Puerto Rican Cuban Central or South American Other and Unknown Hispanic Non-Hispanic White Non-Hispanic Black Non-Hispanic Other Races
	* U,R	Include	s data based on bot	n the 1989 Revision of the U.S	. Certificate of Live I	Birth (unr	evised), an	d the 2003 Revision of the U.S. Certificate of

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						9	Origin unknown or not stated
197-198	2	FILLER	Filler				
199-200	2	UFRACE	Father's Race (Unrevised <u>United States</u>	)	U	01 02 03 04 05 06 07 18 28 38 48 58 68 78	White Black American Indian / Alaska 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
						99	separately. Unknown or not stated
						Blank	Not on certificate
			<u>Puerto Rico</u>			01 03 00 99 Blank	White Black Other races not classified white or black Unknown or not stated Not on certificate
			<u>Guam</u>			01 02 03 04 05 06 07 08 58 99	White Black American Indian / Alaska Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Guamanian Unknown or not stated

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						Blank	Not on certificate
			<u>All other Outlyir</u>	ng Areas of the US		01 02 03 04 05 06 07 08 99 Blank	White Black American Indian / Alaska Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Unknown or not stated Not on certificate
201-211	11	FILLER	Filler				
212	1	LBO	Live Birth Order		U,R	1-7 8 9	Number of live birth order. 8 or more live births Unknown or not stated
213-216	2	FILLER	Filler				
217	1	ТВО	Total Birth Order		U,R	1-7 8 9	Number of total birth order. Total birth order of 8 or more Unknown or not stated
218-219	2	FILLER	Filler				
220-221	2	DLLB_MM	Date of Last Live Birth M	Íonth	R	01 02 03 04 05 06 07 08 09 10 11 12 88 99	January February March April May June July August September October November December Not applicable Unknown or not stated

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
222-225	4	DLLB_YY	Date of Last Live Birth Ye	ar	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 Bega	n (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 Bega	n Recode (Revised 668	) R	1 2 3 4 5 Blank	1 <sup>st</sup> to 3 <sup>rd</sup> month 4 <sup>th</sup> to 6 <sup>th</sup> month 7 <sup>th</sup> to final month No prenatal care Unknown or not stated Not on certificate
248-255	8	FILLER	Filler				
256-257	2	МРСВ	Month Prenatal Care Bega	n (Unrevised) 669	U	00 01-10 99 Blank	No prenatal care Month prenatal care began Unknown or not stated Not on ceritificate
258	1	MPCB_REC6	Month Prenatal Care Bega	n Recode 6 (Unrev 669	ised) U	1 2 3 4 5 6 Blank	1 <sup>st</sup> to 2 <sup>nd</sup> month 3 <sup>rd</sup> month 4 <sup>th</sup> to 6 <sup>th</sup> month 7 <sup>th</sup> to final month No prenatal care Unknown or not stated Not on certificate
259	1	MPCB_REC5	Month Prenatal Care Bega			1	1 st
				669	U	1 2	$1^{st}$ trimester ( $1^{st}$ to $3^{rd}$ month) $2^{rd}$ trimester ( $4^{th}$ to $6^{th}$ month)
* ∐ R	Includes	data based on both	the 1989 Revision of the U.S.	Certificate of Live I	Rirth (unro	vised) and	d the 2003 Revision of the U.S. C

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						3 4 5 Blank	3 <sup>rd</sup> trimester (7 <sup>th</sup> 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 Visit	S	U,R	00-49 99	Number of prenatal visits Unknown or not stated
272-273	2	PREVIS_REC	Number of Prenatal Visit	s 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	1	FILLER	Filler				
275	1	APNCU	Adequacy of Prenatal Ca	re Utilization Index 668	( <b>Revised</b> ) R	1 2 3 4 9 Blank	Inadequate Intermediate Adequate Adequate + Unknown Not on certificate
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	Less than 16 pounds 16 to 20 pounds 21 to 25 pounds 26 to 30 pounds
* U,R	Include	es data based on both	the 1989 Revision of the U.S	. Certificate of Live I	Birth (unre	evised), an	d the 2003 Revision of the U.S. Certification

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						5 6 7 8 9	<ul><li>31 to 35 pounds</li><li>36 to 40 pounds</li><li>41 to 45 pounds</li><li>46 or more pounds</li><li>Unknown or not stated</li></ul>
279	1	U_APNCU	Adequacy of Prenatal Ca	re Utilization Index	(Unrevis	ed)	
217		0_1111100	fracquitey of Frendam Car	669	U	1 2 3 4 9 Blank	Inadequate Intermediate Adequate Adequate + Unknown Not on certificate
280	1	DFPC_IMP	Day of Date First Prenata	l Care Imputed	R	Blank 1	Day of date first prenatal care not imputed Day of date first prenatal care imputed
281-283	3	FILLER	Filler				
284-285	2	CIG_1	Cigarettes 1 <sup>st</sup> 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 2 <sup>nd</sup> 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 3 <sup>rd</sup> 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	Number of cigarettes daily 98 or more cigarettes daily

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						99 Blank	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	1	ALCOHOL	Alcohol Use	649	U	1 2 9 Blank	Yes No Unknown or not stated Not on certificate
296-297	2	DRINKS	Drinks per Week	649	U	00-97 98 99 Blank	Number of drinks weekly 98 or more drinks weekly Unknown or not stated Not on certificate
298	1	DRINKS_REC	Drinks Recode	649	U	0 1 2 3 4 5 Blank	Non drinker 1 drink per week 2 drinks per week 3-4 drinks per week 5 or more drinks per week Unknown or not stated Not on certificate
299-312	14	FILLER	Filler				
313-319	9		ms below follow this code str		D: 4 (	Y N U	Yes No Unknown or not stated
* U,R	Include	es data based on both	the 1989 Revision of the U.S	<ol> <li>Certificate of Live</li> </ol>	e Birth (uni	evised), an	d the 2003 Revision of the U.S. C

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

Position	1	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
	313 314 315 316 317 318 319	1 1 1 1 1 1 1	RF_DIAB RF_GEST RF_PHYP RF_GHYP RF_ECLAM RF_PPTERM RF_PPOUTC	Prepregnancy Diabetes Gestational Diabetes Prepregnancy Hypertesion Gestational Hypertension Eclampsia Previous Preterm Birth Poor Pregnancy Outcome	585 586 587	R R R R R R	Blank	Not on certificate
320-323		4	FILLER	Filler				
324		1	RF_CESAR	Previous Cesarean Deliver	<b>ies</b> 593	R	Y N U Blank	Yes No Unknown or not stated Not on certificate
325-326		2	RF_CESARN	Number of Previous Cesar	<b>ean Deliveries</b> 594	R	00 01-30 99 Blank	None Number of previous cesareans Unknown or not stated Not on certificate
327		1	FILLER	Filler				
328-344		17		ns indented below follow this s 1989 Standard unless otherwis		U	1 2 9 Blank	Yes No Unknown Not on certificate
	328 329 330 331 332 333 334 335 336 337 338 339 * U,R	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Anemia Cardiac Acute or Chronic Lung Dis Diabetes Genital Herpes Hydramnios / Oligohydram Hemoglobinopathy Chronic Hypertension Prepregnancy Associated H Eclampsia Incompetent Cervix Previous Infant 4000+ Gra the 1989 Revision of the U.S.	684 685 686 687 688 Hypertension 65 690 691 ms 692	U,R		d the 2003 Revision of the U.S. Certificate of Live Birth
	U R	Includes	s data based on both	the 1989 Revision of the U.S. the 2003 Revision of the U.S.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
340 341 342 343 344	1 1 1 1	URF_PRETERM URF_RENAL URF_RH URF_UTERINE URF_OTHER	Previous Preterm/Small f Renal Disease Rh Sensitization Uterine Bleeding Other medical risk factor	694 695 696			
345-350	6	FILLER	Filler				
351-354	4	Obstetric Proced The checkbox iten	ures (Revised) ns indented below follow this	s structure:		Y N U Blank	Yes No Unknown or not stated Not on certificate
351 352 353 354	1 1 1 1	OP_CERV OP_TOCOL OP_ECVS OP_ECVF	Cervical Cerclage Tocolysis Successful External Ceph Failed External Cephalic		R R R R	Dialik	
355-361	7		ures (Unrevised) ns indented below follow this 1989 Standard unless otherwi			1 2 9 Blank	Yes No Unknown or not stated Not on certificate
355 356 357 358 359 360 361	1 1 1 1 1 1 1	UOP_AMNIO UOP_MONIT UOP_INDUC UOP_STIML UOP_TOCOL UOP_ULTRA UOP_OTHER	Amniocentesis Electronic Fetal Monitori Induction of Labor Stimulation of Labor Tocolysis Ultrasound Other Obstetric Procedur	703 704 705 706	U,R U,R		
362-364	3	Onset of Labor The checkbox iten	ns below follow this structure	::		Y N U Blank	Yes No Unknown or not stated Not on certificate
362 363 364	1 1 1	ON_RUPTR ON_PRECIP ON_PROL	Premature Rupture of Me Precipitous Labor Prolonged Labor	embrane 605 606 607	R R R		

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

Position	Ler	n Field	Description	Reporting Flag Positi	Re	v* Val	lues	Definition
365-373	9	Characteristics (	of Labor and Delivery (Revis	ed)				
505 515	,		ems below follow this structure			Y N U		Yes No Unknown or not stated
365	1	LD_INDL	Induction of Labor	608	R	Blaı	пк	Not on certificate
365		LD_AUGM	Augmentation of Labor	609	R			
367		LD_AUOM LD_NVPR	Non-Vertex Presentation	610	R			
368		LD_NVIR LD_STER	Steriods	611	R			
369			Antibiotics	612	R			
309		LD_ANTI	Chorioamnionitis	613				
		LD_CHOR			R			
371		LD_MECS	Meconium Staining	614	R			
372		LD_FINT	Fetal Intolerance	615	R			
373	1	LD_ANES	Anesthesia	616	R			
374-389	16		of Labor and Delivery (Unrev					
			ems indented below follow this			1		Yes
		The version is all	1 1989 Standard unless otherwi	se noted.		2 9	1	No Unknown or not stated
274	1		Fabrila	71	11	Blaı	nk	Not on certificate
374		ULD_FEBR	Febrile		11 12 U,I	<b>.</b>		
375 376		ULD_MECO	Meconium			X		
		ULD_RUPTR	Premature Rupture of Me					
377		ULD_ABRUP	Abruptio Placenta		14			
378		ULD_PREPLA	Placenta Previa		15			
379		ULD_EXCBL	Other Excessive Bleeding		16			
380		ULD_SEIZ	Seizures During Labor		17			
381		ULD_PRECIP	Precipitous Labor		18 U,I	κ.		
382		ULD_PROLG	Prolonged Labor		19			
383		ULD_DYSFN	Dysfunctional Labor		20			
384		ULD_BREECH	Breech	. 72		K		
385		ULD_CEPHAL	Cephalopelvic Disproport		22			
386		ULD_CORD	Cord Prolapse		23			
387		ULD_ANEST	Anesthetic Comlications		24			
388		ULD_DISTR	Fetal Distress		25			
389	1	ULD_OTHER	Other Complications	72	26			
390-394	5	Method of Deliv	very (Revised)					
390	) 1	ME_ATTF	Attempted Forceps	617	R	Y		Yes
* U		udes data based on both ised).	h the 1989 Revision of the U.S.	. Certificate of	f Live Birth	(unrevised	l), and	d the 2003 Revision of the U.S. Certificate of Live Birth
U	Incl	udes data based on both	h the 1989 Revision of the U.S.	. Certificate of	f Live Birth	; excludes of	data ł	based on the 2003 Revision.
R			h the 2003 Revision of the U.S.					

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						N U Blank	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 Deliver	ry 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
395-400	6	Method of Delive The checkbox iter	e <b>ry (Unrevised)</b> ns indented below follow this s	structure:		1 2 9	Yes No Unknown or not stated
395 396 397 398 399 400	1 1 1 1 1 1	UME_VAG UME_VBAC UME_PRIMC UME_REPEC UME_FORCP UME_VAC	Vaginal Vaginal after C-Section Primary C-Section Repeat C-Section Forceps Vacuum	730 731 732 733 734 735	U U U U,R U,R	,	

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
401	1	RDMETH_REC	Delivery Method Recode	( <b>Revised</b> ) 679	R	1	Vaginal (excludes vaginal after previous C-section)
				• • •		2	Vaginal after previous c-section
						3	Primary C-section
						4	Repeat C-section
						5	Vaginal (unknown if previous c-section) (2003 Standard only)
						6	C-section (unknown if previous c-section) (2003 Standard only)
						9	Not stated
402	1	UDMETH_REC	Delivery Method Recode		U	1	Vaginal (excludes vaginal after
				680		2	previous C-section) Vaginal after previous c-section
						3	Primary C-section
						4	Repeat C-section
						9	Not stated
403	1	DMETH_REC			U,R	1	Vaginal
						2	C-Section
						9	Unknown
404-409	6	FILLER	Filler				
410	1	ATTEND	Attendant		U,R	1	Doctor of Medicine (MD)
						2	Doctor of Osteopathy (DO)
						3	Certified Nurse Midwife (CNM)
						4	Other Midwife
						5	Other
						9	Unknown or not stated
411-414	4	FILLER	Filler				
415	2	APGAR5	Five Minute APGAR Sco	<b>re</b> 574	U,R	00-10	A score of 0-10
						99	Unknown or not stated
417	1	APGAR5R	Five Minute APGAR Rec	ode			
				574	U,R	1	A score of 0-3
						2	A score of 4-6
						3	A score of 7-8
						4	A score of 9-10
;	* U,R Includ (revise		the 1989 Revision of the U.S.	S. Certificate of Live	Birth (uni	revised), ar	nd the 2003 Revision of the U.S. Certificate of Live Birth
1	· · · · · · · · · · · · · · · · · · ·	/	4 1000 D C4 LLC	Contificante of Line	Dist.	1JJ	hand on the 2002 Destinion

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						5	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 Mor	ıth	U,R	01 02 03 04 05 06 07 08 09 10 11 12 99	January February March April May June July August September October November December Unknown or not stated
440-441	2	DLMP_DD	Last Normal Menses Day		U,R	01-31 99	As applicable to month of LMP
442-445	4	DLMP_YY	Last Normal Menses Year	r	U,R	99 nnnn 9999	Unknown or not stated Year of last normal menses Unknown or not stated

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
446-447	2	ESTGEST	Obstetric/Clinical Gestation	on Est. 573	U,R	0-98 99	0 through 98 <sup>th</sup> week of gestation Unknown or not stated
448-450	3	FILLER	Filler				
451-452	2	COMBGEST	Gestation – Detail in Weel	ks	U,R	17-47 99	17 <sup>th</sup> through 47 <sup>th</sup> 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 Gesta	tion 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	0227-81 9999	65 Number of grams Not stated birthweight
471-472	2	BWTR14	Birthweight Recode 14		U,R	01 02 03 04 05 06	499 grams or less 500 – 749 grams 750 - 999 grams 1000 - 1249 grams 1250 – 1499 grams 1500 – 1999 grams

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						07 08 09 10 11 12 13 14	2000 – 2499 grams 2500 – 2999 grams 3000 – 3400 grams 3500 – 3999 grams 4000 – 4499 grams 4500 – 4999 grams 5000 – 8165 grams Not Stated
473	1	BWTR4	Birthweight Recode 4		U,R	1 2 3 4	1499 grams or less 1500 – 2499 grams 2500 grams or more Unknown or not stated
474	1	FILLER	Filler				
475	1	BWTIMP	Imputed Birth Weight Fl	ag	U,R	Blank 1	Birth Weight is not imputed Birth Weight is imputed
476-482	7	<u>Abnormal Conc</u> The checkbox ite	litions of the Newborn (Revisems below follow this structure	<u>sed)</u> e:		Y N U Blank	Yes, Complication reported No Complication reported Unknown or not stated Not on certificate
470 477 473 479 480 480 488 488	7 1 8 1 9 1 0 1 1 1	AB_AVEN1 AB_AVEN6 AB_NICU AB_SURF AB_ANTI AB_SEIZ AB_BINJ	Assisted Ventilation Assisted Ventilation >6 h Admission to NICU Surfactant Antibiotics Seizures Birth Injury	628         R           629         R           630         R           631         R           632         R           633         R           634         R			
483-491	9		litions of the Newborn (Unreems indented below follow this			1 2 9 Blank	Complication reported Complication not reported Complication not classifiable Not on certificate
48. 484		UAB_ANEM UAB_INJURY	Anemia Birth Injury	740 741	U U		
		les data based on both ed).	•••	S. Certificate of Li	ive Birth (un		d the 2003 Revision of the U.S. Certificate of Live Birth

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
485 486 487 488 489 490 491	1 1 1 1 1 1 1	UAB_ALCOH UAB_HYAL UAB_MECON UAB_VENL30 UAB_VEN30M UAB_NSEIZ UAB_OTHER	Fetal Alcohol Syndrome Hyaline Membrane Diseas Meconium Aspiration Syn Assisted Ventilation < 30 n Assisted Ventilation >= 30 Seizures Other Abnormal Condition	drome         744           nin         745           min         746           747	U U U U U U		
492-503	12	Congenital Anon The checkbox iter	nalies of the Newborn (Revis ns below follow this structure:	<u>ed)</u>		Y N U Blank	Yes, anomaly reported No, anomaly not reported Unknown Not on certificate
492 493 494 495 496 497 498 499 500 501	1 1 1 1 1 1 1 1 1	CA_ANEN CA_CCHD CA_CCHD CA_CDH CA_OMPH CA_GAST CA_LIMB CA_CLEFT CA_CLPAL CA_CDOWN	Anencephaly Meningomyelocele/Spina I Cyanotic Congenital Hear Congenital Diaphragmatic Omphalocele Gastroschisis Limb Reduction Defect Cleft Lip w/ or w/o Cleft P Cleft Palate alone Downs Syndrome	t Disease 637 2 Hernia 638 639 640 641	R R R R R R R R R	C P N U Blank	Confirmed Pending No Unknown Not on certificate
502	1	CA_DISOR	Suspected Chromosomal I	<b>Disorder</b> 645	R	C P N U Blank	Confirmed Pending No Unknown Not on certificate
503	1	СА_НҮРО	Hypospadias	646	R	Y N U Blank	Yes, Anomaly reported No, Anomaly not reported Unknown Not on certificate

### 504-525 22 Congenital Anomalies of the Newborn (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.

Position	Len	Field	Description	Reportin Flag Pos		Rev*	Values	Definition
			ns indented below follow this 1989 Standard unless otherwis				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 / Meningocel	e	753	U.R		
506	1	UCA_HYDRO	Hydrocephalus		754	- ,		
507	1	UCA MICRO	Microcephalus		755			
508	1	UCA_NERV	Other Central Nervous Sy	stem Anon				
509	1	UCA_HEART	Heart Malformations		757			
510	1	UCA_CIRC	Other Circulatory/Respira	ation Anon	<b>ns.</b> 758			
511	1	UCA_RECTAL	Rectal Atresia / Stenosis		759			
512	1	UCA_TRACH	Tracheo-Esophageal Fistu	la	760			
513	1	UCA_OMPHA	Omphalocele / Gastroschis	sis	761	U,R		
514	1	UCA_GASTRO	Other Gastrointestinal An	ioms.	762			
515	1	UCA_GENITAL	Malformed Genitalia		763			
516	1	UCA_RENAL	Renal Agenesis		764			
517	1	UCA_UROGEN	Other Urogenital Anoms.		765			
518	1	UCA_CELFTLP	Cleft Lip / Palate		766	U,R		
519	1	UCA_ADACTY	Polydactyly / Syndactyly /	Adactyly	767			
520	1	UCA_CLUBFT	Club Foot		768			
521	1	UCA_HERNIA	Diaphragmatic Hernia		769			
522	1	UCA_MUSCU	Other Musculoskeletal An	ioms.	770			
523	1	UCA_DOWNS	Downs Syndrome		771	U,R		
524	1	UCA_CHROM	Other Chromosomal Anor	ms.	772			
525	1	UCA_OTHER	Other Congenital Anoms.		773			
526-568	43	FILLER	Filler					
569-773	205	Flag File for Rep The reporting flag	orting Flags s indented below follow this c	coding struc	ture:		0	Not reporting
569	1	E MODICIN	Origin of Mother			UР	1	Reporting
570	1	F_MORIGIN	Origin of Mother Origin of Father			U,R		
570 571	1 1	F_FORIGIN F_MEDUC	Education of Mother			U,R R		
572	1	F_MEDUC FILLER	Filler			К		
573	1	FILLER F_CLINEST	Clinical Estimate of Gesta	tion		U,R		
574	1	F_APGAR5	Five minute APGAR	uon		U,R		
575	1	F_TOBACO	Tobacco use			R R		
576-581		FILLER	Filler			K		
570-581	0		i mei					

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

Position	

Rev\*

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_AUGMEN1	Augmentation of Labor	R
610	1	F_LD_NVRTX	Non-Vertex Presentation	R
611	1	F_LD_STEROIDS	Steriods	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		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
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

Description

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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	1	F_ALCOL Alcohol use	U
650	1	F_API API Codes	U
651-666	16	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
670-678	9	FILLER Filler	
679	1	F_RDMETH_REC Delivery Method Recode (revised)	R
680	1	F_UDMETH_REC Delivery Method Recode (unrevised)	U
681	1	F_URF_ANEMIA Anemia	U
682	1	F_URF_CARDIAC Cardiac	U
683	1	F_URF_LUNG Acute or Chronic Lung Disease	U
684	1	F_URF_DIABETES <b>Diabetes</b>	U
685	1	F_URF_HERPES Genital Herpes	U
686	1	F_URF_HYDRA <b>Hydramnios</b> / Oligohydramnios	U
687	1	F_URF_HEMO Hemoglobinopathy	U
688	1	F_URF_CHYPER Chronic Hypertension	U
689	1	F_URF_PHYPER <b>Pregnancy</b> Associated Hypertension	U
690	1	F_URF_ECLAMP Eclampsia	U
691	1	F_URF_INCERVIX Incompetent Cervix	U
692	1	F_URF_PRE4000 Previous Infant 4000+ Grams	U
693	1	F_URF_PRETERM <b>Previous Preterm/Small for Gestation</b>	U
694	1	F URF RENAL <b>Renal Disease</b>	Ū
695	1	F_URF_RH <b>Rh Sensitization</b>	Ū
696	1	F_URF_UTERINE Uterine Bleeding	Ū
697	1	F_URF_OTHERMR Other Medical Risk Factors	Ū
698-700	3	FILLER <b>Filler</b>	-
701	1	F UOB AMNIO Amniocentesis	U
	-		-

Description

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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.

riag rosmon	Flag	Position	
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702	1	E LIOD MONITOD	Electronic Estal Manitonin a	TT
702 703	1 1		Electronic Fetal Monitoring Induction of Labor	U U
	1			-
704 705	-			U U
	1		<b>J</b>	U
706	1 1	F_UOB_ULTRAS		U
707 708-710	1 3			U
		FILLER	Filler	TT
711	1	F_ULD_FEBRILE		U
712	1	F_ULD_MECONIUM		U
713	1			U
714	1		The second	U
715	1	F_ULD_PREPLACE		U
716	1			U
717	1		8	U
718	1	F_ULD_PRECIP	I I I I I I I I I I I I I I I I I I I	U
719	1	F_ULD_PROLONG	8	U
720	1		<b>J</b>	U
721	1	F_ULD_BREECH		U
722	1			U
723	1			U
724	1		···· · · · · · · · · · · · · · · · · ·	U
725	1	F_ULD_DISTRESS		U
726	1			U
727-729	3		Filler	
730	1			U
731	1	F_U_VBAC		U
732	1			U
733	1		· F · · · · · · · · · · ·	U
734	1			U
735	1	F_U_VACUUM	Vacuum	U
736-739	4	FILLER	Filler	
740	1	F_UAB_ANEMIA		U
741	1	F_UAB_INJURY	Birth Injury	U
742	1	F_UAB_ALCOSYN	Fetal Alcohol Sydrome	U
743	1	F_UAB_HYALINE	Hyaline Membrane Disease	U
744	1	F_UAB_MECONSYN	N Meconium Aspiration Syndrome	U
745	1	F_UAB_VENL30	Assisted Ventilation <30 minutes	U
746	1	F_UAB_VEN30M	Assisted Ventilation >=30 minutes	U
747	1			U
748	1		Other Abnormal Conditions	U
749-751	3	FILLER	Filler	

Description

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	752	1	F_UCA_ANEN	Anencephalus	U	
	753	1	F_UCA_SPINA	Spina Bifida / Meningocele	U	
	754	1	F_UCA_HYDRO		U	
	755	1	F_UCA_MICROCE		U	
	756	1		Other Central Nervous System Anomalies	U	
	757	1		Heart Malformations	U	
	758	1		<b>Other Circulatory / Respiration Anomalies</b>	U	
	759	1		Rectal Atresia / Stenosis	U	
	760	1		Tracheo-Esophageal Fistula	U	
	761	1		Omphalocele / Gastroschisis	U	
	762	1		<b>Other Gastrointestinal Anomalies</b>	U	
	763	1		L Malformed Genitalia	U	
	764	1	F_UCA_RENALAG		U	
	765	1		Other Urogenital Anomalies	U	
	766	1	F_UCA_CLEFTLP		U	
	767	1		Polydactyly / Syndactyly / Adactyly	U	
	768	1	F_UCA_CLUB	Club Foot	U	
	769	1		Diaphragmatic Hernia	U	
	770	1		Other Musculoskeletal Anomalies	U	
	771	1		Downs Syndrome	U	
	772	1		Other Chromosomal Anomalies	U	
	773	1	F_UCA_OTHRCON	Other Congenital Anomalies	U	
774-799		26	FILLER	Filler		
800-823		24	Mother's Race Ed	lited	R**	100-999 Mother's Race Edited Code
						A00-R99
	800	3	MRACE1E			
	803	3	MRACE2E			
	806	3	MRACE3E			
	809	3	MRACE4E			
	812	3	MRACE5E			
	815	3	MRACE6E			
	818	3	MRACE7E			
	821	3	MRACE8E			
			** Also includes un	nrevised states that are reporting multiple race		
824-834		11	FILLER	Filler		

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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
835-858	24	Father's Race	Edited		R**	100-999 A00-R99	Father's Race Edited Code
835 838	3 3	FRACE1E FRACE2E					
841	3	FRACE3E					
844 847	3	FRACE4E FRACE5E					
847 850	3 3	FRACE5E FRACE6E					
853	3	FRACE7E					
856	3	FRACE8E					
		** Also include	es unrevised states that are repo	rting multiple race			
859-867	9	FILLER	Filler				
868	1	FLGND	Flag indicating records in	both numerator and c	denominato	or file	
							1Record in both filesBlankRecord not in numerator file
Here ends the I	Denomina	tor file. Document	ation of the Mortality Section	n of the Numerator	(Linked) f	ile begins (	on the next page.
			·			U	
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	Under 1 hour
						2	1 – 23 hours
						3	1 - 6  days
						4	7 – 27 days (late neonatal)
						5	28 days and over (postneonatal)
876-877	2	AGER22	Infant age recode 22			Blank	Age 1 year and over or not stated
						01	Under 1 hour (includes not stated hours and minutes)
						02	1 – 23 hours
						03	1 day (includes not stated days)
						04 05	2 days 3 days
						05	5 uays
* U,R	Includ	es data based on bo	th the 1989 Revision of the U.	S. Certificate of Live	Birth (unr	evised), an	d the 2003 Revision of the U.S. Certificate of Live Birth
T	(revise	,	4 4 - 1000 D		Dist	1	hand an the 2002 Descision

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

Positior	1	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
							06	4 days
							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 19	7 months 8 months
							19 20	9 months
							20 21	9 months
							21	11 months
							22	11 monuis
878		1	MANNER	Manner of Death			1	Accident
070		1		inter of Deuti			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			В	Burial
							С	Cremation
							0	Other
							U	Unknown
880		1	AUTOPSY	Autopsy			Y	Yes
				1 0			Ν	No
							U	Unknown
881		1	FILLER	Filler				
882		1	PLACE	Place of injury for causes	W00-Y34, excent Y	06	0	Home
		-		and Y07			1	Residential institution
							2	School, other institution and public administrative area
	* U,R	Include	es data based on bot	h the 1989 Revision of the U.S	. Certificate of Live	Birth (unr		d the 2003 Revision of the U.S. Certificate of Live Birth

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						3 4 5 6 7 8 9 Blank	Sports and athletics area Street and highway Trade and service area Industrial and construction area Farm Other Specified Places Unspecified place Cause other than W00-Y34, except Y06 and Y07
883	1	FILLER	Filler				
884-887	4	UC0D	ICD Code (10 <sup>th</sup> Revision) See the <u>International Classi</u> Revision, Volume 1.	fication of Diseases,	1992		
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 weight	ts computed for poss	essions fil	e)1.XXXX	XX
901-902	2	FILLER	Filler				
903-904	2	EANUM	Number of Entity-Axis Co	onditions		00-20	Code range
905-1044	140	ENTITY	Entity-Axis Conditions Space has been provided for Each condition takes 7 posi position will be blank. Rece are blank in the unused area	itions in the record. To ords that do not have	The 7 <sup>th</sup>		
			Position 1:       Part/lin         1          2          3          4          5          6	e number on certific. Part I, line 1 (a) Part I, line 2 (b) Part I, line 3 (c) Part I, line 4 (d) Part I, line 5 (e) Part II	ate		

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Position	Len	Field	Description		Reporting Flag Position	Rev*
			Position 2: 1-7	Sequen	ce of condition with Code range	in part/line
			Position 3 – 6: Co See Ta		ode complete list of cod	les
905-9	11 7		1 <sup>st</sup> Condition			

905-911 912-918 919-925 926-932	7 7 7		1 <sup>st</sup> Condition 2 <sup>nd</sup> Condition 3 <sup>rd</sup> Condition 4 <sup>th</sup> Condition		
933-939 940-946 947-953	7 7		5 <sup>th</sup> Condition 6 <sup>th</sup> Condition 7 <sup>th</sup> Condition		
954-960 961-967 968-974	7 7		8 <sup>th</sup> Condition 9 <sup>th</sup> Condition 10 <sup>th</sup> Condition		
975-981 982-988 989-995	7 7		11 <sup>th</sup> Condition 12 <sup>th</sup> Condition 13 <sup>th</sup> Condition		
996-1002 1003-100 1010-101	09 7 16 7		14 <sup>th</sup> Condition 15 <sup>th</sup> Condition 16 <sup>th</sup> Condition 17 <sup>th</sup> Condition		
1017-102 1024-103 1031-103 1038-104	30 7 37 7		1 <sup>4th</sup> Condition 18 <sup>th</sup> Condition 19 <sup>th</sup> Condition 20 <sup>th</sup> Condition		
1045-1046	2	FILLER	Filler		
1047-1048	2	RANUM	Number of Record-Axis Conditions	00-20	Code range
1049-1148	100	RECORD	<b>Record-Axis Conditions</b> Space has been provided for a maximum of 20		

Positions 1 – 4: Condition Code

See Table 1 for a complete list of codes

Values Definition

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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.

<sup>\*</sup> 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).

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
$1054\\1059\\1064\\1069\\1074\\1079\\1084\\1089\\1094\\1099\\1104\\1109\\1114\\1119\\1124\\1129\\1124\\1129\\1134\\1139$	9-1053       5         1-1058       5         9-1063       5         1-1068       5         9-1073       5         1-1078       5         9-1083       5         1-108       5         9-1093       5         1-108       5         9-1103       5         1-1118       5         9-1123       5         1-1128       5         9-1133       5         9-1133       5         9-1143       5         9-1143       5         9-1143       5		$1^{st}$ Condition $2^{nd}$ Condition $3^{rd}$ Condition $4^{th}$ Condition $5^{th}$ Condition $6^{th}$ Condition $7^{th}$ Condition $9^{th}$ Condition $10^{th}$ Condition $10^{th}$ Condition $11^{th}$ Condition $12^{th}$ Condition $13^{th}$ Condition $14^{th}$ Condition $15^{th}$ Condition $16^{th}$ Condition $17^{th}$ Condition $18^{th}$ Condition $19^{th}$ Condition $20^{th}$ Condition				
1149-1150	2	FILLER	Filler				
1151	1	D_RESTATUS	Death Resident Status				
			United States Occurrence			1 2 3 4	RESIDENTS State and County of Occurrence and Residence are the same. INTRASTATE NONRESIDENTS State of Occurrence and Residence are the same, but County is different. INTERSTATE NONRESIDENTS State of Occurrence and Residence are different, but both are in the U.S. 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

RESIDENTS Territory and County-equivalent of Occurrence and Residence are the same.

\* 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).

1

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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
						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
						4	both are a Territory. 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
						2	Residence are the same. INTRASTATE NONRESIDENTS Territory of Occurrence and Residence are the same, but
						3	County-equivalent is different. INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but
						4	both are a Territory. FOREIGN RESIDENTS Occurred in Virgin Islands to a resident of any other place.
			Guam Occurrence			1	RESIDENTS Occurred in Guam to a resident of Guam or to a resident of
						3	the U.S. INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but
						4	both are a Territory. 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 (This item is available in th only, geographic codes are available in the U.S.file)	e territory file			
						PR VI GU	Puerto Rico Virgin Islands Guam
1154-1156	3	CNTOCFIPD	County of Occurrence (FI	PS) of Death			
* U,R	Include (revise		the 1989 Revision of the U.S	. Certificate of Live	Birth (unre	evised), an	d the 2003 Revision of the U.S. Certificate of Live Birth
U R	Include	es data based on both	n the 1989 Revision of the U.S				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			Counties and county equiva coextensive cities) are num State and identify each cour a county, both the state and complete list of counties is Outline further back in this (This item is available in th only, geographic codes are available in the U.S.file)	bered alphabetically nty. (Note: To uniqu county codes must b shown in the Geogra document. he territory file	within eached within eached within each and a second secon	ý A	
						001-nnn 999	Code range County of less than 250,000
1157-1159	3	FILLER	Filler				
1160-1161	2	STRESFIPD	<b>State of Residence (FIPS)</b> (This item is available in th only, geographic codes are available in the U.S.file)	e territory 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	<b>State/Country of Residen</b> (This item is available in th only, geographic codes are	e territory file			
* U,I	R Include (revise		h the 1989 Revision of the U.S	. Certificate of Live	Birth (unre	evised), an	d the 2003 Revision of the U.S. Certificate of Live Birth
U R	Include	es data based on bot	h the 1989 Revision of the U.S h the 2003 Revision of the U.S				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			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 ZZ	Guam U.S. resident. Also considered a resident of Guam Foreign residents
1166-1167	3	CNTYRFPD	<b>County of Residence (FIP</b> Counties and county equiva coextensive cities) are num each State and identify eacl identify a county, both the be used.) A complete list of Geographic Code Outline f	alents (independent a bered alphabetically h county. (Note: To state and county code of counties is shown i	within uniquely es must n the		
			(This item is available in th only, geographic codes are 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	<b>Population Size of County</b> Based on the results of the		eath		
* U, U R	(revise) Include	d). es data based on bot	h the 1989 Revision of the U.S h the 1989 Revision of the U.S h the 2003 Revision of the U.S	. Certificate of Live	Birth; exc	ludes data	

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			(This item is available in th only, geographic codes are available in the U.S.file)				
						0	County of 1,000,000 or more
						1	County of 500,000 to 1,000,000
						2	County of 250,000 to 500,000
						9	County of less than 250,000
						Ζ	Foreign residents
1183-1185	3	FILLER	Filler				
1186	1	HOSPD	Place of Death and Decen	dent's Status		1	Hospital, clinic or Medical Center – Inpatient
1100	Ĩ	110512	There of Death and Deeth	dent 5 Status		2	Hospital, clinic of Medical Center – Outpatient or admitted to Emergency Room
						3	Hospital, clinic or Medical Center – Dead on Arrival
						4	Decedent's home
						5	Hospice facility
						6	Nursing home/long term care
						7	Other
						9	Place of death unknown
1187	1	WEEKDAYD	Day of Week of Death			1	Sunday
1107	1		Duy of Week of Death			2	Monday
						3	Tuesday
						4	Wednesday
						5	Thursday
						6	Friday
						7	Saturday
						9	Unknown
1188-1191	4	DTHYR	Death Year			2006	2006
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
* I⊺ D	Include	e data basad on bott	h the 1080 Payision of the US	Cortificate of Live	Birth (unr	avisad) an	d the 2003 Pavision of the U.S. Cartificate of Live Birth

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						08 09	August September

- 10 October
- 11 November
- 12 December

- \* 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.

Tenth Revision 130 Selected Causes of Infant Death Adapted for use by DVS Page 1 ST: 1 = SubtotalLimited: Sex: 1 = Males; 2 = Females Age: 1 = 5 and over; 2 = 10-54; 3 = 28 days and over 4 = Under 1 year; 5 = 1-4 years; 6 = 1 year and over 7 = 10 years and over \*\*\*\*\* Cause Subtotals are not identified in this file \*\*\*\*\* 130 S Limited T Sex Age Cause Title and ICD-10 Codes Included Recode 001 1 Certain infectious and parasitic diseases (A00-B99) 002 Certain intestinal infectious diseases (A00-A08) 003 Diarrhea and gastroenteritis of infectious origin (A09) 004 Tuberculosis (A16-A19) 005 Tetanus (A33,A35) 006 Diphtheria (A36) 007 Whooping cough (A37) 008 Meningococcal infection (A39) Septicemia (A40-A41) 009 3 010 Congenital syphilis (A50) Gonococcal infection (A54) 011 012 1 Viral diseases (A80-B34) 013 Acute poliomyelitis (A80) Varicella (chickenpox) (B01) 014 015 Measles (B05) 016 Human immunodeficiency virus (HIV) disease (B20-B24) 017 Mumps (B26) Other and unspecified viral diseases (A81-B00, B02-B04, B06-B19, B25, B27-B34) 018 019 Candidiasis (B37) 020 Malaria (B50-B54) 021 Pneumocystosis (B59) All other and unspecified infectious and parasitic diseases 022 (A20-A32, A38, A42-A49, A51-A53, A55-A79, B35-B36, B38-B49, B55-B58, B60-B99) 023 Neoplasms (C00-D48) 1 024 1 Malignant neoplasms (C00-C97) Hodgkin's disease and non-Hodgkin's lymphomas (C81-C85) 025 026 Leukemia (C91-C95) 027 Other and unspecified malignant neoplasms (C00-C80,C88,C90,C96-C97) 028 In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behavior (D00-D48) 029 1 Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89) 030 Anemias (D50-D64) Hemorrhagic conditions and other diseases of blood and blood-forming organs 031 (D65-D76) 032 Certain disorders involving the immune mechanism (D80-D89) Endocrine, nutritional and metabolic diseases (E00-E88) 033 1 034 Short stature, not elsewhere classified (E34.3) 035 Nutritional deficiencies (E40-E64) 036 Cystic fibrosis (E84) 037 3 Volume depletion, disorders of fluid, electrolyte and acid-base balance (E86-E87) 038 All other endocrine, nutritional and metabolic diseases (E00-E32,E34.0-E34.2,E34.4-E34.9,E65-E83,E85,E88) 039 1 Diseases of the nervous system (G00-G98) Meningitis (G00,G03) 040 041 Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) (G12.0) 042 Infantile cerebral palsy (G80) Anoxic brain damage, not elsewhere classified (G93.1) 043 044 Other diseases of nervous system (G04,G06-G11,G12.1-G12.9,G20-G72,G81-G92,G93.0,G93.2-G93.9,G95-G98) 045 Diseases of the ear and mastoid process (H60-H93) 046 1 Diseases of the circulatory system (I00-I99) 047 Pulmonary heart disease and diseases of pulmonary circulation (I26-I28) 048 Pericarditis, endocarditis and myocarditis (I30, I33, I40) 049 Cardiomyopathy (I42) 050 Cardiac arrest (I46) Cerebrovascular diseases (I60-I69) 051 052 All other diseases of circulatory system (I00-I25, I31, I34-I38, I44-I45, I47-I51, I70-I99) 053 Diseases of the respiratory system (J00-J98) 1 Acute upper respiratory infections (J00-J06) 054 055 1 Influenza and pneumonia (J10-J18)

Tenth Revision 130 Selected Causes of Infant Death Adapted for use by DVS Page 2 ST: 1 = SubtotalLimited: Sex: 1 = Males; 2 = Females Age: 1 = 5 and over; 2 = 10-54; 3 = 28 days and over 4 = Under 1 year; 5 = 1-4 years; 6 = 1 year and over 7 = 10 years and over \*\*\*\*\* Cause Subtotals are not identified in this file \*\*\*\*\* 130 S Limited T Sex Age Cause Title and ICD-10 Codes Included Recode 056 Influenza (J10-J11) 057 Pneumonia (J12-J18) 058 Acute bronchitis and acute bronchiolitis (J20-J21) 059 Bronchitis, chronic and unspecified (J40-J42) 060 Asthma (J45-J46) 061 Pneumonitis due to solids and liquids (J69) 062 Other and unspecified diseases of respiratory system (J22,J30-J39,J43-J44,J47-J68,J70-J98) 063 1 Diseases of the digestive system (K00-K92) Gastritis, duodenitis, and noninfective enteritis and colitis (K29,K50-K55) 064 065 Hernia of abdominal cavity and intestinal obstruction without hernia (K40-K46,K56) 066 All other and unspecified diseases of digestive system (K00-K28,K30-K38,K57-K92) Diseases of the genitourinary system (N00-N95) 067 1 068 Renal failure and other disorders of kidney (N17-N19, N25, N27) 069 Other and unspecified diseases of genitourinary system (N00-N15, N20-N23, N26, N28-N95) 070 Certain conditions originating in the perinatal period (POO-P96) 1 071 Newborn affected by maternal factors and by complications of pregnancy, labor and 1 delivery (P00-P04) Newborn affected by maternal hypertensive disorders (P00.0) 072 Newborn affected by other maternal conditions which may be unrelated to present 073 pregnancy (P00.1-P00.9) 074 Newborn affected by maternal complications of pregnancy (P01) 1 Newborn affected by incompetent cervix (P01.0) 075 076 Newborn affected by premature rupture of membranes (P01.1) 077 Newborn affected by multiple pregnancy (P01.5) 078 Newborn affected by other maternal complications of pregnancy (P01.2-P01.4,P01.6-P01.9) 079 Newborn affected by complications of placenta, cord and membranes (P02) 1 080 Newborn affected by complications involving placenta (P02.0-P02.3) 081 Newborn affected by complications involving cord (P02.4-P02.6) 082 Newborn affected by chorioamnionitis (P02.7) 083 Newborn affected by other and unspecified abnormalities of membranes (P02.8-P02.9) 084 Newborn affected by other complications of labor and delivery (PO3) Newborn affected by noxious influences transmitted via placenta or breast milk 085 (P04) 086 1 Disorders related to length of gestation and fetal malnutrition (P05-P08) 087 Slow fetal growth and fetal malnutrition (P05) Disorders related to short gestation and low birthweight, not elsewhere 088 1 classified (P07) 089 Extremely low birthweight or extreme immaturity (P07.0,P07.2) 090 Other low birthweight or preterm (P07.1,P07.3) 091 Disorders related to long gestation and high birthweight (PO8) 092 Birth trauma (P10-P15) Intrauterine hypoxia and birth asphyxia (P20-P21) 093 1 094 Intrauterine hypoxia (P20) 095 Birth asphyxia (P21) 096 Respiratory distress of newborn (P22) 097 1 Other respiratory conditions originating in the perinatal period (P23-P28) 098 Congenital pneumonia (P23) 099 Neonatal aspiration syndromes (P24) Interstitial emphysema and related conditions originating in the perinatal period 100 (P25) 101 Pulmonary hemorrhage originating in the perinatal period (P26) 102 Chronic respiratory disease originating in the perinatal period (P27) 103 Atelectasis (P28.0-P28.1) 104 All other respiratory conditions originating in the perinatal period (P28.2-P28.9) 105 Infections specific to the perinatal period (P35-P39) 1 106 Bacterial sepsis of newborn (P36) 107 Omphalitis of newborn with or without mild hemorrhage (P38)

Tenth Revision 130 Selected Causes of Infant Death Adapted for use by DVS Page 3 ST: 1 = SubtotalLimited: Sex: 1 = Males; 2 = Females Age: 1 = 5 and over; 2 = 10-54; 3 = 28 days and over 4 = Under 1 year; 5 = 1-4 years; 6 = 1 year and over 7 = 10 years and over \*\*\*\*\* Cause Subtotals are not identified in this file \*\*\*\*\* 130 S Limited T Sex Age Cause Title and ICD-10 Codes Included Recode 108 All other infections specific to the perinatal period (P35,P37,P39) 109 Hemorrhagic and hematological disorders of newborn (P50-P61) 1 110 Neonatal hemorrhage (P50-P52, P54) 111 Hemorrhagic disease of newborn (P53) 112 Hemolytic disease of newborn due to isoimmunization and other perinatal jaundice (P55-P59) 113 Hematological disorders (P60-P61) 114 Syndrome of infant of a diabetic mother and neonatal diabetes mellitus (P70.0-P70.2) 115 Necrotizing enterocolitis of newborn (P77) Hydrops fetalis not due to hemolytic disease (P83.2) 116 117 Other perinatal conditions (P29, P70.3-P70.9, P71-P76, P78-P81, P83.0-P83.1, P83.3-P83.9,P90-P96) Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99) 118 1 119 Anencephaly and similar malformations (Q00) 120 Congenital hydrocephalus (Q03) 121 Spina bifida (Q05) Other congenital malformations of nervous system (Q01-Q02,Q04,Q06-Q07) 122 123 Congenital malformations of heart (Q20-Q24) 124 Other congenital malformations of circulatory system (Q25-Q28) 125 Congenital malformations of respiratory system (Q30-Q34) Congenital malformations of digestive system (Q35-Q45) 126 127 Congenital malformations of genitourinary system (Q50-Q64) 128 Congenital malformations and deformations of musculoskeletal system, limbs and integument (Q65-Q85) 129 Down's syndrome (Q90) Edward's syndrome (Q91.0-Q91.3) 130 131 Patau's syndrome (Q91.4-Q91.7) 132 Other congenital malformations and deformations (Q10-Q18,Q86-Q89) Other chromosomal abnormalities, not elsewhere classified (Q92-Q99) 133 134 1 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99) 135 Sudden infant death syndrome (R95) Other symptoms, signs and abnormal clinical and laboratory findings, not elsewhere 136 classified (R00-R53, R55-R94, R96-R99) 137 All other diseases (Residual) (F01-F99,H00-H57,L00-M99) External causes of mortality (\*U01,V01-Y84) 138 1 139 Accidents (unintentional injuries) (V01-X59) 1 140 1 Transport accidents (V01-V99) Motor vehicle accidents(V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2, 141 V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86, V87.0-V87.8,V88.0-V88.8,V89.0,V89.2) 142 Other and unspecified transport accidents (V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9, V90-V99) Falls (W00-W19) 143 144 Accidental discharge of firearms (W32-W34) 145 Accidental drowning and submersion (W65-W74) 146 Accidental suffocation and strangulation in bed (W75) Other accidental suffocation and strangulation (W76-W77,W81-W84) 147 148 Accidental inhalation and ingestion of food or other objects causing obstruction of respiratory tract (W78-W80) 149 Accidents caused by exposure to smoke, fire and flames (X00-X09) 150 Accidental poisoning and exposure to noxious substances (X40-X49) 151 Other and unspecified accidents (W20-W31,W35-W64,W85-W99,X10-X39,X50-X59) 152 Assault (homicide) (\*U01,X85-Y09) 1 Assault (homicide) by hanging, strangulation and suffocation (X91) 153 Assault (homicide) by discharge of firearms (\*U01.4,X93-X95) 154 Neglect, abandonment and other maltreatment syndromes (Y06-Y07) 155 156 Assault (homicide) by other and unspecified means (\*U01.0-\*U01.3,\*U01.5-\*U01.9,X85-X90,X92,X96-X99,Y00-Y05,Y08-Y09) 157 Complications of medical and surgical care (Y40-Y84)

Tenth Revision 130 Selected Causes of Infant Death Adapted for use by DVS ST: 1 = Subtotal Limited: Sex: 1 = Males; 2 = Females Age: 1 = 5 and over; 2 = 10-54; 3 = 28 days and over 4 = Under 1 year; 5 = 1-4 years; 6 = 1 year and over 7 = 10 years and over \*\*\*\*\* Cause Subtotals are not identified in this file \*\*\*\*\* 130 S Limited

Recode T Sex Age Cause Title and ICD-10 Codes Included

158 Other external causes (X60-X84, Y10-Y36)

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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, 2006 Period Data. (Residence of birth is of the mother)

	Live b	irths		Infant		
State	Occurence	Residence	Unweigh Occurence	ted Residence	Weighte Occurence	ed 1/ Residence
United States /2	4273264	4265593	28174	28144	28540	28509
Alabama	62100	63232	563	567	564	568
Alaska	10899	10996	72	75	74	77
Arizona	103143	102430	645	649	647	651
Arkansas	39746	40961	322	344	324	346
California	563522	562440	2740	2734	2842	2835
Colorado	71157	70751	426	406	428	408
Connecticut	42187	41820	255	258	255	258
Delaware	12418	11989	98	97	98	97
Dist of Columbia	14592	8523	153	101	153	101
Florida	237499	236802	1718	1708	1730	1720
Georgia	149920	148633	1210	1196	1214	1200
Iawaii	18987	18983	113	111	113	111
Idaho	23719	24184	150	164	151	165
Illinois	177235	180573	1236	1308	1245	1317
Indiana	89179	88632	694	695	700	701
Lowa	40620	40607	194	205	197	208
Kansas	41946	40968	299	290	302	293
Kentucky	56646	58250	372	433	376	438
Louisiana	63481	63378	604	599	637	631
Maine	14010	14151	85	88	86	89
Marvland	74082	77494	590	614	592	616
Massachusetts	78509	77677	381	375	383	377
Massachusetts Michigan	126393	127483	927	935	927	935
Minnesota	73474	73525	389	380	390	381
Minesota Mississippi	44863	46056	440	477	448	485
Mississippi Missouri	44863 82461	81388	648	477 604	448 650	485
			648 77	74	78	
Montana	12490	12508				75
Nebraska	26892	26727	147	148	147	148
Nevada	39690	40027	263	262	266	265
New Hampshire	14070	14378	81	85	81	85
New Jersey	111930	115021	592	620	598	626
New Mexico	29337	29936	149	167	152	171
New York	126445	130218	698	721	712	734
New York City	125503	119885	712	675	713	676
North Carolina	128999	127859	1042	1034	1043	1035
North Dakota	9875	8621	53	51	53	51
Ohio	151347	150599	1189	1141	1218	1168
Oklahoma	53042	54019	417	422	425	430
Dregon	49092	48691	277	262	277	262
Pennsylvania	148522	149094	1159	1126	1174	1141
Rhode Island	13180	12373	87	77	87	77
South Carolina	59573	62173	487	515	489	517
South Dakota	12386	11919	90	82	90	82
Tennessee	89429	84355	826	730	826	730
ſexas	405879	399613	2420	2397	2498	2474
Jtah	54528	53504	291	274	291	274
'ermont	6114	6511	27	37	27	37
/irginia	105890	107817	733	765	733	765
lashington	86800	86876	397	406	399	408
lest Virginia	21134	20931	152	148	152	148
Visconsin	71236	72340	450	460	451	461
Nyoming	7093	7672	34	52	34	52
Foreign Residents	_	7671	_	30	_	30
Puerto Rico	48745	48597	428	419	428	419
Virgin Islands	1764	1687	8	9	8	9
		2007	5	-	0	

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.

#### 09/14/09

[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 4,265,593 Infant deaths 28,509 Infant mortality rate 6.68	7,294 6,177 846.86	11,782 5,507 467.41	12,737 1,916 150.43	14,910 1,040 69.75	17,733 857 48.33	69,555 1,810 26.02	219,449 2,268 10.33	3911038 8,779 2.24	1,095 154 140.64
Male									
Live births 2,184,260 Infant deaths 15,973 Infant mortality rate 7.31	3,664 3,168 864.63	5,970 3,176 531.99	6,583 1,230 186.84	7,573 610 80.55	8,871 430 48.47	33,734 943 27.95	100,996 1,184 11.72	2016267 5,121 2.54	602 110 182.72
Female									
Live births 2,081,333 Infant deaths 12,536 Infant mortality rate 6.02	3,630 3,010 829.20	5,812 2,331 401.07	6,154 685 111.31	7,337 430 58.61	8,862 427 48.18	35,821 867 24.20	118,453 1,083 9.14	1894771 3,658 1.93	493 45 91.28
White									
Both sexes									
Live births	4,020 3,429 852.99	6,874 3,324 483.56	7,898 1,216 153.96	9,691 678 69.96	11,883 565 47.55	47,385 1,237 26.11	151,559 1,540 10.16	3070169 6,331 2.06	852 103 120.89
Male									
Live births 1,695,886 Infant deaths 10,384 Infant mortality rate 6.12	1,996 1,753 878.26	3,487 1,920 550.62	4,091 791 193.35	4,974 399 80.22	5,986 279 46.61	23,124 648 28.02	70,144 826 11.78	1581629 3,699 2.34	455 69 151.65
Female									
Live births 1,614,445 Infant deaths 8,039 Infant mortality rate 4.98	2,024 1,677 828.56	3,387 1,403 414.23	3,807 425 111.64	4,717 279 59.15	5,897 287 48.67	24,261 588 24.24	81,415 714 8.77	1488540 2,632 1.77	397 34 85.64
Black									
Both sexes									
Live births	2,948 2,486 843.28	4,364 1,946 445.92	4,177 599 143.40	4,409 314 71.22	4,812 230 47.80	17,825 461 25.86	52,405 598 11.41	575,385 1,918 3.33	169 44 260.36
Male									
Live births	1,492 1,266 848.53	2,196 1,118 509.11	2,139 374 174.85	2,158 181 83.87	2,347 117 49.85	8,426 237 28.13	23,510 291 12.38	297,468 1,108 3.72	108 35 324.07
Female									
Live births	1,456 1,219 837.23	2,168 828 381.92	2,038 225 110.40	2,251 133 59.08	2,465 113 45.84	9,399 225 23.94	28,895 307 10.62	277,917 809 2.91	61 9 *

#### 09/14/09

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

Race of mother and sex T	otal	<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 Infant deaths Infant mortality rate	47,720 395 8.28	63 55 873.02	97 44 453.61	133 23 172.93	150 10 *	181 10 *	729 18 *	2,248 37 16.46	44,111 198 4.49	8 0 *
Male										
Live births Infant deaths Infant mortality rate	24,308 232 9.54	31 28 903.23	57 24 421.05	74 16 *	91 7 *	94 5 *	386 10 *	1,102 22 19.96	22,470 118 5.25	3 0 *
Female										
Live births Infant deaths Infant mortality rate	23,412 163 6.96	32 26 812.50	40 19 *	59 7 *	59 3 *	87 5 *	343 8 *	1,146 15 *	21,641 79 3.65	5 0 *
Asian or Pacific Islander										
Both sexes										
Live births Infant deaths Infant mortality rate	241,048 1,097 4.55	263 208 790.87	447 194 434.00	529 77 145.56	660 39 59.09	857 52 60.68	3,616 94 26.00	13,237 92 6.95	221,373 333 1.50	66 8 *
Male										
Live births Infant deaths Infant mortality rate	124,222 632 5.09	145 120 827.59	230 114 495.65	279 50 179.21	350 24 68.57	444 29 65.32	1,798 48 26.70	6,240 46 7.37	114,700 195 1.70	36 6 *
Female										
Live births Infant deaths Infant mortality rate	116,826 465 3.98	118 88 745.76	217 80 368.66	250 27 108.00	310 15 *	413 22 53.27	1,818 46 25.30	6,997 47 6.72	106,673 138 1.29	30 2 *

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

- Quantity zero /1 Includes Aleut and Eskimos

# Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age: United states, 2006 period data

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

					Ges	tation				
Birthweight	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 Infant deaths Infant mortality rate		32,057 12,856 401.04	54,490 2,371 43.51	68,579 1,110 16.19	387,791 2,746 7.08	2,303,021 5,937 2.58	800,019 1,519 1.90	353,384 816 2.31	240,589 674 2.80	25,663 481 18.74
Less then 2,500 grams										
Live births Infant deaths Infant mortality rate	353,460 19,576 55.38	30,883 12,841 415.80	41,363 2,268 54.83	44,819 931 20.77	117,858 1,595 13.53	92,055 1,272 13.82	11,952 205 17.15	5,390 113 20.96	6,261 108 17.25	2,879 241 83.71
Less then 500 grams										
Live births Infant deaths Infant mortality rate	7,294 6,177 846.86	6,898 5,899 855.18	234 151 645.30	12 11 *	18 16 *	16 13 *	1 1 *	2 2 *	4 2 *	109 82 752.29
500-749 grams										
Live births Infant deaths Infant mortality rate	11,782 5,507 467.41	10,135 5,000 493.34	1,310 360 274.81	87 35 402.30	65 23 353.85	20 5 *	10 2 *	2 2 *	5 4 *	148 75 506.76
750-999 grams										
Live births Infant deaths Infant mortality rate	12,737 1,916 150.43	7,693 1,385 180.03	4,249 424 99.79	319 43 134.80	120 21 175.00	134 16 *	46 6 *	23 2 *	12 _ _	141 19 *
1,000-1,249 grams										
Live births Infant deaths Infant mortality rate	14,910 1,040 69.75	3,433 353 102.83	8,108 441 54.39	1,625 94 57.85	833 94 112.85	425 31 72.94	144 5 *	89 7 *	91 2 *	162 13 *
1,250-1,499 grams										
Live births Infant deaths Infant mortality rate	17,733 857 48.33	966 100 103.52	9,376 352 37.54	3,701 156 42.15	2,313 154 66.58	775 66 85.16	198 12 *	112 5 *	152 5 *	140 7 *
1,500-1,999 grams										
Live births Infant deaths Infant mortality rate	69,555 1,810 26.02	1,051 82 78.02	13,480 405 30.04	20,067 352 17.54	23,529 506 21.51	8,356 333 39.85	1,094 52 47.53	547 28 51.19	830 28 33.73	601 24 39.93
2,000-2,499 grams										
Live births Infant deaths Infant mortality rate	219,449 2,268 10.33	707 22 31.12	4,606 135 29.31	19,008 239 12.57	90,980 781 8.58	82,329 809 9.83	10,459 127 12.14	4,615 67 14.52	5,167 67 12.97	1,578 22 13.94
2,500-2,999 grams										
Live births Infant deaths Infant mortality rate	786,117 3,153 4.01	1,174 15 *	4,712 56 11.88	10,198 103 10.10	131,031 681 5.20	470,809 1,663 3.53	92,672 304 3.28	37,067 162 4.37	33,787 140 4.14	4,667 29 6.21
3,000-3,499 grams										
Live births Infant deaths Infant mortality rate		- - -	5,662 33 5.83	8,822 49 5.55	95,270 331 3.47	989,448 1,960 1.98	321,271 589 1.83	132,721 273 2.06	95,019 234 2.46	8,957 29 3.24

See footnotes at end of table.

# Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age: United states, 2006 period data

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

					Ges	tation				
Birthweight	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 Infant deaths Infant mortality rate		- - -	2,753 13 *	3,790 19 *	35,543 106 2.98	596,548 818 1.37	282,335 318 1.13	128,671 201 1.56	78,643 141 1.79	6,228 19 *
4,000-4,499 grams										
Live births Infant deaths Infant mortality rate	287,710 390 1.36	- - -	- - -	806 3 *	6,854 26 3.79	133,854 182 1.36	79,632 83 1.04	42,178 52 1.23	22,831 39 1.71	1,555 4 *
4,500-4,999 grams										
Live births Infant deaths Infant mortality rate	40,972 76 1.85	- - -	- -	125 3 *	1,043 3 *	18,116 31 1.71	11,131 17 *	6,693 12 *	3,622 9 *	242 - -
5,000 grams or more										
Live births Infant deaths Infant mortality rate	4,558 25 5.48	- - -	- - -	19 1 *	192 3 *	2,191 9 *	1,026 2 *	664 3 *	426 3 *	40 3 *
Not stated										
Live births Infant deaths Infant mortality rate	1,095 154 140.64	- -	- -	- -	- - -	- - -	- - -	- - -	- - -	1,095 154 140.64
White										
Total										
Live births Infant deaths Infant mortality rate		18,951 7,498 395.65	36,805 1,550 42.11	48,264 764 15.83	285,839 1,890 6.61	1,792,662 4,198 2.34	633,749 1,109 1.75	282,918 581 2.05	190,709 505 2.65	20,434 329 16.10
Less then 2,500 grams										
Live births Infant deaths Infant mortality rate	239,310 11,989 50.10	18,189 7,489 411.73	27,659 1,484 53.65	31,412 646 20.57	82,340 1,075 13.06	61,725 845 13.69	8,009 131 16.36	3,575 80 22.38	4,313 73 16.93	2,088 166 79.50
Less then 500 grams										
Live births Infant deaths Infant mortality rate	4,020 3,429 852.99	3,786 3,264 862.12	137 90 656.93	8 8 *	9 8 *	7 6 *	1 1 *	1 1 *	2 1 *	69 50 724.64
500-749 grams										
Live births Infant deaths Infant mortality rate	6,874 3,324 483.56	5,851 2,999 512.56	793 219 276.17	60 25 416.67	41 18 *	9 2 *	7 1 *	2 1 *	4 3 *	107 54 504.67
750-999 grams										
Live births Infant deaths Infant mortality rate	7,898 1,216 153.96	4,716 878 186.17	2,646 272 102.80	208 31 149.04	79 9 *	88 11 *	35 4 *	19 1 *	8 - -	99 10 *
1,000-1,249 grams										
Live births Infant deaths Infant mortality rate	9,691 678 69.96	2,183 215 98.49	5,290 294 55.58	1,058 62 58.60	549 67 122.04	268 19 *	90 3 *	60 4 *	65 2 *	128 11 *

See footnotes at end of table.

# Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age: United states, 2006 period data

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

					Gest	tation				
Birthweight	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 Infant deaths Infant mortality rate	11,883 565 47.55	595 65 109.24	6,318 236 37.35	2,491 101 40.55	1,544 101 65.41	521 46 88.29	136 6 *	74 4 *	104 3 *	100 4 *
1,500-1,999 grams										
Live births Infant deaths Infant mortality rate	47,385 1,237 26.11	616 49 79.55	9,397 282 30.01	13,806 249 18.04	15,857 338 21.32	5,589 225 40.26	754 36 47.75	367 18 *	560 20 35.71	439 19 *
2,000-2,499 grams										
Live births Infant deaths Infant mortality rate	151,559 1,540 10.16	442 18 *	3,078 92 29.89	13,781 169 12.26	64,261 533 8.29	55,243 536 9.70	6,986 80 11.45	3,052 51 16.71	3,570 44 12.32	1,146 17 *
2,500-2,999 grams										
Live births Infant deaths Infant mortality rate	556,908 2,145 3.85	762 9 *	3,048 35 11.48	6,918 67 9.68	96,325 476 4.94	331,766 1,139 3.43	64,482 198 3.07	26,184 104 3.97	23,952 98 4.09	3,471 18 *
3,000-3,499 grams										
Live births Infant deaths Infant mortality rate		- -	3,968 21 5.29	6,282 34 5.41	72,634 233 3.21	767,984 1,403 1.83	247,503 431 1.74	102,830 185 1.80	73,765 178 2.41	7,138 21 2.94
3,500-3,999 grams										
Live births Infant deaths Infant mortality rate	943,506 1,278 1.35	- -	2,130 9 *	2,889 12 *	28,016 81 2.89	498,300 629 1.26	234,217 264 1.13	107,283 157 1.46	65,390 112 1.71	5,281 14 *
4,000-4,499 grams										
Live births Infant deaths Infant mortality rate	248,421 328 1.32	- - -	- - -	646 3 *	5,510 21 3.81	115,553 156 1.35	68,975 70 1.01	36,585 43 1.18	19,798 31 1.57	1,354 4 *
4,500-4,999 grams										
Live births Infant deaths Infant mortality rate	35,400 55 1.55	- - -	- - -	103 2 *	853 2 *	15,537 19 *	9,675 13 *	5,884 10 *	3,134 8 *	214 - -
5,000 grams or more										
Live births Infant deaths Infant mortality rate	3,830 17 *	- - -	- - -	14 _ _	161 2 *	1,797 6 *	888 2 *	577 2 *	357 3 *	36 2 *
Not stated										
Live births Infant deaths Infant mortality rate	852 103 120.89	- - -	- - -	- - -	- -	- - -	- - -	- - -	- - -	852 103 120.89
Black										
Total										
Live births Infant deaths Infant mortality rate	666,494 8,595 12.90	11,580 4,790 413.64	14,714 690 46.89	16,129 276 17.11	77,746 708 9.11	349,822 1,385 3.96	111,018 307 2.77	47,661 179 3.76	34,959 134 3.83	2,865 127 44.33

See footnotes at end of table.

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

					Gest	tation				
Birthweight	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 then 2,500 grams										
Live births Infant deaths Infant mortality rate	90,940 6,634 72.95	11,227 4,784 426.12	11,525 666 57.79	10,793 224 20.75	27,812 433 15.57	23,016 348 15.12	3,071 57 18.56	1,407 30 21.32	1,575 29 18.41	514 62 120.62
Less then 500 grams										
Live births Infant deaths Infant mortality rate	2,948 2,486 843.28	2,804 2,382 849.50	93 58 623.66	1 1 *	9 8 *	7 7 *	- -	- -	- -	34 29 852.94
500-749 grams										
Live births Infant deaths Infant mortality rate	4,364 1,946 445.92	3,824 1,784 466.53	454 127 279.74	22 8 *	21 5 *	9 3 *	3 1 *	- 1 *	1 1 *	30 15 *
750-999 grams										
Live births Infant deaths Infant mortality rate	4,177 599 143.40	2,584 437 169.12	1,391 135 97.05	86 7 *	33 9 *	38 3 *	7 2 *	3 1 *	2 - -	33 4 *
1,000-1,249 grams										
Live births Infant deaths Infant mortality rate	4,409 314 71.22	1,085 126 116.13	2,388 119 49.83	460 29 63.04	229 22 96.07	131 10 *	45 2 *	24 3 *	22 _ _	25 2 *
1,250-1,499 grams										
Live births Infant deaths Infant mortality rate	4,812 230 47.80	316 25 79.11	2,561 96 37.49	973 40 41.11	611 44 72.01	207 15 *	50 5 *	30 1 *	38 2 *	26 2 *
1,500-1,999 grams										
Live births Infant deaths Infant mortality rate	17,825 461 25.86	376 24 63.83	3,381 100 29.58	5,069 83 16.37	6,071 135 22.24	2,189 86 39.29	277 13 *	153 8 *	218 7 *	91 5 *
2,000-2,499 grams										
Live births Infant deaths Infant mortality rate	52,405 598 11.41	238 4 *	1,257 30 23.87	4,182 57 13.63	20,838 210 10.08	20,435 223 10.91	2,689 34 12.64	1,197 16 *	1,294 19 *	275 4 *
2,500-2,999 grams										
Live births Infant deaths Infant mortality rate	165,410 835 5.05	353 6 *	1,384 13 *	2,578 30 11.64	26,379 168 6.37	98,849 445 4.50	19,872 86 4.33	7,977 45 5.64	7,366 33 4.48	652 9 *
3,000-3,499 grams										
Live births Infant deaths Infant mortality rate	255,831 764 2.99	- - -	1,343 9 *	1,984 13 *	16,956 79 4.66	149,934 432 2.88	49,451 115 2.33	20,294 65 3.20	14,924 44 2.95	945 6 *
3,500-3,999 grams										
Live births Infant deaths Infant mortality rate	125,072 262 2.09	- - -	462 2 *	645 6 *	5,485 22 4.01	64,343 135 2.10	30,949 38 1.23	13,910 30 2.16	8,801 22 2.50	477 5 *

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

					Gest	tation				
Birthweight	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 Infant deaths Infant mortality rate	25,101 35 1.39	- - -	- -	106 - -	969 4 *	11,780 15 *	6,685 7 *	3,537 5 *	1,931 4 *	93 - -
4,500-4,999 grams										
Live births Infant deaths Infant mortality rate	3,499 15 *	- -	- -	19 1 *	125 1 *	1,636 8 *	906 3 *	486 1 *	316 1 *	11 - -
5,000 grams or more										
Live births Infant deaths Infant mortality rate	472 6 *	- -	- - -	4 1 *	20 1 *	264 2 *	84 - -	50 1 *	46 - -	4 1 *
Not stated										
Live births Infant deaths Infant mortality rate	169 44 260.36	- - -	- -	- -	- - -	- -	- -	- - -	- - -	169 44 260.36
American Indian <sup>1</sup>										
Total										
Live births Infant deaths Infant mortality rate	47,720 395 8.28	344 122 354.65	664 19 *	874 14 *	4,848 47 9.69	24,410 117 4.79	8,696 46 5.29	4,186 19 *	3,451 11 *	247 1 *
Less then 2,500 grams										
Live births Infant deaths Infant mortality rate	3,601 197 54.71	324 122 376.54	408 15 *	459 11 *	1,182 23 19.46	945 20 21.16	124 4 *	66 - -	69 1 *	24 1 *
Less then 500 grams										
Live births Infant deaths Infant mortality rate	63 55 873.02	60 55 916.67	1 - -	1 - -	- -	- -	- -	- - -	- - -	1 - -
500-749 grams										
Live births Infant deaths Infant mortality rate	97 44 453.61	86 41 476.74	7 1 *	2 - -	1 - -	- -	- - -	- -	- - -	1 1 *
750-999 grams										
Live births Infant deaths Infant mortality rate	133 23 172.93	93 22 236.56	32 1 *	4 - -	1 - -	3 - -	- - -	- -	- - -	- -
1,000-1,249 grams										
Live births Infant deaths Infant mortality rate	150 10 *	48 3 *	61 6 *	15 _ _	14 1 *	7 - -	5 - -	- - -	- - -	- - -
1,250-1,499 grams										
Live births Infant deaths Infant mortality rate	181 10 *	13 - -	90 2 *	38 3 *	23 3 *	11 2 *	2 - -	2 - -	2 - -	- -

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

					Gest	tation				
Birthweight —	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 <sup>1</sup>										
1,500-1,999 grams										
Live births Infant deaths Infant mortality rate	729 18 *	17 _ _	152 3 *	190 5 *	242 8 *	98 2 *	7 - -	6 - -	8 - -	9 - -
2,000-2,499 grams										
Live births Infant deaths Infant mortality rate	2,248 37 16.46	7 - -	65 2 *	209 3 *	901 11 *	826 16 *	110 4 *	58 - -	59 1 *	13 - -
2,500-2,999 grams										
Live births Infant deaths Infant mortality rate	8,077 58 7.18	20 - -	87 2 *	158 1 *	1,457 14 *	4,529 23 5.08	916 8 *	396 6 *	463 3 *	51 - -
3,000-3,499 grams										
Live births Infant deaths Infant mortality rate	17,799 77 4.33	- - -	122 1 *	137 1 *	1,377 6 *	9,977 41 4.11	3,300 20 6.06	1,495 4 *	1,304 4 *	87 - -
3,500-3,999 grams										
Live births Infant deaths Infant mortality rate	13,575 44 3.24	- - -	47 1 *	92 1 *	654 3 *	6,779 22 3.25	3,207 9 *	1,555 7 *	1,183 _ _	58 - -
4,000-4,499 grams										
Live births Infant deaths Infant mortality rate	3,857 13 *	- -	- -	24 - -	148 _ _	1,801 6 *	966 3 *	544 1 *	359 3 *	15 - -
4,500-4,999 grams										
Live births Infant deaths Infant mortality rate	712 5 *	- -	- -	3 - -	27 _ _	327 3 *	165 1 *	119 1 *	67 _ _	4 - -
5,000 grams or more										
Live births Infant deaths Infant mortality rate	91 1 *	- -	- - -	1 - -	3 - -	52 1 *	18 _ _	11 - -	6 - -	- - -
Not stated										
Live births Infant deaths Infant mortality rate	8 - -	- -	- -	- -	- -	- -	- -	- - -	- -	8 - -
Asian or Pacific Islander										
Total										
Live births Infant deaths Infant mortality rate	241,048 1,097 4.55	1,182 447 378.17	2,307 112 48.55	3,312 56 16.91	19,358 102 5.27	136,127 237 1.74	46,556 58 1.25	18,619 37 1.99	11,470 24 2.09	2,117 24 11.34
Less then 2,500 grams										
Live births Infant deaths Infant mortality rate	19,609 756 38.55	1,143 447 391.08	1,771 103 58.16	2,155 50 23.20	6,524 64 9.81	6,369 59 9.26	748 13 *	342 3 *	304 5 *	253 13 *

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

					Gest	tation				
Birthweight	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 then 500 grams										
Live births Infant deaths Infant mortality rate	263 208 790.87	248 198 798.39	3 3 *	2 2 *	- -	2 - -	- - -	1 1 *	2 1 *	5 3 *
500-749 grams										
Live births Infant deaths Infant mortality rate	447 194 434.00	374 175 467.91	56 13 *	3 2 *	2 - -	2 - -	- -	- -	- -	10 4 *
750-999 grams										
Live births Infant deaths Infant mortality rate	529 77 145.56	300 48 160.00	180 16 *	21 4 *	7 3 *	5 2 *	4 - -	1 - -	2 - -	9 4 *
1,000-1,249 grams										
Live births Infant deaths Infant mortality rate	660 39 59.09	117 9 *	369 22 59.62	92 3 *	41 3 *	19 1 *	4 - -	5 - -	4 - -	9 - -
1,250-1,499 grams										
Live births Infant deaths Infant mortality rate	857 52 60.68	42 9 *	407 18 *	199 13 *	135 6 *	36 3 *	10 1 *	6 - -	8 - -	14 1 *
1,500-1,999 grams										
Live births Infant deaths Infant mortality rate	3,616 94 26.00	42 8 *	550 19 *	1,002 15 *	1,359 26 19.13	480 19 *	56 3 *	21 2 *	44 1 *	62 - -
2,000-2,499 grams										
Live births Infant deaths Infant mortality rate	13,237 92 6.95	20 _ _	206 10 *	836 10 *	4,980 26 5.22	5,825 34 5.84	674 9 *	308 - -	244 3 *	144 _ _
2,500-2,999 grams										
Live births Infant deaths Infant mortality rate	55,722 115 2.06	39 - -	193 6 *	544 5 *	6,870 23 3.35	35,665 57 1.60	7,402 12 *	2,510 6 *	2,006 5 *	493 1 *
3,000-3,499 grams										
Live births Infant deaths Infant mortality rate	101,436 151 1.49	- - -	229 2 *	419 1 *	4,303 14 *	61,553 84 1.36	21,017 22 1.05	8,102 18 *	5,026 7 *	787 2 *
3,500-3,999 grams										
Live births Infant deaths Infant mortality rate	52,358 53 1.01	- - -	114 1 *	164 - -	1,388 _ _	27,126 31 1.14	13,962 7 *	5,923 7 *	3,269 6 *	412 - -
4,000-4,499 grams										
Live births Infant deaths Infant mortality rate	10,331 13 *	- -	- -	30 - -	227 1 *	4,720 5 *	3,006 3 *	1,512 3 *	743 1 *	93 - -

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

_	Gestation									
Birthweight	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 Infant deaths Infant mortality rate	1,361 1 *	- - -	- - -	- - -	38 - -	616 1 *	385 - -	204 _ _	105 _ _	13 - -
5,000 grams or more										
Live births Infant deaths Infant mortality rate	165 _ _	- - -	- -	- -	8 - -	78 - -	36 _ _	26 - -	17 _ _	-
Not stated										
Live births Infant deaths Infant mortality rate	66 8 *	- - -	- - -	- -	- - -	- -	- -	- - -	- -	66 8 *

-/ 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.

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2005 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]

	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Total (all birthweights) Rate	4,265,593	28,509 6.68	19,041 4.46	15,148 3.55	3,893 0.91	9,468 2.22
Less than 2,500 gramsRate	353,460	19,576 55.38	15,897 44.98	13,309 37.65	2,588 7.32	3,679 10.41
Less than 500 gramsRate	7,294	6,177 846.86	6,017 824.92	5,827 798.88	189 25.91	160 21.94
500-749 gramsRate	11,782	5,507 467.41	4,654 395.01	3,766 319.64	888 75.37	853 72.40
750-999 gramsRate	12,737	1,916 150.43	1,414 111.02	947 74.35	467 36.66	501 39.33
1,000-1,249 grams Rate	14,910	1,040 69.75	756 50.70	529 35.48	227 15.22	285 19.11
1,250-1,499 grams Rate	17,733	857 48.33	624 35.19	471 26.56	153 8.63	233 13.14
1,500-1,999 grams Rate	69,555	1,810 26.02	1,210 17.40	924 13.28	286 4.11	600 8.63
2,000-2,499 grams Rate	219,449	2,268 10.33	1,222 5.57	844 3.85	378 1.72	1,046 4.77
2,500-2,999 grams Rate	786,117	3,153 4.01	1,225 1.56	713 0.91	512 0.65	1,928 2.45
3,000-3,499 grams Rate	1,657,170	3,499 2.11	1,100 0.66	586 0.35	515 0.31	2,399 1.45
3,500-3,999 grams Rate	1,134,511	1,636 1.44	477 0.42	267 0.24	210 0.19	1,160 1.02
4,000-4,499 gramsRate	287,710	390 1.36	143 0.50	93 0.32	50 0.17	247 0.86
4,500-4,999 grams Rate	40,972	76 1.85	32 0.78	19 *	13 *	43 1.05
5,000 grams or moreRate	4,558	25 5.48	19	15 *	4 *	5 *
Not statedRate	1,095	154 140.64	147 134.25	147 134.25	-	7

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2005 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]

Distingight and were of wether	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Total (all birthweights)	3,310,331	18,422	12,292	9,760	2,533	6,130
Rate		5.57	3.71	2.95	0.77	1.85
Less than 2,500 grams	239,310	11,989	9,909	8,329	1,580	2,080
Rate		50.10	41.41	34.80	6.60	8.69
Less than 500 grams	4,020	3,429	3,376	3,271	105	53
Rate		852.99	839.80	813.68	26.12	13.18
500-749 grams	6,874	3,324	2,898	2,388	510	425
Rate		483.56	421.59	347.40	74.19	61.83
750-999 gramsRate	7,898	1,216 153.96	936 118.51	656 83.06	279 35.33	281 35.58
1,000-1,249 grams	9,691	678	516	373	143	162
Rate		69.96	53.25	38.49	14.76	16.72
1,250-1,499 grams	11,883	565	424	329	95	141
Rate		47.55	35.68	27.69	7.99	11.87
1,500-1,999 grams	47,385	1,237	876	687	189	361
Rate		26.11	18.49	14.50	3.99	7.62
2,000-2,499 grams	151,559	1,540	883	624	259	657
Rate		10.16	5.83	4.12	1.71	4.33
2,500-2,999 grams	556,908	2,145	900	543	356	1,246
Rate		3.85	1.62	0.98	0.64	2.24
3,000-3,499 grams	1,282,104	2,507	848	467	381	1,659
Rate		1.96	0.66	0.36	0.30	1.29
3,500-3,999 grams	943,506	1,278	378	217	161	900
Rate		1.35	0.40	0.23	0.17	0.95
4,000-4,499 grams	248,421	328	123	81	41	206
Rate		1.32	0.50	0.33	0.17	0.83
4,500-4,999 grams Rate	35,400	55 1.55	24 0.68	13	11 *	30 0.85
5,000 grams or moreRate	3,830	17 *	13	11	2 *	4
Not statedRate	852	103 120.89	98 115.02	98 115.02	- -	5

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2005 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) Rate	666,494	8,595 12.90	5,778 8.67	4,616 6.93	1,161 1.74	2,818 4.23
Less than 2,500 gramsRate	90,940	6,634 72.95	5,198 57.16	4,318 47.48	880 9.68	1,436 15.79
Less than 500 gramsRate	2,948	2,486 843.28	2,384 808.68	2,304 781.55	80 27.14	102 34.60
500-749 gramsRate	4,364	1,946 445.92	1,540 352.89	1,195 273.83	345 79.06	406 93.03
750-999 gramsRate	4,177	599 143.40	403 96.48	249 59.61	154 36.87	196 46.92
1,000-1,249 grams Rate	4,409	314 71.22	203 46.04	126 28.58	76 17.24	111 25.18
1,250-1,499 grams Rate	4,812	230 47.80	151 31.38	107 22.24	44 9.14	79 16.42
1,500-1,999 grams Rate	17,825	461 25.86	257 14.42	178 9.99	79 4.43	205 11.50
2,000-2,499 grams Rate	52,405	598 11.41	261 4.98	159 3.03	102 1.95	337 6.43
2,500-2,999 grams Rate	165,410	835 5.05	259 1.57	131 0.79	128 0.77	576 3.48
3,000-3,499 grams Rate	255,831	764 2.99	189 0.74	79 0.31	110 0.43	575 2.25
3,500-3,999 grams Rate	125,072	262 2.09	67 0.54	31 0.25	35 0.28	195 1.56
4,000-4,499 grams Rate	25,101	35 1.39	11	6 *	5	24 0.96
4,500-4,999 grams Rate	3,499	15 *	7 *	5	2 *	8
5,000 grams or moreRate	472	б *	5	4 *	1	1 *
Not statedRate	169	44 260.36	42 248.52	42 248.52	-	2 *

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2005 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]

	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
American Indian <sup>1</sup>						
Total (all birthweights) Rate	47,720	395 8.28	205 4.30	157 3.29	49 1.03	190 3.98
Less than 2,500 grams Rate	3,601	197 54.71	156 43.32	132 36.66	24 6.66	42 11.66
Less than 500 grams Rate	63	55 873.02	53 841.27	53 841.27	-	2 *
500-749 grams Rate	97	44 453.61	40 412.37	36 371.13	4 *	3
750-999 grams Rate	133	23 172.93	18	8 *	10	5
1,000-1,249 grams Rate	150	10 *	9 *	7 *	2 *	1
1,250-1,499 grams Rate	181	10 *	7 *	5	2 *	3
1,500-1,999 grams Rate	729	18 *	9	7 *	2 *	9 *
2,000-2,499 grams Rate	2,248	37 16.46	19 *	15 *	4 *	18 *
2,500-2,999 grams Rate	8,077	58 7.18	19 *	11 *	8 *	38 4.70
3,000-3,499 grams Rate	17,799	77 4.33	17 *	8 *	9 *	60 3.37
3,500-3,999 grams Rate	13,575	44 3.24	10 *	5	5	34 2.50
4,000-4,499 grams Rate	3,857	13 *	2 *	1 *	1 *	11
4,500-4,999 grams Rate	712	5 *	- -	- -	-	5
5,000 grams or more Rate	91	1 *	1 *	- -	1	-
Not stated Rate	8	-	-	-	-	-

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2005 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]

	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Asian or Pacific Islander						
Total (all birthweights) Rate	241,048	1,097 4.55	766 3.18	616 2.56	151 0.63	331 1.37
Less than 2,500 gramsRate	19,609	756 38.55	634 32.33	530 27.03	104 5.30	122 6.22
Less than 500 gramsRate	263	208 790.87	205 779.47	200 760.46	5	3
500-749 grams Rate	447	194 434.00	175 391.50	147 328.86	28 62.64	19 *
750-999 gramsRate	529	77 145.56	57 107.75	34 64.27	23 43.48	20 37.81
1,000-1,249 grams Rate	660	39 59.09	28 42.42	23 34.85	5	11 *
1,250-1,499 grams Rate	857	52 60.68	42 49.01	30 35.01	12	10
L,500-1,999 grams Rate	3,616	94 26.00	69 19.08	52 14.38	16 *	25 6.91
2,000-2,499 grams Rate	13,237	92 6.95	59 4.46	45 3.40	14 *	33 2.49
2,500-2,999 grams Rate	55,722	115 2.06	48 0.86	27 0.48	20 0.36	68 1.22
3,000-3,499 grams Rate	101,436	151 1.49	47 0.46	32 0.32	15 *	104 1.03
3,500-3,999 grams Rate	52,358	53 1.01	21 0.40	13	8 *	31 0.59
1,000-4,499 grams Rate	10,331	13 *	7 *	4 *	3	б *
1,500-4,999 grams Rate	1,361	1 *	1 *	1 *		-
5,000 grams or more Rate	165	-	- -	- -	-	-
Not statedRate	66	8 *	8 *	8 *	-	-

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

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
All birthweights						
All Causes4	,265,593	28,509 668.3	19,041 446.4	15,148 355.1	3,893 91.3	
Congenital malformations (Q00-Q99)		5,850 137.1	4,244 99.5	3,226 75.6	1,018 23.9	
Short gestation and low birthweight nec (P07)		4,843 113.5	4,725 110.8	4,592 107.7	133 3.1	
Sudden infant death syndrome (R95)		2,327 54.6	211 4.9	35 0.8	177 4.1	
Maternal complications of pregnancy (P01)		1,676 39.3	1,656 38.8	1,622 38.0	33 0.8	
Complications of placenta, cord, membranes (PO2)		1,137 26.7	1,122 26.3	1,083 25.4	39 0.9	
Accidents (unintentional injures) (V01-X59)		1,143 26.8	115 2.7	30 0.7	85 2.0	
Respiratory distress of newborn (P22)		828 19.4	813 19.1	643 15.1	170 4.0	
Bacterial sepsis of newborn (P36)		810 19.0	768 18.0	337 7.9	431 10.1	
Neonatal hemorrhage (P50-P52, P54)		622 14.6	608 14.3	437 10.2	170 4.0	
Diseases of the circulatory system (I00-I99)		540 12.7	134 3.1	71 1.7	62 1.5	
All other causes		8,732 204.7	4,646 108.9	3,071 72.0	1,575 36.9	
Less then 2,500 grams						
All Causes	353,460	19,576 5,538.4	15,897 4,497.5	13,309 3,765.3	2,588 732.2	3,679 1,040.9
Congenital malformations (Q00-Q99)		3,574 1,011.1	2,871 812.3	2,381 673.6	490 138.6	
Short gestation and low birthweight nec (P07)		4,738 1,340.5	4,622 1,307.6	4,490 1,270.3	132 37.3	
Sudden infant death syndrome (R95)		480 135.8	41 11.6	8	32 9.1	
Maternal complications of pregnancy (PO1)		1,611 455.8	1,593 450.7	1,560 441.4	33 9.3	
Complications of placenta, cord, membranes (P02)		1,034 292.5	1,023 289.4	996 281.8		
Accidents (unintentional injures) (V01-X59)		199 56.3	23 6.5	12	11	
Respiratory distress of newborn (P22)		810 229.2	795 224.9	631 178.5	164 46.4	15
Bacterial sepsis of newborn (P36)		717 202.9	683 193.2	290 82.0	393 111.2	34
Neonatal hemorrhage (P50-P52, P54)		581 164.4	569 161.0	411 116.3	158	12
See footnotes at end of table.						

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Diseases of the circulatory system (IOO-I99)		264 74.7	63 17.8	40 11.3		
All other causes		5,568 1,575.3	3,613 1,022.2	2,489 704.2		
2,500 grams or more						
All Causes	3,911,038	8,779 224.5	2,997 76.6	1,692 43.3		
Congenital malformations (Q00-Q99)		2,265 57.9	1,363 34.9	836 21.4		
Short gestation and low birthweight nec (P07)		48 1.2	46 1.2	45 1.2		
Sudden infant death syndrome (R95)		1,846 47.2	171 4.4	26 0.7		
Maternal complications of pregnancy (PO1)		35 0.9	32 0.8	32 0.8		5
Complications of placenta, cord, membranes (PO2)		88 2.3	83 2.1	71 1.8		
Accidents (unintentional injures) (V01-X59)		944 24.1	92 2.4	18		
Respiratory distress of newborn (P22)		16 *	16	10		· –
Bacterial sepsis of newborn (P36)		93 2.4	85 2.2	48 1.2		
Neonatal hemorrhage (P50-P52, P54)		37 0.9	35 0.9	23 0.6	12	2
Diseases of the circulatory system (IOO-I99)		275 7.0	70 1.8	30 0.8	39	
All other causes		3,132 80.1	1,003 25.6	552 14.1	451	2,128
Not stated birthweight						
All Causes	1,095	154 14,063.9	147 13,424.7	147 13,424.7		7. *
Congenital malformations (Q00-Q99)		11 *	9 *	9	-	2
Short gestation and low birthweight nec (P07)		57 5,205.5	57 5,205.5	57 5,205.5		· _
Sudden infant death syndrome (R95)		2	-	-	-	2
Maternal complications of pregnancy (P01)		30 2,739.7	30 2,739.7	30 2,739.7		
Complications of placenta, cord, membranes (PO2)		15 ×	15	15 ×		
Accidents (unintentional injures) (V01-X59)		-	-	-	-	
Respiratory distress of newborn (P22)		- 2	- 2	- 2	-	
See footnotes at end of table.		*	*	*	-	-

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Bacterial sepsis of newborn (P36)		-	-	-		
Neonatal hemorrhage (P50-P52, P54)		3	3	3	-	
Diseases of the circulatory system (IOO-I99)		1 *	1	1	-	
All other causes		32 2,922.4	29 2,648.4	29 2,648.4		- 3
White						
All birthweights						
All Causes3,	310,331	18,422 556.5	12,292 371.3	9,760 294.8	2,533 76.5	
Congenital malformations (Q00-Q99)		4,377 132.2	3,235 97.7	2,494 75.3		
Short gestation and low birthweight nec (P07)		2,674 80.8	2,612 78.9	2,540 76.7	72	
Sudden infant death syndrome (R95)		1,553 46.9	143 4.3	30 0.9	113 3.4	
Maternal complications of pregnancy (PO1)		1,029 31.1	1,020 30.8	993 30.0	27	
Complications of placenta, cord, membranes (PO2)		701 21.2	695 21.0	670 20.2	25	
Accidents (unintentional injures) (V01-X59)		744 22.5	85 2.6	23 0.7	62 1.9	
Respiratory distress of newborn (P22)		518 15.6	508 15.3	405 12.2		
Bacterial sepsis of newborn (P36)		495 15.0	472 14.3	218 6.6	254 7.5	
Neonatal hemorrhage (P50-P52, P54)		422 12.7	413 12.5	298 9.0	115	
Diseases of the circulatory system (IOO-I99)		348 10.5	96 2.9	52 1.6	44	
All other causes		5,562 168.0	3,012 91.0	2,035 61.5		
Less then 2,500 grams						
All Causes	239,310	11,989 5,009.8	9,909 4,140.7	8,329 3,480.4	1,580 660.2	
Congenital malformations (Q00-Q99)		2,628 1,098.2	2,150 898.4	1,813 757.6		
Short gestation and low birthweight nec (P07)		2,615 1,092.7	2,553 1,066.8	2,481 1,036.7		
Sudden infant death syndrome (R95)		278 116.2	25 10.4	6 *	19	
Maternal complications of pregnancy (PO1)		987 412.4	981 409.9	954 398.6		7 5
See footnotes at end of table.						

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

L. Cause of death, birthweight, and race of mother	ive		Total	Early	Late	Post-
Bi	rths	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Complications of placenta, cord, membranes (PO2)		626 261.6	621 259.5	601 251.1		
Accidents (unintentional injures) (V01-X59)		112 46.8	12 *	7 *	5	
Respiratory distress of newborn (P22)		504 210.6	494 206.4	396 165.5		
Bacterial sepsis of newborn (P36)		427 178.4	409 170.9	183 76.5		
Neonatal hemorrhage (P50-P52, P54)		387 161.7	380 158.8	276 115.3		
Diseases of the circulatory system (IOO-I99)		161 67.3	46 19.2	31 13.0		
All other causes		3,265 1,364.3	2,238 935.2	1,580 660.2		
2,500 grams or more						
All Causes	0,169	6,331 206.2	2,286 74.5	1,333 43.4		
Congenital malformations (Q00-Q99)		1,738 56.6	1,077 35.1	672 21.9		
Short gestation and low birthweight nec (P07)		24 0.8	24 0.8	24 0.8	-	
Sudden infant death syndrome (R95)		1,274 41.5	117 3.8	23 0.7		, -
Maternal complications of pregnancy (P01)		25 0.8	22 0.7	22 0.7		5
Complications of placenta, cord, membranes (PO2)		65 2.1	64 2.1	59 1.9	E *	
Accidents (unintentional injures) (V01-X59)		632 20.6	73 2.4	16 *	56 1.8	
Respiratory distress of newborn (P22)		13 *	13 *	8	E *	
Bacterial sepsis of newborn (P36)		68 2.2	64 2.1	35 1.1		
Neonatal hemorrhage (P50-P52, P54)		32 1.0	30 1.0	19 *	11	
Diseases of the circulatory system (IOO-I99)		186 6.1	49 1.6	20 0.7		
All other causes		2,274 74.1	753 24.5	434 14.1		
Not stated birthweight						
All Causes	852		98 11,502.3	98 11,502.3		- 5
Congenital malformations (Q00-Q99)		10 *	8 *	8	-	- 2
Short gestation and low birthweight nec (P07)		36 4,225.4	36 4,225.4	36 4,225.4		
See footnotes at end of table.		·				

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

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)		1 *	-	-	-	- 1
Maternal complications of pregnancy (PO1)		17 *	17 *	17		
Complications of placenta, cord, membranes (PO2)		10 *	10 *	10		 
Accidents (unintentional injures) (V01-X59)		-	-	-	-	
Respiratory distress of newborn (P22)		1 *	1 *	1 *		
Bacterial sepsis of newborn (P36)		-	-	-		 
Neonatal hemorrhage (P50-P52, P54)		3 *	3 *	3 *	-	 
Diseases of the circulatory system (IOO-I99)		1 *	1 *	1 *	-	· -
All other causes		23 2,699.5	21 2,464.8	21 2,464.8		- 2
Black						
All birthweights						
All Causes	666,494	8,595 1,289.6	5,778 866.9	4,616 692.6	1,161 174.2	
Congenital malformations (Q00-Q99)		1,138 170.7	768 115.2	550 82.5	218 32.5	
Short gestation and low birthweight nec (P07)		1,938 290.8	1,884 282.7	1,829 274.4	55 8.3	
Sudden infant death syndrome (R95)		662 99.3	61 9.2	4 *	57 8.6	
Maternal complications of pregnancy (P01)		577 86.6	565 84.8	559 83.9	6	
Complications of placenta, cord, membranes (P02)		372 55.8	365 54.8	352 52.8	13	3 7 * *
Accidents (unintentional injures) (V01-X59)		331 49.7	28 4.2	7 *	21 3.2	
Respiratory distress of newborn (P22)		279 41.9	274 41.1	211 31.7		
Bacterial sepsis of newborn (P36)		279 41.9	261 39.2	104 15.6		
Neonatal hemorrhage (P50-P52, P54)		172 25.8	167 25.1	120 18.0		
Diseases of the circulatory system (IOO-I99)		161 24.2	25 3.8	13 *	12	
All other causes		2,685 402.9	1,379 206.9	868 130.2		
Less then 2,500 grams						
All Causes	90,940	6,634 7,294.9	5,198 5,715.9	4,318 4,748.2		) 1,436 7 1,579.1
See footnotes at end of table.						

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
1	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Black						
Congenital malformations (Q00-Q99)		747 821.4	558 613.6	433 476.1	125 137.5	
Short gestation and low birthweight nec (P07)		1,897 2,086.0	1,845 2,028.8	1,791 1,969.4	54 59.4	
Sudden infant death syndrome (R95)		185 203.4	15 *	2	13	
Maternal complications of pregnancy (PO1)		560 615.8	548 602.6	542 596.0	6	12
Complications of placenta, cord, membranes (PO2)		352 387.1	347	340 373.9	7	
Accidents (unintentional injures) (V01-X59)		81	381.6 11	373.9 5	6	70
Respiratory distress of newborn (P22)		89.1 276	* 271	209	*	5
Bacterial sepsis of newborn (P36)		303.5 258	298.0 243	229.8 93	68.2 149	
Neonatal hemorrhage (P50-P52, P54)		283.7 169	267.2 164	102.3	163.8 46	
Diseases of the circulatory system (I00-I99)		185.8 91	180.3 12	129.8	50.6	
Diseases of the circulatory system (100-199)		100.1	*	*	*	
All other causes		2,019 2,220.1	1,184 1,302.0	779 856.6	405 445.3	
2,500 grams or more						
All Causes	575,385	1,918 333.3	538 93.5	257 44.7		
Congenital malformations (Q00-Q99)		391 68.0	210 36.5	118 20.5	93 16.2	
Short gestation and low birthweight nec (P07)		22 3.8	20 3.5	19 *	1	
Sudden infant death syndrome (R95)		476 82.7	45 7.8	2		
Maternal complications of pregnancy (PO1)		8	8	8	-	-
Complications of placenta, cord, membranes (PO2)		15	13	7	6	
Accidents (unintentional injures) (V01-X59)		251	17	2		233
Respiratory distress of newborn (P22)		43.6 2	2	1	1	-
Bacterial sepsis of newborn (P36)		21	*	*	8	3
Neonatal hemorrhage (P50-P52, P54)		3.6	*	*		_
Diseases of the circulatory system (I00-I99)		* 71	*	* 7	*	_
		12.3 657	*	*	*	9.9
All other causes		114.2	187 32.5	80 13.9		
See footnotes at end of table.						

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 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	169	44 26,035.5	42 24,852.1	42 24,852.1		-	2 *
Congenital malformations (Q00-Q99)		-	-	-		-	-
Short gestation and low birthweight nec (P07)		18 *	18 *	18		-	-
Sudden infant death syndrome (R95)		1 *	- -	-		-	1 *
Maternal complications of pregnancy (P01)		9 *	9 *	9		-	_
Complications of placenta, cord, membranes (PO2)		5	5	5		-	-
Accidents (unintentional injures) (V01-X59)		-	-	-		-	_
Respiratory distress of newborn (P22)		1	1	1		-	_
Bacterial sepsis of newborn (P36)		-	-	-		-	-
Neonatal hemorrhage (P50-P52, P54)		-	-	-		-	-
Diseases of the circulatory system (IOO-I99)		-	-	-		-	-
All other causes		9 *	8 *	8 *		-	1 *
American Indian <sup>1</sup>							
All birthweights							
All Causes	47,720	395 827.7	205 429.6	157 329.0	4 102.		
Congenital malformations (Q00-Q99)		73 153.0	55 115.3	40 83.8	1	4 1 *	*
Short gestation and low birthweight nec (P07)		47 98.5	46 96.4	43 90.1		3 *	1 *
Sudden infant death syndrome (R95)		57 119.4	4 *	-		4 5 * 111.	53 1
Maternal complications of pregnancy (P01)		13 *	13	13		-	-
Complications of placenta, cord, membranes (PO2)		19 *	19 *	18		1	-
Accidents (unintentional injures) (V01-X59)		37 77.5	1	-		1 3 * 75.	36 .4
Respiratory distress of newborn (P22)		5 *	5 *	4		1	-
Bacterial sepsis of newborn (P36)		6 *	5 *	3		2	1
See footnotes at end of table.							

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal I	Neonatal
American Indian <sup>1</sup>						
Neonatal hemorrhage (P50-P52, P54)		5 *	5 *	2 *	3 *	-
Diseases of the circulatory system (IOO-I99)		7 *	1	-	1	6 *
All other causes		126 264.0	51 106.9	32 67.1		75 157.2
Less then 2,500 grams						
All Causes	3,601	197 5,470.7	156 4,332.1	132 3,665.6		42 1,166.3
Congenital malformations (Q00-Q99)		37 1,027.5	30 833.1	27 749.8		7 *
Short gestation and low birthweight nec (P07)		47 1,305.2	46 1,277.4	43 1,194.1		1 *
Sudden infant death syndrome (R95)		8 *	-	-	-	8 *
Maternal complications of pregnancy (P01)		12 *	12	12	-	-
Complications of placenta, cord, membranes (PO2)		17 *	17 *	17	-	-
Accidents (unintentional injures) (V01-X59)		3 *	-	-	-	3
Respiratory distress of newborn (P22)		5 *	5 *	4	1 *	-
Bacterial sepsis of newborn (P36)		5 *	5 *	3*	2 *	-
Neonatal hemorrhage (P50-P52, P54)		5 *	5 *	2 *	3	-
Diseases of the circulatory system (IOO-I99)		2	-	-	-	2
All other causes		55 1,527.4	34 944.2	22 610.9		20 555.4
2,500 grams or more						
All Causes	44,111	198 448.9	50 113.4	25 56.7	24 54.4	148 335.5
Congenital malformations (Q00-Q99)		35 79.3	24 54.4	13		11 *
Short gestation and low birthweight nec (P07)		-	-	-	-	-
Sudden infant death syndrome (R95)		49 111.1	4 *	-	4 *	45 102.0
Maternal complications of pregnancy (P01)		1 *	1 *	1		-
Complications of placenta, cord, membranes (PO2)		2	2 *	1		-
Accidents (unintentional injures) (V01-X59)		34 77.1	1	-	1	33 74.8
See footnotes at end of table.		. –				

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
- American Indian <sup>1</sup>						
Respiratory distress of newborn (P22)		-	-	-		
Bacterial sepsis of newborn (P36)		1 *	-	-		- 1
Neonatal hemorrhage (P50-P52, P54)		-	-	-		
Diseases of the circulatory system (I00-I99)		5 *	1 *	-		1 4
All other causes		71 161.0	16 *	10		6 55 * 124.7
Not stated birthweight						
All Causes	8	-	-	-		
Congenital malformations (Q00-Q99)		-	-	-		
Short gestation and low birthweight nec (P07)		-	-	-		
Sudden infant death syndrome (R95)		-	- -	-		
Maternal complications of pregnancy (PO1)		-	-	-		
Complications of placenta, cord, membranes (PO2)		-	-	-		
Accidents (unintentional injures) (V01-X59)		- -	- -	-		
Respiratory distress of newborn (P22)		-	-	-		
Bacterial sepsis of newborn (P36)		-	- -	-		
Neonatal hemorrhage (P50-P52, P54)		-	-	-		
Diseases of the circulatory system (I00-I99)		-	-	-		
All other causes		-	-	-		
Asian or Pacific Islander						
All birthweights						
All Causes	241,048	1,097 455.1	766 317.8	616 255.6	15 62.	
Congenital malformations (Q00-Q99)		263 109.1	185 76.7	141 58.5		
Short gestation and low birthweight nec (P07)		184 76.3	183 75.9	180 74.7		3 1 * *
Sudden infant death syndrome (R95)		55 22.8	4 *	1		3 51 * 21.2
See footnotes at end of table.						

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 period data -Cont

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)		57 23.6	57 23.6	57 23.6	-	-
Complications of placenta, cord, membranes (PO2)		44 18.3	42 17.4	42 17.4		2 *
Accidents (unintentional injures) (V01-X59)		31 12.9	1 *	-	1	
Respiratory distress of newborn (P22)		26 10.8	26 10.8	23 9.5	3	
Bacterial sepsis of newborn (P36)		31 12.9	30 12.4	12	17 *	1
Neonatal hemorrhage (P50-P52, P54)		23 9.5	23 9.5	18	5	-
Diseases of the circulatory system (I00-I99)		24 10.0	11 *	6 *	5	
All other causes		359 148.9	205 85.0	136 56.4	69 28.6	
Less then 2,500 grams						
All Causes	19,609	756 3,855.4	634 3,233.2	530 2,702.8	104 530.4	
Congenital malformations (Q00-Q99)		162 826.2	133 678.3	107 545.7	25 127.5	
Short gestation and low birthweight nec (P07)		179 912.8	178 907.7	175 892.4	3	
Sudden infant death syndrome (R95)		9 *	-	-	-	2
Maternal complications of pregnancy (P01)		52 265.2	52 265.2	52 265.2	-	- -
Complications of placenta, cord, membranes (PO2)		39 198.9	38 193.8	38 193.8	-	1 *
Accidents (unintentional injures) (V01-X59)		3 *	-	-	-	3
Respiratory distress of newborn (P22)		25 127.5	25 127.5	22 112.2	3	-
Bacterial sepsis of newborn (P36)		27 137.7	26 132.6	10	16 *	
Neonatal hemorrhage (P50-P52, P54)		21 107.1	21 107.1	15 *	5	
Diseases of the circulatory system (I00-I99)		10 *	5 *	3	2	
All other causes		229 1,167.8	157 800.7	108 550.8		
2,500 grams or more						
All Causes	221,373	333 150.4	124 56.0	77 34.8		
Congenital malformations (Q00-Q99)		100 45.2	52 23.5	32 14.5	19 *	
See footnotes at end of table.						

Infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2006 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						
Short gestation and low birthweight nec (P07)		2 *	2 *	2 *		
Sudden infant death syndrome (R95)		46 20.8	4 *	1		3 42 * 19.0
Maternal complications of pregnancy (P01)		1 *	1 *	1 *		
Complications of placenta, cord, membranes (PO2)		5 *	4 *	4 *		- 1
Accidents (unintentional injures) (V01-X59)		28 12.6	1 *	-		1 27 * 12.2
Respiratory distress of newborn (P22)		1 *	1 *	1 *		
Bacterial sepsis of newborn (P36)		3 *	3 *	2		1 -
Neonatal hemorrhage (P50-P52, P54)		2 *	2 *	2		
Diseases of the circulatory system (IOO-I99)		14	6 *	3		3 8
All other causes		130 58.7	48 21.7	28 12.6		9 82 * 37.0
Not stated birthweight						
All Causes	66	8 *	8 *	8 *		
Congenital malformations (Q00-Q99)		1 *	1 *	1		
Short gestation and low birthweight nec (P07)		3 *	3 *	3		
Sudden infant death syndrome (R95)		-	-	-		
Maternal complications of pregnancy (PO1)		4 *	4 *	4 *		
Complications of placenta, cord, membranes (P02)		-	-	-		
Accidents (unintentional injures) (V01-X59)		-	-	-		
Respiratory distress of newborn (P22)		-	-	-		
Bacterial sepsis of newborn (P36)		-	-	-		
Neonatal hemorrhage (P50-P52, P54)		-	-	-		
Diseases of the circulatory system (IOO-I99)		- -	-	-		
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.

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal	
United States /2						
Total	366	277	244	33	89	
White	235	178	155	23	57	
Black	116	88	78	10	28	
BLACK	110	00	70	TO	20	
Alabama						
Total	1	1	-	1	-	
White	-	-	-	-	-	
Black	1	1	-	1	-	
Alaska						
Total	3	1	1	-	2	
White	2	1	1	-	1	
Black	-	-	-	-	-	
Arizona						
Arizona Total	4	1	1	_	3	
White	4	1	1	-	2	
	1			-	2	
Black	Ţ	-	-	-	Ţ	
Arkansas						
Total	1	1	1	-	-	
White	1	1	1	-	-	
Black	-	-	-	-	-	
California						
Total	105	94	83	11	11	
White	74	66	58	8	8	
Black	22	20	17	3	2	
				-	_	
Colorado	2	1	1	_	1	
Total						
White	2	1	1	-	1	
Black	-	-	-	-	-	
Connecticut						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
Delaware						
Total	1	_	_	_	1	
White	-	-	_	-	_	
Black	1	-	-	-	1	
Dist of Columbia						
Total	_	_	_	_	_	
White	_		_	_	_	
Black	-	-	-	-	-	
Florida					-	
Total	12	4	4	-	8	
White	10	3	3	-	7	
Black	2	1	1	-	1	
Georgia						
Total	3	3	3	-	-	
White	1	1	1	-	-	
Black	2	2	2	-	-	
Hawaii						
Total	_	_	_	_	_	
White	_	_	_	_	_	
Black	_	_	_	_	_	
21401						

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal	
Idaho						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
Illinois						
Total	13	8	6	2	5	
White	5	2	1	1	3	
Black	8	6	5	1	2	
Indiana						
Total	6	4	4	-	2	
White	5	3	3	-	2	
Black	1	1	1	-	-	
Iowa						
Total	1	1	1	-	-	
White	1	1	1	-	-	
Black	-	-	-	-	-	
Kansas						
Total	-	_	_	_	-	
White	-	-	_	-	-	
Black	-	-	-	-	-	
Kentucky						
Total	4	3	_	3	1	
White	4	3	_	3	1	
Black	-	-	-	-	-	
Louisiana						
Total	43	25	21	4	18	
White	15	23	6	3	6	
Black	26	15	14	1	11	
Maine						
Total	_	_	_	_	_	
White	_		_		_	
	_			_	-	
Black	-	-	-	-	-	
Maryland						
Total	-	-	-	=	-	
White Black	_	-	-	-	-	
Massachusetts						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
Michigan						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
Minnesota						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
Mississippi						
Total	2	-	-	-	2	
White	1	-	-	-	1	
Black	1	-	-	-	1	

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal	
Missouri						
Total	3	1	1	-	2	
White	2	1	1	-	1	
Black	1	-	-	-	1	
Montana						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
Nebraska						
Total	1	1	-	1	-	
White	-	-	-	-	-	
Black	1	1	-	1	-	
Nevada						
Total	1	1	1	-	-	
White	1	1	1	-	-	
Black	-	-	-	-	-	
New Hampshire						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
New Jersey						
Total	6	6	6	-	-	
White	5	5	5	-	-	
Black	1	1	1	-	-	
New Mexico						
Total	3	3	2	1	-	
White	3	3	2	1	-	
Black	-	-	-	-	-	
New York						
Total	11	9	8	1	2	
White	10	8	7	1	2	
Black	1	1	1	-	-	
New York City						
Total	2	1	1	-	1	
White	1	-	-	-	1	
Black	1	1	1	-	-	
North Carolina						
Total	2	2	2	-	-	
White	2	2	2	-	-	
Black	-	-	-	-	-	
North Dakota						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	
Ohio						
Total	26	22	19	3	4	
White	11	8	7	1	3	
Black	15	14	12	2	1	
Oklahoma						
Total	-	-	-	-	-	
White	-	-	-	-	-	
Black	-	-	-	-	-	

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Oregon					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
Pennsylvania					
Total	14	11	10	1	3
White	7	5	4	1	2
Black	7	6	6	-	1
Rhode Island					
Total	-	_	-	_	-
White	-	_	-	_	-
Black	-	-	-	-	-
South Carolina					
Total	5	1	1	_	4
White	1	-	-	_	1
Black	4	1	1	_	3
BIACK	4	T	1	-	5
South Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Tennessee					
Total	-	_	_	_	_
White	-	_	-	_	_
Black	-	-	-	-	-
Texas				_	
Total	87	72	67	5	15
White	65	53	49	4	12
Black	20	17	16	1	3
Utah					
Total	3	-	-	-	3
White	2	-	-	-	2
Black	-	-	-	-	-
Vermont					
Total	-	_	-	_	-
White	-	_	_	-	-
Black	-	-	-	-	-
Virginia					
Total	_	_	_	_	_
White	_	_	_	_	_
Black	-	-	-	-	-
Washington					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
West Virginia					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Wisconsin					
Total	-	_	-	-	-
White	-	_	-	-	-
Black	_	-	_	_	_

[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 2006 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	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
Virgin Islands					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Guam					
Total	-	_	-	_	-
White	-	_	_	-	_
Black	-	-	-	-	-

I/ Totals for geographic areas include races other than white and black.
 Excludes data for foreign residents, Puerto Rico, Virgin Islands and Guam.