Public Use Data File Documentation

2007 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

2007 Period Linked Birth/Infant Death Data Set

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Introduction

The linked birth/infant death data set (linked file) is released in two formats - period data and birth cohort data. This documentation is for the 2007 period linked file. Differences between period and birth cohort data are outlined below.

Period data - The numerator for the 2007 period linked file consists of all infant deaths occurring in 2007 linked to their corresponding birth certificates, whether the birth occurred in 2006 or 2007. The denominator file for this data set is the 2007 natality file, that is, all births occurring in 2007.

Birth cohort data - The numerator for the 2007 birth cohort linked file consists of deaths to infants born in 2007 whether the death occurred in 2007 or 2008. The denominator file is the 2007 natality file, that is, all births occurring in 2007.

The 2007 period linked birth/infant death data set includes several data files. The first file includes all US infant deaths which occurred in the 2007 data year linked to their corresponding birth certificates, whether the birth occurred in 2006 or 2007 - 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 2007 NCHS natality file for the US, which is used to provide denominators for rate computations. These same three data files are also available for Puerto Rico, the Virgin Islands, and Guam.

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: http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm. Twenty-two states, California, Colorado, Delaware, Florida, Idaho, Indiana, Iowa, 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, 2007. 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-three states (California, Connecticut, Delaware, Florida, Idaho, Kansas, Michigan, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, Ohio, 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, 2007. 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 2007 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 2007 linked file contains information on infants born in both 2006 and 2007 (see description of the period linked file above). As reporting areas changed between 2006 and 2007, 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 2006 and 2007. 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 2007 linked file are different from those for the 2007 birth file, as items had to be reported by a state in both 2006 and 2007 to be able to provide complete data. Thus, data for non-comparable items from states that revised in 2007 are excluded from all tabulations. Positions for reporting flags are noted along with each data item in the file layout. Reporting flags must be invoked to generate accurate numbers by residence for items which are not reported by all states. Where applicable, reporting flags are shown in the column "Reporting Flag Position" in the file layout. Reporting flag codes are "0" (item reported in neither the current or previous year), 1 (item reported in both current and previous year), 2 (item reported in the previous but not in the current year), and 3 (item reported in the current but not in the previous year). When using these data, select reporting flag=1 to get valid and complete data for an item (see SAS code examples below).

Translating "blanks" - In the 2007 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 2007 data for the month prenatal care began for the eighteen revised states which had implemented the revised certificate by January 1st 2006. Data for states which implemented the revised certificates in 2007 are excluded, as part of their linked file births (those born in 2006) were reported on the unrevised certificate.

Sample SAS program

```
DATA work;
01
02
            INFILE 'C:VS07LINK.USNUMPUB' LRECL=1259;
03
            INPUT
04
                  restatus 138
05
                  precare 245-246
06
                  f mpcb 668;
07
80
            /*Exclude foreign residents*/
            IF restatus NE 4;
09
10
            /*Select reporting area*/
11
            IF f mpcb=1;
12
            /*Convert blanks to unknown*/
            IF precare=. THEN precare=99:
13
14
15
      PROC FREQ:
            TABLE precare;
16
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)

```
DATA work;INFILE 'C:VS07LINK.USNUMPUB ' LRECL=1259;
```

```
03
             INPUT
04
                   restatus 138
05
                   xmrstate $ 107-108
06
                   precare 245-246;
07
80
             /*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 2007 data, twenty-seven areas reported multiple race data: California, Colorado, Delaware, Florida, Georgia (for births after January 1 only), Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Michigan (for most facilities), Minnesota, Nebraska, New Hampshire, New York State (excluding New York City), North Dakota, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, and Wyoming. For the 2007 period linked file, complete data for both 2006 and 2007 births is available from 23 states: California, Colorado, Delaware, Florida, Hawaii, Idaho, Kansas, Kentucky, Michigan (for most facilities), Minnesota, Nebraska, New Hampshire, New York State (excluding New York City), North Dakota, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, and Wyoming.

In 2007, multiple race data was reported for the entire year on the death certificates of California, Connecticut, Delaware, the District of Columbia, Florida, Hawaii, Idaho, Kansas, Maine, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Texas, 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 2007" and "Deaths: Final Data for 2007".

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 3.09 to 0.37 in the numerator file, and from 0.11 to 0.01 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:

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 2007 linked file 1.6% of all infant death records could not be linked to their corresponding birth certificates. Unlinked records are included in a separate data file in this data set. The unlinked record file uses the same record layout as the numerator file of linked birth and infant death records. However, except as noted below, locations reserved for information from the matching birth certificate are blank since no matching birth certificate could be found for these records. The sex field contains the sex of infant as reported on the death certificate, rather than the sex of infant from the birth certificate, which is not available. The race field contains the race of the decedent as reported on the death certificate rather than the race of mother as reported on the birth certificate as is the case with the linked record file. The race of mother on the birth certificate is generally considered to be more accurate than the race information from the death certificate (see section on Race and Hispanic origin in "Deaths: Final Data for 2007" 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 2007 linked file for the 50 States and D.C. includes 28,715 linked infant death records and 467 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 29,182. While the overall percent linked for infant deaths in the 2007 file is 98.4%, 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 (95.6), Arizona (97.0), California (95.7), Louisiana (93.7), Nevada (96.5), and Texas (93.6). 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, 2007 linked file

United States	98.4	Nebraska	100.0
Alabama	100.0	Nevada	96.5
Alaska	95.6	New Hampshire	100.0
Arizona	97.0	New Jersey	99.2
Arkansas	100.0	New Mexico	98.3
California	95.7	New York State	98.0
Colorado	100.0	New York City	99.1
Connecticut	100.0	North Carolina	99.9
Delaware	100.0	North Dakota	100.0
District of Columbia	99.6	Ohio	98.5
Florida	100.0	Oklahoma	99.5
Georgia	99.4	Oregon	100.0
Hawaii	100.0	Pennsylvania	99.6
Idaho	100.0	Rhode Island	100.0
Illinois	98.5	South Carolina	100.0
Indiana	99.7	South Dakota	100.0
Iowa	100.0	Tennessee	100.0
Kansas	100.0	Texas	93.6
Kentucky	99.1	Utah	98.7
Louisiana	93.7	Vermont	100.0

Maine	100.0	Virginia	99.7
Maryland	99.8	Washington	99.8
Massachusetts	99.3	West Virginia	100.0
Michigan	99.6	Wisconsin	100.0
Minnesota	100.0	Wyoming	100.0
Mississippi	99.8	Puerto Rico	99.7
Missouri	99.6	Virgin Islands	90.0
Montana	100.0	Guam	100.0

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 2007 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.
- 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: http://www.cdc.gov/nchs/about/major/dvs/im.htm

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

Underlying Cause of Death Data

Mortality statistics by cause of death are compiled from entries on the medical certification portion of the death certificate. 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.

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:

1. Line indicator: The first byte represents the line of the death certificate on which the

code appears. Six lines (1-6) are allowable with the fourth and fifth denoting one or two written in "due to"s beyond the three lines provided in Part I of the U.S. standard death certificate.

Line "6" represents Part II of the death certificate.

2. Position indicator: The next byte indicates the position of the code on the line, i.e.,

it is the first (1), second (2), third (3) eighth (8) code on the

line.

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

4. The last byte is blank.

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

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

- <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.
- 3. Entity Axis Applications. The entity axis multiple cause data file is appropriate for analyses that require that each condition be coded as a stand alone entity without linkage to other conditions and/or require information on the placement of such conditions in the death certificate. Within this framework, the entity data are appropriate to examine relationships among conditions and the validity of traditional assumptions in underlying cause selection. Additionally, the entity data provide in certain categories a more detailed code assignment that could be excluded in creating record axis data. Where such detail is needed for a study, the user should use entity data. Finally, the researcher may not wish to be bound by the assumptions used in the axis translation process.

The main limitation of entity axis data is that it does not necessarily reflect the best code for a condition when considered within the context of the medical certification as a whole. As a result, certain entity codes can be misleading or even contradict other codes in the record. For example, category K80.2 is titled "Calculus of gallbladder without cholecystitis." Within the framework of entity codes this is interpreted to mean that the codable entity itself contained no mention of cholecystitis rather than that cholecystitis was not mentioned anywhere on the record. Tabulation of records with a "K80.2" as a count of persons having Calculus of gallbladder without cholecystitis would therefore be erroneous. This illustrates the fact that under entity coding the ICD-10 titles cannot be taken literally. The user should study the rules for entity coding as they relate to his/her research prior to use of entity data. The user is further cautioned that the inclusion notes in ICD-10 that relate to modifying and combining categories are seldom applicable to entity coding (except where provided 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.
- 3. Record Axis Applications. The record axis multiple cause data are the basis for NCHS core multiple cause tabulations. Location of codes is not relevant to this data, and conditions have been linked into the most meaningful categories for the certification. The most immediate consequence for the user is that the codes on the record already represent mention of a disease assignable to that particular ICD-10 category. This is in contrast to the entity code which is assigned each time such a disease is reported on different lines of the certification. Secondly, the linkage implies that within the constraints of ICD-10 the most meaningful code has been assigned. The translation process creates for the user a data file that is edited for contradictions, duplicate codes, and imprecisions. In contrast to entity axis data, record axis data are classified in a manner comparable to underlying cause of death classification thereby facilitating joint analysis of these variables. A potential disadvantage of record axis data is that some detail is sacrificed in a number of the linkages.

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

The user should proceed with caution in using record axis data to count conditions as opposed to people with conditions, since linkages have been invoked and duplicate codes

have been eliminated. As with entity data, person-based tabulations that combine individual cause categories must take into account the possible interaction of up to 20 codes on a single certificate.

Additional Information

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

If on the surface it is not obvious whether entity axis or record axis data should be employed in a given application, detailed examination of NCHS Instruction Manual Part 2f and its attachments will probably provide the necessary information to make a decision. It allows the user to determine the extent of the trade-offs between the two sets of data in terms of specific categories and the assumption of axis translation. In certain situations, a combination of entity and record axis data may be the more appropriate alternative.

2007 Period Linked Birth/Infant Death Data Set

Numerator Files:

United States

A. Record count: 28,715
B. Record length: 1,259

C. Data counts: a. By occurrence: 28,715

b. By residence: 28,687c. To foreign residents: 28

Territories

A. Record count: 440
B. Record length: 1,259

Denominator Files:

United States

A. Record count: 4,324,008

B. Record length: 868

C. Data counts: a. By occurrence: 4,324,008

b. By residence: 4,316,233c. To foreign residents: 7,775

Territories

A. Record count: 51,998
B. Record length: 868

Unlinked Files:

United States

A. Record count: 467
B. Record length: 1,259

Territories

A. Record count: 2

B. Record length: 1,259

Linked 2007 Data Elements and Locations

	Denominator	Numerator F	ile	Unlinked	
Data Items	File	Birth	Death	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	0.45 45	0.45 45			
Month pre-care began	245-47,	245-47,			
	256-59	256-59			

Number prenatal visits Live birth order Total birth order Month of last live birth Year of last live birth	270-73 212 217 220-21 222-25	270-73 212 217 220-21 222-25	 	
Medical and health data				
Method of delivery	390-403	390-403		
Medical risk factors	313-19,	313-19,		
Wedical Helt factors	328-37	328-37		
Tobacco	284-94	284-94		
Weight gain during preg	276-78	276-78		
Obstetric procedures	351-61	351-61		
Complications /	001 01	001 01		
Characteristics of L/D	365-89	365-89		
Abnormal conditions	476-82	476-82		
Congenital anomalies	492-523	492-523		
Underlying cause, death			884-87	884-87
130 infant cause recode			889-91	889-91
Multiple conditions			903-1148	903-1148
Other items				
Residence reporting				
Flags	569-771	569-771		
Late record flag	9	9		
Place of birth	42,59	42,59		
Attendant at birth	410	410		
Place of death and				
decedent's status			1186	1186
Place of injury			882	882
Manner of death			878	878
Method of disposition			879	879
Autopsy			880	880
• •				

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition					
2007 LINKED FILE PUBLIC-USE RECORD LAYOUT												
1-6	6	FILLER	Filler									
7	1	REVISION	Revision		U,R	R	State used the 2003 version of the US Standard Birth Certificate (Revised)					
						U	State used the 1989 version of the US Standard Birth Certificate (Unrevised)					
8	1	FILLER	Filler									
9	1	LATEREC	Late Record Flag		U,R	0 1	Not late record Late record					
10-14	5	FILLER	Filler									
15-18	4	DOB_YY	Birth Year		U,R	2006 2007	2006 2007					
19-20	2	DOB_MM	Birth Month		U,R	01 02 03 04 05 06 07 08 09 10 11	January February March April May June July August September October November December					
21-28	8	FILLER	Filler									
29	1	DOB_WK	Weekday		U,R	1 2 3 4 5 6 7	Sunday Monday Tuesday Wednesday Thursday Friday Saturday					
30-31	2	OSTATE	Occurrence Territory		U,R							

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

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			(This item is available in the only, geographic codes are available in the U.S.file)				
			Outlying Areas of	the U.S.		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		
			<u>Puerto Rico</u>			127 999	San Juan County less than 250,000
			Other Outlying Ar	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 5 9	Hospital Freestanding Birthing Center Clinic / Doctor's Office Residence Other Unknown
43-58	16	FILLER	Filler				
* I I D	Includes	data bagad on bath	the 1000 Davision of the IIC	Cartificate of Live	Dieth (una	ovicad) an	d the 2002 Davision of the U.S. Co.

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
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	lag	U,R	Blank 1	Reported age not used Reported age used
89-90	2	MAGER	Mother's Age Recode 41		U,R	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	10 – 12 years 13 years 14 years 15 years 16 years 17 years 18 years 19 years 20 years 21 years 22 years 23 years 24 years 25 years 26 years 27 years 28 years 29 years 30 years 31 years 32 years 33 years 34 years 35 years 36 years 37 years 38 years 39 years 39 years 40 years 41 years 42 years

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						43	43 years
						44	44 years
						45	45 years
						46	46 years
						47	47 years
						48	48 years
						49	49 years
						50	50 -54 years
						50	30 31 years
91-92	2	MAGER14	Mother's Age Recode 14		U,R	01	Under 15 Years
,	_	THE TOLLTE	niomer brige recode 1		0,11	03	15 years
						04	16 years
						05	17 years
						06	18 years
						07	19 years
						08	20-24 years
						09	25-29 years
						10	30-34 years
						11	35-39 years
						12	40-44 years
						13	45-49 years
						14	50-54 years
						14	30-34 years
93	1	MAGER9	Mother's Age Recode 9		U,R	1	Under 15 years
75	1	WII IGER)	Within Singe Recode 9		0,10	2	15-19 years
						3	20-24 years
						4	25-29 years
						5	30-34 years
						6	35-39 years
						7	40-44 years
						8	45-49 years
						9	50-54 years
						,	30-34 years
94-95	2	MBCNTRY	Mother's Birth Country		R**	AA-ZZ	A complete list is shown in
			(This item is available in th	e territory file			the Geographic Code Outline.
			only, geographic codes are				2gq
			available in the U.S.file)	1101			
	** Als	o includes unrevise	d territories/possessions that use	e new geographic co	oding.		
96-108	13	FILLER	Filler				
109-110	2	MRTERR	Mother's Residence		U,R		
				Cartificate of Live		cavicad) co	d the 2003 Revision of the U.S. Certificate of Live Birth
* U,l	revise		ui uie 1909 Kevisioii oi iiie U.S	. Cerunicate of Live	חווות (uni	eviseu), an	u die 2003 Kevision of the U.S. Certificate of Live Birth
T T	,	· ·	th the 1080 Davision of the IIC	Cartificate of Live	Rirth: oro	dudos doto	based on the 2003 Pavision
U R			th the 1989 Revision of the U.S				
K	menda	es uata vaseu on bo	th the 2003 Revision of the U.S		Dirui; exc	ruues uata	Dascu on the 1707 Revision.
				4			

Position	1	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition	
				(This item is available in the only, geographic codes are available in the U.S.file)					
							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 resid (This item is available in the only, geographic codes are available in the U.S.file)	ne territory file				
				Puerto Rico			127 999	San Juan County of less than 250,000 or foreign resident	
				Other Outlying A	Areas 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	Population of Residence (This item is available in the only, geographic codes are	ne territory file	U,R			
				available in the U.S.file)			0 1 2 9 Z	County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County less than 250,000 Foreign resident	
133-136		4	FILLER	Filler					
137		1	RECTYPE	Record Type (This item is available in the only, geographic codes are available in the U.S.file)		U,R	1 2	RESIDENT: State and county of occurrence and residence are the same. NONRESIDENT: State and county of occurrence and residence are different.	
	* U,R	(revised	d).			`		nd 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.							

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

R

Position		Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
138		1	RESTATUS	Residence Status <u>United States</u>		U,R	1 2 3	RESIDENT: State and county of occurrence and residence are the same. INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different. INTERSTATE NONRESIDENT: State of occurrence and residence are different but both are one of the 50 US states or District of Columbia. FOREIGN RESIDENT: The state of residence is not one of the 50 US states or District of Columbia.
				Outlying areas of	the US		1 2 2 3	RESIDENT: State and county of occurrence and residence are the same. (Unique to Guam, all US residents are considered residents of Guam and thus are assigned 1.) INTRATERRITORY NONRESIDENT: Territory of occurrence and residence are the same but county is different. INTERTERRITORY RESIDENT: Territory of occurrence and residence are different but both are US Territories. FOREIGN RESIDENT: The residence is not a US Territory.
139-140		2	MBRACE	Mother's Bridged Race Includes only states reportin 01-14 used for individuals in Codes 21-24 used for individuals in Code 24 also used for individuals in Code 24 also used for individuals in Code 24 also used for individual in individual in individual in individual individu	reporting only one ra iduals reporting more dged to a single race. iduals reporting c Islander group;	ce. e than	01 02 03 04 05 06 07 08 09 10 11 12 13 14 21 22 23 24 Blank	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 Korean – single race Vietnamese – single race Other Asian – single race Hawaiian – single race Guamanian – single race Samoan – single race Other Pacific Islander – single race White – bridged multiple race Black – bridged multiple race American Indian / Alaska Native – bridged multiple race Not on certificate
141-142	* U,R	2 Include		Mother's Race h the 1989 Revision of the U.S	. Certificate of Live	U Birth (unı	revised), an	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.

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
			Includes only states exclusive race. Some areas report addit Pacific Islander (API) codes 18-68 replace former code 0 Code 78 replaces former code areas. See reporting flag at paper API reporting area.	itional Asian or s for race. Codes 98 for these areas. de 08 for all other			
			<u>United States</u>			01 02 03 04 05 06 07 18 28 38 48 58 68	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. 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
			All other Outlying	Areas of the US		01	White

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Position	Ι	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
							02 03 04 05	Black American Indian / Alaska Native Chinese Japanese
							06 07 08 Blank	Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Not on certificate
143	1	1	MRACEREC	Mother's Race Recode Includes individuals reportin individuals reporting more th to a single race.		U,R		
					all Outlying Areas of	<u>f</u>		
				the United States e	xcept Puerto Rico		1 2	White Black
							3 4	American Indian / Alaskan Native Asian / Pacific Islander
				Puerto Rico			1	White
							2 0	Black Other (not classified as White or Black)
144	1	1	MRACEIMP	Mother's Race Imputed Fla	ag	U,R	Blank	Mother's race not imputed
							1 2	Unknown race imputed All other races, formerly coded 09, imputed.
145-147	3	3	FILLER	Filler				
148	1	1	UMHISP	Mother's Hispanic Origin				
- 10	_	_			569	U,R	0	Non-Hispanic
							1	Mexican
							2 3	Puerto Rican Cuban
							4	Central American
							5	Other and Unknown Hispanic
							9	Origin unknown or not stated
149	1	1	MRACEHISP	Mother's Race/Hispanic O	_			
					569	U,R	1	Mexican
							2 3	Puerto Rican Cuban
							3 4	Central or South American
	* U.R I	Includes	data based on both	the 1989 Revision of the U.S.	Certificate of Live E	Birth (unre	evised), an	d the 2003 Revision of the U.S. Certificate of 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).

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						5 6	Other and Unknown Hispanic Non-Hispanic White
						7	Non-Hispanic Black
						8	Non-Hispanic Other Races
						9	Origin unknown or not stated
150-152	3	FILLER	Filler				
153	1	MAR	Mother's Marital Status		U,R		
				all Outlying Areas o	<u>ot</u>	1	37
			the US except Pu	erto Rico		1	Yes No
						2 9	Unknown or not Stated
						7	Childwii of not Stated
			Puerto Rico			1	Yes
			<u> </u>			2	Unmarried parents living together
						3	Unmarried parents not living together
						9	Unknown or not stated
154	1	MAR_IMP	Mother's Marital Status I	mnuted Flag	U,R	Blank	Marital Status not imputed
154	1	1417 114_11411	Motifer 5 Maritan States 1	inputed I lug	0,10	1	Marital Status imputed
155	1	MEDUC	Mother's Educ –Revised	571	R	1	8 th grade or less
133	1	MEDUC	Mother's Educ – Revised	3/1	K	2	9 th through 12 th grade with no diploma
						3	High school graduate or GED completed
						4	Some college credit, but not a degree.
						5	Associate degree (AA,AS)
						6	Bachelor's degree (BA, AB, BS)
						7	Master's degree (MA, MS, MEng, MEd, MSW, MBA)
						8	Doctorate (PhD, EdD) or Professional Degree (MD, DDS,
							DVM, LLB, JD)
						9	Unknown
						Blank	Not on certificate
156-157	2	UMEDUC	Mother's Educ –Unrevise	d 647	U	00	No formal education
						01-08	Years of elementary school
						09	1 year of high school
						10	2 years of high school
						11	3 years of high school
						12	4 years of high school
						13	1 year of college
						14	2 years of college
						15 16	3 years of college
4117		1.1.1.1.1.1	1 1000 P :: 61 HG	G .: 61 . 61	D: 4 /	16	4 years of college

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

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Position	Len	Field	Description Reporting Re Flag Position		Rev*	Values	s Definition			
						17 99 Blank	5 or more years of college Not stated Not on certificate			
158	1	MEDUC_REC	Mother's Education Recode 647 U		Mother's Education Recode 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	ed	U,R	Blank 1	Father's reported age not used Father's reported age used			
176-181	6	FILLER	Filler							
182-183	2	FAGECOMB	Father's Combined Age (F	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 (U	Jnrevised)	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	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 reportin 01-14 used for individuals r Codes 21-24 used for indivi one race that have been brid Code 24 also used for indivi	eporting only one ra duals reporting more lged to a single race. iduals reporting	ce. e than	01 02 03 04 05 06	White – single race Black – single race American Indian/Alaska Native – single race Asian Indian – single race Chinese – single race Filipino – single race			

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition				
			more than one Asian/Pac see "Technical Appendix ** Also includes unrevis multiple race.	."		07 08 09 10 11 12 13 14 21 22 23 24 99	Japanese – single race Korean – single race Vietnamese – single race Other Asian – single race Hawaiian – single race Guamanian – single race Samoan – single race Other Pacific Islander – single race White – bridged multiple race Black – bridged multiple race American Indian / Alaska Native – bridged multiple race Asian / Pacific Islander – bridged multiple race Unknown or not stated, also includes states not reporting multiple race. Not on certificate				
190	1	FILLER	Filler								
191	1	FRACEREC	Father's Race Recode Includes individuals reporting monto a single race.								
			United States a the US except	nd all Outlying Areas Puerto Rico	<u>of</u>	1 2 3 4 9	White Black American Indian / Alaskan Native Asian / Pacific Islander Unknown or not stated				
			Puerto Rico			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 Origi	i n 570	U,R	0 1 2 3 4 5	Non-Hispanic Mexican Puerto Rican Cuban Central American Other and Unknown Hispanic				
*		Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised)									

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						9	Origin unknown or not stated
196	1	FRACEHISP	Father's Race/Hisp Origin	570	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
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 separately. Unknown or not stated Not on certificate
			Puerto Rico			01 03 00 99 Blank	White Black Other races not classified white or black Unknown or not stated Not on certificate
			<u>Guam</u>		D. J.	01 02 03	White Black American Indian / Alaska Native

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						04 05 06 07 08 58 99 Blank	Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Guamanian Unknown or not stated Not on certificate
			All other Outlying	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	TBO	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 Mo	onth	R	01 02 03 04 05 06 07 08 09	January February March April May June July August September October

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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
						11 12 88 99	November December Not applicable Unknown or not stated
222-225	4	DLLB_YY	Date of Last Live Birth Y	'ear	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 Be	gan (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 Be	gan Recode (Revise 668	d) R	1 2 3 4 5 Blank	1 st to 3 rd month 4 th to 6 th month 7 th to final month No prenatal care Unknown or not stated Not on certificate
248-255	8	FILLER	Filler				
256-257	2	MPCB	Month Prenatal Care Be	gan (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 Be	gan Recode 6 (Unre 669	vised) U	1 2 3 4 5 6 Blank	1 st to 2 nd month 3 rd month 4 th to 6 th month 7 th to final month No prenatal care Unknown or not stated Not on certificate
259 * II R	1	MPCB_REC5	Month Prenatal Care Be	669	U	1	1 st trimester (1 st to 3 rd month)

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Position	Len	Field	Description Reporting Flag Position		Rev*	Values	Definition
				Ü		2 3 4 5 Blank	2 nd trimester (4 th to 6 th month) 3 rd trimester (7 th to final month) No prenatal care Unknown or not stated Not on certificate
						Diank	Not on certificate
260-269	10	FILLER	Filler				
270-271	2	UPREVIS	Number of Prenatal Visi	ts	U,R	00-49 99	Number of prenatal visits Unknown or not stated
272-273	2	PREVIS_REC	Number of Prenatal Visits Recode		Number of Prenatal Visits Recode U,R 0 0 0 0 0 0 0 0 0 0 0 1 1		No visits 1 to 2 visits 3 to 4 visits 5 to 6 visits 7 to 8 visits 9 to 10 visits 11 to 12 visits 13 to 14 visits 15 to 16 visits 17 to 18 visits 19 or more visits Unknown or not stated
274-275	2	FILLER	Filler				
276-277	2	WTGAIN	Weight Gain	648	U,R	00-97 98 99	Weight gain in pounds 98 pounds and over Unknown or not stated
278	1	WTGAIN_REC	Weight Gain Recode	648	U,R	1 2 3 4 5 6 7 8	Less than 16 pounds 16 to 20 pounds 21 to 25 pounds 26 to 30 pounds 31 to 35 pounds 36 to 40 pounds 41 to 45 pounds 46 or more pounds Unknown or not stated
280	1	DFPC_IMP	Day of Date First Prenat	al 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				
* U,R	Include	es data based on both	the 1989 Revision of the U.S	S. Certificate of Live	e Birth (uni	revised), an	nd the 2003 Revision of the U.S. Certificate of

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
284-285	2	CIG_1	Cigarettes 1 st 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 nd 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 rd Trimester	575	R	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
290	1	TOBUSE	Tobacco Use	667	U	1 2 9 Blank	Yes No Unknown or not stated Not on certificate
291-292	2	CIGS	Cigarettes per Day	667	U	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
293	1	UCIG_REC6	Cigarette Recode	667	U	0 1 2 3 4 5 6 Blank	Non-smoker 1 to 5 cigarettes daily 6 to 10 cigarettes daily 11 to 20 cigarettes daily 21 to 40 cigarettes daily 41 or more cigarettes daily Unknown or not stated Not on certificate
294	1	CIG_REC	Cigarette Recode	575	R	Y N U Blank	Yes No Unknown or not stated Not on certificate
295-312	18	FILLER	Filler				
313-319	9	Risk Factors (Re The checkbox ite	evised) ms below follow this code stru	Y	Yes		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						N U Blank	No Unknown or not stated Not on certificate
313	1	RF_DIAB	Prepregnancy Diabetes	582	R		
314	1	RF_GEST	Gestational Diabetes	583	R		
315 316	1 1	RF_PHYP	Prepregnancy Hypertesion		R		
317	1	RF_GHYP RF_ECLAM	Gestational Hypertension Eclampsia	585 586	R R		
318	1	RF_PPTERM	Previous Preterm Birth	587	R		
319	1	RF_PPOUTC	Poor Pregnancy Outcome	588	R		
320-323	4	FILLER	Filler				
324	1	RF_CESAR	Previous Cesarean Deliveri	ies			
				593	R	Y	Yes
						N U	No Unknown or not stated
						0 Blank	Not on certificate
						Diank	Tot on certificate
325-326	2	RF_CESARN	Number of Previous Cesard	ean Deliveries			
				594	R	00	None
						01-30	Number of previous cesareans
						99 D1 1	Unknown or not stated
327	1	FILLER	Filler			Blank	Not on certificate
328-337	10	Risk Factors in t	his Pregnancy		U		
			ms indented below follow this s	structure:		1	Yes
		The version is all	1989 Standard unless otherwise	e noted.		2	No
						9	Unknown
328-33	20. 3	FILLER	Filler			Blank	Not on certificate
331	1	URF_DIAB	Diabetes	684	U,R		
332-33		FILLER	Filler	004	0,10		
335	1	URF_CHYPER	Chronic Hypertension	688	U,R		
336	1	URF_PHYPER	Prepregnancy Associated F	Hypertension 689	U,R		
337	1	URF_ECLAM	Eclampsia	690	U,R		
338-350	13	FILLER	Filler				
351-354	4	Obstetric Proced	lures (Revised)				
		The checkbox iter	ms indented below follow this s	structure:		Y	Yes
						N	No
						U	Unknown or not stated

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Position	Len	Field	Description	Reporting Flag Positi		ev* Va	lues	Definition
351 352 353 354	1 1 1 1	OP_CERV OP_TOCOL OP_ECVS OP_ECVF	Cervical Cerclage Tocolysis Successful External Cepha Failed External Cephalic V	dic Version 6	501 R 502 R 503 R 504 R	Bla	ank	Not on certificate
355-361	7		ns indented below follow this 1989 Standard unless otherwis			1 2 9 Bla	ank	Yes No Unknown or not stated Not on certificate
355-356 357 358 359 360-361	1 1 1	FILLER UOP_INDUC FILLER UOP_TOCOL FILLER	Filler Induction of Labor Filler Tocolysis Filler	703 705	U,I			
362-364	3	Onset of Labor The checkbox iter	ns below follow this structure:			Y N U Bla	ank	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	mbrane 605 606 607	R			
365-373	9		f Labor and Delivery (Revise ns below follow this structure:			Y N U Bla	ank	Yes No Unknown or not stated Not on certificate
365 366 367 368 369 370 371 372 373	1 1 1 1 1 1 1 1	LD_INDL LD_AUGM LD_NVPR LD_STER LD_ANTI LD_CHOR LD_MECS LD_FINT LD_ANES	Induction of Labor Augmentation of Labor Non-Vertex Presentation Steriods Antibiotics Chorioamnionitis Meconium Staining Fetal Intolerance Anesthesia	608 609 610 611 612 613 614 615 616	R R R R R R	Die	ank	Not on certificate

^{374-389 16 &}lt;u>Complications of Labor and Delivery</u>

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
		The checkbox iter	ns indented below follow this	structure:		1 2 9 Blank	Yes No Unknown or not stated Not on certificate
374 375	1 1	FILLER ULD_MECO	Filler Meconium	712	U,R		
376-380 381	1	FILLER ULD_PRECIP	Filler Precipitous Labor	718	U,R		
382-383 384 385-389	1	FILLER ULD_BREECH FILLER	Filler Breech Filler	721	U,R		
390-394	5	Method of Delive					
390	1	ME_ATTF	Attempted Forceps	617	R	Y N U Blank	Yes No Unknown Not on certificate
391	1	ME_ATTV	Attempted Vacuum	618	R	Y N U Blank	Yes No Unknown Not on certificate
392	1	ME_PRES	Fetal Presentation	619	R	1 2 3 9 Blank	Cephalic Breech Other Unknown Not on certificate
393	1	ME_ROUT	Route & Method of Delive	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 <u>Method of Delivery (Unrevised)</u>

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
		The checkbox iter	ns indented below follow this	structure:		1 2 9	Yes No Unknown or not stated
395 396 397 398 399 400	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	9	Chritown of not stated
401	1	RDMETH_REC	Delivery Method Recode	(Revised) 679	R	1 2 3 4 5 6	Vaginal (excludes vaginal after previous C-section) Vaginal after previous c-section Primary C-section Repeat C-section Vaginal (unknown if previous c-section) (2003 Standard only) C-section (unknown if previous c-section) (2003 Standard only) Not stated
402	1	UDMETH_REC	Delivery Method Recode ((Unrevised) 680	U	1 2 3 4 9	Vaginal (excludes vaginal after previous C-section) Vaginal after previous c-section Primary C-section Repeat C-section Not stated
403	1	DMETH_REC			U,R	1 2 9	Vaginal C-Section Unknown
404-409	6	FILLER	Filler				
410	1	ATTEND	Attendant		U,R	1 2 3 4 5 9	Doctor of Medicine (MD) Doctor of Osteopathy (DO) Certified Nurse Midwife (CNM) Other Midwife Other Unknown or not stated
411-414 * II D	4 Include	FILLER	Filler	Cartificate of Live	Dieth (une	ravisad) an	d the 2003 Pavision of the U.S. Cartificate of Live Birth

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
415	2	APGAR5	Five Minute APGAR Scor	e 574	U,R	00-10 99	A score of 0-10 Unknown or not stated
417	1	APGAR5R	Five Minute APGAR Reco	de 574	U,R	1 2 3 4 5	A score of 0-3 A score of 4-6 A score of 7-8 A score of 9-10 Unknown or not stated
418-422	5	FILLER	Filler				
423	1	DPLURAL	Plurality Recode		U,R	1 2 3 4 5	Single Twin Triplet Quadruplet Quintuplet or higher
424	1	FILLER	Filler				
425	1	IMP_PLUR	Plurality Imputed		U,R	Blank 1	Plurality is imputed Plurality is not imputed
426-435	10	FILLER	Filler				
436	1	SEX	Sex of Infant		U,R	M F	Male Female
437	1	IMP_SEX	Imputed Sex		U,R	Blank 1	Infant Sex not Imputed Infant Sex is Imputed
438-439	2	DLMP_MM	Last Normal Menses Mon	th	U,R	01 02 03 04 05 06 07 08 09 10 11	January February March April May June July August September October November December

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						99	Unknown or not stated
440-441	2	DLMP_DD	Last Normal Menses Day		U,R	01-31	As applicable to month of LMP
442-445	4	DLMP_YY	Last Normal Menses Year		U,R	99 nnnn 9999	Unknown or not stated Year of last normal menses Unknown or not stated
446-447	2	ESTGEST	Obstetric/Clinical Gestation	on Est. 573	U,R	0-98 99	0 through 98 th week of gestation Unknown or not stated
448-450	3	FILLER	Filler				
451-452	2	COMBGEST	Gestation – Detail in Weel	ks	U,R	17-47 99	17 th through 47 th week of gestation Unknown
453-454	2	GESTREC10	Gestation Recode 10		U,R	01 02 03 04 05 06 07 08 09	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	499 grams or less 500 – 749 grams 750 - 999 grams

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Position	Len	Field	Description	Reporting Flag Positi	Rev*	Values	Definition
						04 05 06 07 08 09 10 11 12 13	1000 - 1249 grams 1250 - 1499 grams 1500 - 1999 grams 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 Flag	9	U,R	Blank 1	Birth Weight is not imputed Birth Weight is imputed
476-482	7		litions of the Newborn (Revise ems below follow this structure:			Y N U Blank	Yes, Complication reported No Complication reported Unknown or not stated Not on certificate
476	1	AB_AVEN1	Assisted Ventilation	628 R			
477	1	AB_AVEN6	Assisted Ventilation >6 hrs				
478	1	AB_NICU	Admission to NICU	630 R			
479 480	1 1	AB_SURF	Surfactant Antibiotics	631 R 632 R			
480 481	1	AB_ANTI AB_SEIZ	Seizures	632 R			
482	1	AB_BINJ	Birth Injury	634 R			
483-491	9	FILLER	Filler				
492-503	12	Congenital Ano The checkbox ite	malies of the Newborn (Revise ems below follow this structure:	<u>ed)</u>		Y N U Blank	Yes, anomaly reported No, anomaly not reported Unknown Not on certificate

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Position L	Len	Field	Description	Reportin Flag Pos		Rev*	Values	Definition
492 1 493 1 494 1 495 1 496 1 497 1 498 1 499 1 500 1 501 1	1 1 1 1 1 1 1	CA_ANEN CA_MNSB CA_CCHD CA_CDH CA_OMPH CA_GAST CA_LIMB CA_CLEFT CA_CLPAL CA_DOWN	Anencephaly Meningomyelocele/Spina B Cyanotic Congenital Heart Congenital Diaphragmatic Omphalocele Gastroschisis Limb Reduction Defect Cleft Lip w/ or w/o Cleft Pa Cleft Palate alone Downs Syndrome	Disease Hernia	635 636 637 638 639 640 641 642 643 644	R R R R R R R R	C P N U Blank	Confirmed Pending No Unknown Not on certificate
502 1	1	CA_DISOR	Suspected Chromosomal D	isorder	645	R	C P N U Blank	Confirmed Pending No Unknown Not on certificate
503 1	1	СА_НҮРО	Hypospadias		646	R	Y N U Blank	Yes, Anomaly reported No, Anomaly not reported Unknown Not on certificate
504-523 2	20	The checkbox item	alies of the Newborn s indented below follow this s 989 Standard unless otherwise				1 2 9 Blank	Anomaly reported Anomaly not reported Anomaly not classifiable Not on certificate
504 1	1	UCA_ANEN	Anencephalus		752	U,R		
505 1 506-512 7		UCA_SPINA FILLER	Spina Bifida / Meningocele Filler		753	U,R		
513 1 514-517 4		UCA_OMPHA FILLER	Omphalocele / Gastroschisi Filler	İS	761	U,R		
518 1 519-522 4	1	UCA_CELFTLP FILLER	Cleft Lip / Palate Filler		766	U,R		
523 1	1	UCA_DOWNS	Downs Syndrome		771	U,R		
524-568 4	45	FILLER	Filler					
	203 Includes	Flag File for Repo	rting Flags he 1989 Revision of the U.S.	Cartificata	of Live D	irth (unra	visad) end	I the 2003 Pavision of the U
* U,R I	meruaes (iaia baseu on doth t	HE 1769 KEVISION OF THE U.S.	cermicate	or rive B	ırın (unre	viseu), and	i uie 2003 kevision oi the U.

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
		The reporting flags	indented below follow this co	oding structure:		0 1	Not reporting Reporting
569	1	F_MORIGIN	Origin of Mother		U,R		1 &
570	1	F_FORIGIN	Origin of Father		U,R		
571	1	F_MEDUC	Education of Mother		R		
572	1	FILLER	Filler				
573	1	F_CLINEST	Clinical Estimate of Gestat	ion	U,R		
574	1	F_APGAR5	Five minute APGAR		U,R		
575	1	F_TOBACO	Tobacco use		R		
576-581	6	FILLER	Filler				
582	1	F_RF_PDIAB	Prepregnancy Diabetes		R		
583	1	F_RF_GDIAB	Gestational Diabetes		R		
584	1	F_RF_PHYPER	Prepregnancy Hypertensio	n	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 Cesar	eans	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 Cepha	lic Version	R		
604	1	F_OB_FAIL	Failed External Cephalic V	Version	R		
605	1	F_OL_RUPTURE	Premature Rupture of Men	mbranes	R		
606	1	F_OL_PRECIP	Precipitous Labor		R		
607	1	F_OL_PROLONG	Prolonged Labor		R		
608	1	F_LD_INDUCT	Induction of Labor		R		
609	1	F_LD_AUGMENT	Augmentation of Labor		R		
610	1	F_LD_NVRTX	Non-Vertex Presentation		R		
611	1	F_LD_STEROIDS	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		Attempted Forceps		R		
618	1		Attempted Vacuum		R		
619	1		Fetal Presentation		R		
620	1	F_MD_ROUTE	Final Route and Method of	f 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		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
629 630	1 1	F_AB_VENT6 F_AB_NICU	Assisted Ventilation >6 hrs Admission to NICU	C	R R		
631	1	F_AB_SURFAC	Surfactant		R		
632	1	F_AB_ANTIBIO	Antibiotics		R		
633	1	F AB SEIZ	Seizures		R		
634	1	F_AB_INJ	Birth Injury		R		
635	1	F_CA_ANEN	Anencephaly		R		
636	1	F_CA_MENIN	Meningomyelocele/Spina B	ifida	R		
637	1	F_CA_HEART	Cyanotic Congenital Heart		R		
638	1	F_CA_HERNIA	Congenital Diaphragmatic		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 Pa	alate	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 D	isorder	R		
646	1	F_CA_HYPOS	Hypospadias		R		
647	1	F_MED	Mother's Education		U		
648	1	F_WTGAIN	Weight Gain		U,R		
649-666		FILLER	Filler				
667	1	F_TOBAC	Tobacco Use		U		
668	1	F_MPCB	Month Prenatal Care Bega		R		
669	1	F_MPCB_U	Month Prenatal Care Bega	n	U		
670-683		FILLER	Filler		T.T.		
684 685-687	1	F_URF_DIABETES	Filler		U		
688	1	FILLER			U		
689	1		Chronic Hypertension Pregnancy Associated Hype	ontoncion	U		
690	1	F_URF_ECLAMP		ei tension	U		
691-702		FILLER	Filler		U		
703	1		Induction of Labor		U		
704	1	FILLER	Filler		C		
705	1		Tocolysis		U		
706-711		FILLER	Filler		-		
712	1	F_ULD_MECONIUN	4 Meconium		U		
713-717	5	FILLER	Filler				
718	1	F_ULD_PRECIP	Precipitous Labor		U		
719-720	2	FILLER	Filler				
721	1	F_ULD_BREECH	Breech		U		
722-729	8	FILLER	Filler				
730	1	F_U_VAGINAL	Vaginal		U		
731	1	F_U_VBAC	Vaginal after C-Section		U		
732	1	F_U_PRIMAC	Primary C-Section		U		

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Position		Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
	733	1	F_U_REPEAC	Repeat C-Section		U		
	734	1	F_U_FORCEP	Forceps		U		
	735	1	F_U_VACUUM	Vacuum		U		
	736-751	16	FILLER	Filler				
	752	1	F_UCA_ANEN	Anencephalus		U		
	753	1	F_UCA_SPINA	Spina Bifida / Meningocele	!	U		
	754-760	7	FILLER	Filler				
	761	1	F_UCA_OMPHALO	Omphalocele / Gastroschis	is	U		
	762-765	4	FILLER	Filler				
	766	1	F_UCA_CLEFTLP	Cleft Lip / Palate		U		
	767-770	4	FILLER	Filler				
	771	1	F_UCA_DOWNS	Downs Syndrome		U		
772-867		146	FILLER	Filler				
868		1	FLGND	Flag indicating records in bo	th numerator and d	enominato	r file	

1 Record in both files

Blank Record not in numerator file

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

86	9-871	3	FILLER	Filler		
87	2-874	3	AGED	Age at Death in Days	000-365	Number of days
87	5	1	AGER5	Infant age recode 5	1 2 3 4 5	Under 1 hour 1 – 23 hours 1 – 6 days 7 – 27 days (late neonatal) 28 days and over (postneonatal)
87	6-877	2	AGER22	Infant age recode 22	Blank 01 02 03 04 05 06 07	Age 1 year and over or not stated Under 1 hour (includes not stated hours and minutes) 1 – 23 hours 1 day (includes not stated days) 2 days 3 days 4 days 5 days 6 days

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Position	Le	en	Field	Description	Reporting Flag Position	Rev*	Values	Definition
							09	7-13 days
							10	14-20 days
							11	21 – 27 days
							12	1 month (includes not stated months)
							13	2 months
							14	3 months
							15	4 months
							16	5 months
							17	6 months
							18	7 months
							19	8 months
							20	9 months
							21	10 months
							22	11 months
878	1		MANNER	Manner of Death			1	Accident
							2	Suicide
							3	Homicide
							4	Pending investigation
							5	Could not determine
							6	Self-inflicted
							7	Natural
							Blank	Not specified
879	1		DISPO	Method of Disposition			В	Burial
							C	Cremation
							Ō	Other
							U	Unknown
							-	
880	1		AUTOPSY	Autopsy			Y	Yes
							N	No
							U	Unknown
881	1		FILLER	Filler				
882	1		PLACE	Place of injury for causes	W00-Y34, except Y	06	0	Home
				and Y07			1	Residential institution
							2	School, other institution and public administrative area
							3	Sports and athletics area
							4	Street and highway
							5	Trade and service area
							6	Industrial and construction area
							7	Farm
							8	Other Specified Places
	*IID In	chidae	data based on bot	h the 1000 Davision of the U.S.	Cartificate of Live	Dieth (une	oviced) on	d the 2003 Pavision of the U.S. Cartificate of Live Right

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						9 Blank	Unspecified place Cause other than W00-Y34, except Y06 and Y07
883	1	FILLER	Filler				
884-887	4	UC0D	ICD Code (10 th Revision See the <u>International Clas</u> Revision, Volume 1.) sification of Diseases,	, 1992		
888	1	FILLER	Filler				
889-891	3	UCODR130	130 Infant Cause Recode	e		001-158	Code Range
892	1	FILLER	Filler				
893-900	8	RECWT	Record Weight (no weig	hts computed for poss	essions fil	e) 1.XXXX	XXX
901-902	2	FILLER	Filler				
903-904	2	EANUM	Number of Entity-Axis	Conditions		00-20	Code range
905-1044	140	ENTITY	Entity-Axis Conditions Space has been provided to Each condition takes 7 po position will be blank. Re are blank in the unused ar	sitions in the record. To	Γhe 7 th		
			1 2 3 4 5 6 Position 2: Seque 1-7 Position 3 – 6: Condition	ne 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 ence of condition with Code range code a complete list of cod	in part/lin	e	

^{905-911 7 1}st Condition 912-918 7 2nd Condition

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
919-925	7		3 rd Condition				
926-932			4 th Condition				
933-939			5 th Condition				
940-946			6 th Condition				
947-953			7 th Condition				
954-960			8 th Condition				
961-967			9 th Condition				
968-974			10 th Condition				
975-981			11 th Condition				
982-988			12 th Condition				
989-995			13 th Condition				
996-1002			14 th Condition				
1003-100			15 th Condition				
1010-101			16 th Condition				
1017-102			17 th Condition				
1024-103			18 th Condition				
1031-103			19 th Condition				
1031-105			20 th Condition				
1045-1046	2	FILLER	Filler				
1047-1048	2	RANUM	Number of Record-Axis Co	onditions		00-20	Code range
1049-1148	100	RECORD	Record-Axis Conditions Space has been provided for conditions. Each condition to record. The 5 th position will do not have 20 conditions are	akes 5 positions in the blank. Records the	nat		
			Positions 1 – 4: Condition Co	ode complete list of code	es		
				omprete not or cour			
1049-105	53 5		1 st Condition				
1054-105	58 5		2 nd Condition				
1059-106	53 5		3 rd Condition				
1064-106	58 5		4 th Condition				
1069-107	73 5		5 th Condition				
1074-107	78 5		6 th Condition				
1079-108	33 5		7 th Condition				
1084-108	38 5		8 th Condition				
1089-109			9 th Condition				
1094-109	98 5		10 th Condition				
1099-110	3 5		11 th Condition				
1104-110	08 5		12 th Condition				
* I I D	Includes	data based on both t	he 1080 Revision of the U.S.	Cartificate of Live 1	Rirth (unra	wised) and	d the 2003 Pavis

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
1114 1119 1124 1129 1134 1139	-1113 5 -1118 5 -1123 5 -1128 5 -1133 5 -1138 5 -1143 5 -1148 5		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	RESIDENTS State and County of Occurrence and Residence are the
						2	same. INTRASTATE NONRESIDENTS State of Occurrence and Residence are the same, but
						3	County is different. INTERSTATE NONRESIDENTS State of Occurrence and Residence are different, but both
						4	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			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 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 County-equivalent is different.
* U.I	R Include	es data based on both	n the 1989 Revision of the U.S	. Certificate of Live	Birth (unr	evised), ar	nd the 2003 Revision of the U.S. Certificate of Live Birth

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
				Ç		3	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 the U.S.
						3	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 (FIP: (This item is available in the only, geographic codes are available in the U.S.file)	ne territory file			
						PR VI GU	Puerto Rico Virgin Islands Guam
1154-1156	3	CNTOCFIPD	County of Occurrence (F) Counties and county equiva- coextensive cities) are num State and identify each cou- a county, both the state and complete list of counties is Outline further back in this	alents (independent a abered alphabetically nty. (Note: To uniqual d county codes must be shown in the Geogra	within ea uely identi be used.)	fy A	
			(This item is available in the only, geographic codes are available in the U.S.file)				
						001-nnn 999	Code range County of less than 250,000
1157-1159	3	FILLER	Filler				
1160-1161	2	STRESFIPD	State of Residence (FIPS) (This item is available in the	ne territory file			
* U,R	Include (revise		h the 1989 Revision of the U.S	S. Certificate of Live	Birth (unr	evised), an	ad the 2003 Revision of the U.S. Certificate of Live Birth
U R			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
			only, geographic codes are available in the U.S.file)	e not			
			Territories			PR VI GU	Puerto Rico Virgin Islands Guam
			Puerto Rico Occurrence			PR US,ZZ	Puerto Rico Foreign residents
			Virgin Islands Occurrence			VI US, ZZ	Virgin Islands Foreign residents
			Guam Occurrence			GU US ZZ	Guam U.S. resident. Also considered a resident of Guam. Foreign residents
1162-1163	2	FILLER	Filler				
1164-1165	2	DRCNTY	State/Country of Residence (This item is available in the only, geographic codes are available in the U.S.file)	e territory 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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
1166-1167	3	CNTYRFPD	County of Residence (FIP Counties and county equivare coextensive cities) are numerach State and identify each identify a county, both the be used.) A complete list of Geographic Code Outline for	alents (independent as bered alphabetically in county. (Note: To us state and county code of counties is shown in	within uniquely es must n the		
			(This item is available in the 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	Population Size of County Based on the results of the (This item is available in th only, geographic codes are available in the U.S.file)	2000 Census ne territory file	ath		
						0 1	County of 1,000,000 or more County of 500,000 to 1,000,000
						2	County of 250,000 to 1,000,000 County of 250,000 to 500,000
						9	County of less than 250,000
						Z	Foreign residents
1183-1185	3	FILLER	Filler				
1186	1	HOSPD	Place of Death and Decen	dent's Status		1 2	Hospital, clinic or Medical Center – Inpatient Hospital, clinic or 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
						2	Monday
						3	Tuesday
* I I R	Include	es data based on both	the 1989 Revision of the U.S.	Certificate of Live 1	Rirth (unre	evised) an	d the 2003 Revision of the U.S. Certificate of Live Birth

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						4 5 6 7 9	Wednesday Thursday Friday Saturday Unknown
1188-1191	4	DTHYR	Death Year			2007	2007
1192-1257	66	FILLER	Filler				
1258-1259	2	DOD_MM	Month of Death			01 02 03 04 05 06 07 08 09 10 11	January February March April May June July August September October November December

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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
       T Sex Age Cause Title and ICD-10 Codes Included
Recode
001
                  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
010
                    Congenital syphilis (A50)
                    Gonococcal infection (A54)
011
012
                    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)
024
                    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
034
                    Short stature, not elsewhere classified (E34.3)
035
                    Nutritional deficiencies (E40-E64)
036
                    Cystic fibrosis (E84)
037
                    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
                  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
                  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
```

Influenza and pneumonia (J10-J18)

055

1

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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
       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
                  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
 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 (P00-P96)
        1
071
                    Newborn affected by maternal factors and by complications of pregnancy, labor and
                      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)
                        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 (PO2)
        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
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
                        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)
106
                      Bacterial sepsis of newborn (P36)
```

Omphalitis of newborn with or without mild hemorrhage (P38)

107

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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
       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
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)
                      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)
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Complications of medical and surgical care (Y40-Y84)

157

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) 03/30/11 Page 1

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, 2007 Period Data.

(Residence of birth is of the mother)

	Live b	rths		Infant		
			Unweig		Weighte	
State	Occurence	Residence	Occurence	Residence	Occurence	Residence
Jnited States /2	4324008	4316233	28715	28687	29182	29153
Alabama	63995	64804	648	644	648	644
Alaska	10955	11052	68	70	71	73
Arizona	103797	102981	691	689	709	707
Arkansas	40168	41378	309	319	313	323
California	567527	566414	2848	2836	2959	2947
Colorado	71225	70809	446	431	449	434
Connecticut	42265	41660	276	279	276	279
Delaware	12527	12170	91	93	91	93
Dist of Columbia	14824	8864	174	114	175	115
florida	239389	239165	1700	1693	1701	1694
Georgia	152068	151137	1202	1202	1210	1210
[awaii	19151	19134	120	124	123	127
daho	24436	25019	151	170	152	171
llinois	177450	180836	1143	1212	1160	1229
Indiana	90572	89864	671	677	675	681
Iowa	40988	40886	193	222	195	224
Cansas	42938	42004	330	336	330	336
Centucky	57424	59368	352	394	355	397
ouisiana	66336	66301	570	569	610	608
Maine	13974	14120	92	90	92	90
Marvland	74940	78095	578	625	579	626
Massachusetts	78723	77967	388	382	391	385
	124124	125261	979	990	983	994
Michigan						
Minnesota	73595	73735	410	409	411	410
Mississippi	45509	46491	436	462	438	464
Missouri	82823	81930	673	604	677	608
Montana	12400	12439	74	78	74	78
Jebraska	27117	26934	191	182	191	182
levada	40766	41181	244	246	257	259
New Hampshire	13937	14168	67	77	67	77
New Jersey	112883	116063	564	589	569	594
Jew Mexico	29905	30616	166	171	184	188
New York	126468	130125	729	769	748	787
New York City	128961	123326	671	621	671	622
North Carolina	132188	131037	1111	1112	1116	1117
Jorth Dakota	10152	8840	72	67	72	67
North Dakota Ohio	151342	150879	1185	1154	1204	1172
Oklahoma	54154	55065	442	452	452	463
regon	49873	49378	304	281	305	282
ennsylvania	149999	150713	1154	1129	1160	1135
hode Island	13192	12376	99	89	100	90
South Carolina	60204	62875	508	534	509	535
South Dakota	12815	12261	95	77	95	77
ennessee	92049	86711	789	717	792	720
'exas	414170	407625	2445	2441	2571	2567
Jtah	56319	55130	300	275	302	277
'ermont	6210	6513	34	33	34	33
irginia	107262	108884	823	840	825	842
ashington	88944	88978	433	433	434	434
				433 159		160
est Virginia	21917	21994	168		169	
/isconsin	71741	72784	466	467	466	467
yoming	7317	7893	42	58	42	58
Foreign Residents	-	7775	-	28	-	28
Puerto Rico	46727	46642	395	393	395	393
Virgin Islands	1780	1697	9	10	9	10
Guam	3491	3480	36	36	36	36

^{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.

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Documentation Table 2. Live births, infant deaths and infant mortality rates by race of mother, sex and birthweight of child: United States, 2007 Period Data.

Race of mother and sex To	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
All races										
Both sexes										
Live births	4,316,233 29,153 6.75	7,446 6,398 859.25	12,063 5,479 454.20	12,818 1,975 154.08	14,936 1,083 72.51	17,986 782 43.48	69,067 1,853 26.83	221,429 2,394 10.81	3,959,945 9,081 2.29	543 109 200.74
Male										
Live births	2,208,071 16,274 7.37	3,747 3,275 874.03	6,083 3,191 524.58	6,627 1,208 182.28	7,583 648 85.45	9,026 445 49.30	33,625 977 29.06	101,772 1,233 12.12	2,039,320 5,223 2.56	288 72 250.00
Female										
Live births	2,108,162 12,880 6.11	3,699 3,123 844.28	5,980 2,288 382.61	6,191 766 123.73	7,353 435 59.16	8,960 338 37.72	35,442 875 24.69	119,657 1,160 9.69	1,920,625 3,857 2.01	255 37 145.10
White										
Both sexes										
Live births	3,336,626 18,749 5.62	4,194 3,585 854.79	6,939 3,221 464.19	7,968 1,260 158.13	9,448 709 75.04	11,772 501 42.56	46,845 1,312 28.01	152,283 1,678 11.02	3,096,785 6,429 2.08	392 54 137.76
Male										
Live births	1,708,315 10,506 6.15	2,104 1,837 873.10	3,527 1,861 527.64	4,176 782 187.26	4,871 427 87.66	6,066 282 46.49	23,031 699 30.35	70,679 865 12.24	1,593,658 3,721 2.33	203 34 167.49
Female										
Live births	1,628,311 8,242 5.06	2,090 1,749 836.84	3,412 1,360 398.59	3,792 478 126.05	4,577 281 61.39	5,706 219 38.38	23,814 613 25.74	81,604 813 9.96	1,503,127 2,708 1.80	189 20 105.82
Black										
Both sexes										
Live births	675,676 8,732 12.92	2,872 2,479 863.16	4,549 1,965 431.96	4,224 620 146.78	4,619 313 67.76	5,080 213 41.93	17,703 439 24.80	52,869 588 11.12	583,639 2,067 3.54	121 48 396.69
Male										
Live births	343,279 4,830 14.07	1,441 1,253 869.54	2,275 1,172 515.16	2,125 366 172.24	2,268 189 83.33	2,398 119 49.62	8,320 229 27.52	23,537 304 12.92	300,842 1,164 3.87	73 35 479.45
Female										
Live births	332,397 3,902 11.74	1,431 1,226 856.74	2,274 793 348.72	2,099 254 121.01	2,351 125 53.17	2,682 94 35.05	9,383 210 22.38	29,332 284 9.68	282,797 903 3.19	48 14 *

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Documentation Table 2. Live births,infant deaths and infant mortality rates by race of mother, sex and birthweight of child: United States, 2007 Period Data.

Race of mother and sex To	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	49,443 456 9.22	71 56 788.73	115 64 556.52	124 16 *	138 20 144.93	189 18 *	710 28 39.44	2,359 33 13.99	45,729 220 4.81	8 1 *
Male										
Live births Infant deaths Infant mortality rate	25,177 255 10.13	36 31 861.11	50 32 640.00	73 8 *	70 9 *	89 13 *	370 10 *	1,082 19 *	23,404 131 5.60	3 1 *
Female										
Live births	24,266 201 8.28	35 24 685.71	65 33 507.69	51 8 *	68 10 *	100 4 *	340 18 *	1,277 15 *	22,325 89 3.99	5 0 *
Asian or Pacific Islander										
Both sexes										
Live births	254,488 1,216 4.78	309 278 899.68	460 228 495.65	502 78 155.38	731 42 57.46	945 51 53.97	3,809 74 19.43	13,918 95 6.83	233,792 365 1.56	22 6 *
Male										
Live births Infant deaths Infant mortality rate	131,300 682 5.19	166 155 933.73	231 126 545.45	253 52 205.53	374 22 58.82	473 31 65.54	1,904 40 21.01	6,474 46 7.11	121,416 208 1.71	9 3 *
Female										
Live births Infant deaths Infant mortality rate	123,188 534 4.33	143 124 867.13	229 102 445.41	249 26 104.42	357 19 *	472 20 42.37	1,905 34 17.85	7,444 49 6.58	112,376 157 1.40	13 3 *

^{*} 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

					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		33,391 13,286 397.89	54,661 2,419 44.25	68,914 1,111 16.12	389,636 2,890 7.42	2,346,479 6,194 2.64	816,262 1,611 1.97	357,809 744 2.08	242,235 635 2.62	6,846 264 38.56
Less then 2,500 grams										
Live births	355,745 19,963 56.12	32,067 13,275 413.98	41,117 2,294 55.79	45,109 921 20.42	119,180 1,634 13.71	93,943 1,293 13.76	11,760 208 17.69	5,422 115 21.21	6,343 119 18.76	804 104 129.35
Less then 500 grams										
Live births	7,446 6,398 859.25	7,125 6,181 867.51	208 137 658.65	19 15 *	18 12 *	13 7 *	2 2 *	3 3 *	- - -	58 41 706.90
500-749 grams										
Live births	12,063 5,479 454.20	10,514 5,054 480.69	1,351 353 261.29	54 16 *	44 13 *	37 11 *	8 5 *	4 3 *	11 2 *	40 20 500.00
750-999 grams										
Live births	12,818 1,975 154.08	7,947 1,449 182.33	4,216 429 101.76	294 45 153.06	117 17 *	149 13 *	26 5 *	13 - -	20 2 *	36 14 *
1,000-1,249 grams										
Live births	14,936 1,083 72.51	3,539 367 103.70	8,265 490 59.29	1,602 100 62.42	779 83 106.55	433 25 57.74	127 7 *	68 2 *	94 7 *	29 2 *
1,250-1,499 grams										
Live births	17,986 782 43.48	1,022 100 97.85	9,511 355 37.33	3,756 123 32.75	2,382 122 51.22	815 54 66.26	211 6 *	96 9 *	150 11 *	43 2 *
1,500-1,999 grams										
Live births	69,067 1,853 26.83	1,074 90 83.80	12,979 398 30.66	20,077 369 18.38	24,190 544 22.49	8,164 335 41.03	1,031 46 44.62	573 22 38.39	838 36 42.96	141 12 *
2,000-2,499 grams										
Live births	221,429 2,394 10.81	846 33 39.01	4,587 133 28.99	19,307 252 13.05	91,650 843 9.20	84,332 847 10.04	10,355 137 13.23	4,665 75 16.08	5,230 61 11.66	457 12 *
2,500-2,999 grams										
Live births	797,926 3,305 4.14	1,324 11 *	4,682 68 14.52	10,022 100 9.98	131,545 738 5.61	482,797 1,725 3.57	94,729 340 3.59	37,454 153 4.09	33,996 158 4.65	1,377 11 *
3,000-3,499 grams										
Live births	1,687,045 3,556 2.11	- - -	5,878 37 6.29	8,890 59 6.64	95,349 369 3.87	1,012,837 2,045 2.02	330,077 570 1.73	134,750 247 1.83	97,026 210 2.16	2,238 20 8.94
See footnotes at end of table	е.									

					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	1,144,002 1,729 1.51	- - -	2,984 20 6.70	3,979 16 *	35,160 111 3.16	603,726 892 1.48	287,655 380 1.32	130,810 177 1.35	78,267 119 1.52	1,421 13 *
4,000-4,499 grams										
Live births	286,218 392 1.37	- - -	- - -	791 13 *	7,146 32 4.48	132,937 193 1.45	80,123 96 1.20	42,180 40 0.95	22,657 18 *	384 1 *
4,500-4,999 grams										
Live births	40,218 75 1.86	- - -	- - -	109 - -	1,067 5 *	17,959 36 2.00	10,914 14 *	6,556 8 *	3,550 9 *	63 2 *
5,000 grams or more										
Live births	4,536 24 5.29	- - -	- - -	14 1 *	189 1 *	2,280 10 *	1,004 3 *	637 4 *	396 1 *	16 3 *
Not stated										
Live births	543 109 200.74	- - -	- - -	- - -	- - -	- - -	-	- - -	- - -	543 109 200.74
White										
Total										
Live births Infant deaths Infant mortality rate		19,621 7,748 394.88	36,734 1,558 42.41	48,356 768 15.88	286,001 1,981 6.93	1,818,792 4,388 2.41	644,754 1,160 1.80	285,852 535 1.87	191,464 451 2.36	5,052 161 31.87
Less then 2,500 grams										
Live births	239,449 12,266 51.23	18,807 7,740 411.55	27,198 1,467 53.94	31,516 631 20.02	82,918 1,126 13.58	62,736 932 14.86	7,836 144 18.38	3,623 83 22.91	4,296 76 17.69	519 66 127.17
Less then 500 grams										
Live births	4,194 3,585 854.79	3,999 3,462 865.72	121 74 611.57	14 11 *	12 7 *	5 1 *	2 2 *	3 3 *	- - -	38 26 684.21
500-749 grams										
Live births	6,939 3,221 464.19	5,984 2,970 496.32	825 198 240.00	33 12 *	29 8 *	25 10 *	4 2 *	3 3 *	9 2 *	27 15 *
750-999 grams										
Live births	7,968 1,260 158.13	4,826 914 189.39	2,687 279 103.83	202 34 168.32	83 12 *	112 10 *	16 4 *	12 - -	12 - -	18 7 *
1,000-1,249 grams										
Live births	9,448 709 75.04	2,216 248 111.91	5,196 315 60.62	1,030 60 58.25	519 53 102.12	280 19 *	79 5 *	45 1 *	61 5 *	22 2 *
See footnotes at end of table	٠.									

Birthweight					Gest	tation				
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
White										
1,250-1,499 grams										
Live births	11,772 501 42.56	625 66 105.60	6,263 228 36.40	2,446 74 30.25	1,565 78 49.84	537 40 74.49	151 3 *	59 5 *	98 6 *	28 1 *
1,500-1,999 grams										
Live births	46,845 1,312 28.01	630 61 96.83	9,034 278 30.77	13,766 254 18.45	16,241 391 24.07	5,431 246 45.30	714 35 49.02	371 12 *	572 27 47.20	86 9 *
2,000-2,499 grams										
Live births Infant deaths Infant mortality rate	152,283 1,678 11.02	527 19 *	3,072 96 31.25	14,025 186 13.26	64,469 577 8.95	56,346 605 10.74	6,870 93 13.54	3,130 58 18.53	3,544 36 10.16	300 6 *
2,500-2,999 grams										
Live births	563,026 2,225 3.95	814 8 *	3,073 50 16.27	6,820 75 11.00	96,236 501 5.21	339,336 1,155 3.40	65,529 223 3.40	26,292 101 3.84	23,972 103 4.30	954 9 *
3,000-3,499 grams										
Live births	1,300,414 2,520 1.94	- - -	4,168 27 6.48	6,274 43 6.85	72,569 246 3.39	782,936 1,436 1.83	253,274 415 1.64	104,279 179 1.72	75,270 159 2.11	1,644 15 *
3,500-3,999 grams										
Live births Infant deaths Infant mortality rate	948,391 1,305 1.38	- - -	2,295 13 *	3,029 8 *	27,542 82 2.98	502,144 683 1.36	238,458 284 1.19	108,849 132 1.21	64,927 91 1.40	1,147 11 *
4,000-4,499 grams										
Live births Infant deaths Infant mortality rate	246,400 304 1.23	- - -	- - -	618 10 *	5,742 22 3.83	114,347 147 1.29	69,302 79 1.14	36,476 31 0.85	19,588 13 *	327 1 *
4,500-4,999 grams										
Live births	34,786 58 1.67	- - -	- - -	89 - -	855 2 *	15,430 27 1.75	9,506 13 *	5,772 5 *	3,079 8 *	55 2 *
5,000 grams or more										
Live births	3,768 16 *	- - -	- - -	10 1 *	139 1 *	1,863 8 *	849 1 *	561 2 *	332 1 *	14 2 *
Not stated										
Live births	392 54 137.76	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	392 54 137.76
Black										
Total										
Live births	675,676 8,732 12.92	12,152 4,848 398.95	14,674 724 49.34	16,276 267 16.40	78,168 725 9.27	357,019 1,414 3.96	112,551 356 3.16	48,198 160 3.32	35,417 151 4.26	1,221 88 72.07
See footnotes at end of table										

Birthweight					Gest	tation				
	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	91,916 6,617 71.99	11,714 4,845 413.61	11,518 695 60.34	10,795 227 21.03	27,945 407 14.56	23,620 295 12.49	3,056 52 17.02	1,403 25 17.82	1,648 38 23.06	217 31 142.86
Less then 500 grams										
Live births	2,872 2,479 863.16	2,760 2,395 867.75	78 57 730.77	4 4 *	5 4 *	8 6 *	- - -	- - -	- - -	17 13 *
500-749 grams										
Live births	4,549 1,965 431.96	4,032 1,816 450.40	457 134 293.22	18 4 *	13 3 *	10 1 *	4 3 *	1 - -	2 - -	12 4 *
750-999 grams										
Live births	4,224 620 146.78	2,756 465 168.72	1,309 129 98.55	72 11 *	31 4 *	27 3 *	7 1 *	1 - -	7 2 *	14 5 *
1,000-1,249 grams										
Live births	4,619 313 67.76	1,162 106 91.22	2,563 143 55.79	458 31 67.69	214 23 107.48	125 5 *	40 2 *	23 1 *	30 2 *	4 - -
1,250-1,499 grams										
Live births	5,080 213 41.93	340 29 85.29	2,666 100 37.51	1,071 34 31.75	640 29 45.31	222 9 *	48 2 *	33 3 *	49 5 *	11 1 *
1,500-1,999 grams										
Live births	17,703 439 24.80	392 27 68.88	3,161 102 32.27	5,077 95 18.71	6,247 121 19.37	2,149 68 31.64	249 10 *	164 7 *	225 7 *	39 2 *
2,000-2,499 grams										
Live births	52,869 588 11.12	272 8 *	1,284 29 22.59	4,095 49 11.97	20,795 222 10.68	21,079 203 9.63	2,708 34 12.56	1,181 14 *	1,335 22 16.48	120 6 *
2,500-2,999 grams										
Live births	167,917 882 5.25	438 3 *	1,312 15 *	2,575 21 8.16	26,478 193 7.29	100,869 459 4.55	20,415 99 4.85	8,026 40 4.98	7,495 50 6.67	309 2 *
3,000-3,499 grams										
Live births	260,166 798 3.07	- - -	1,318 7 *	2,054 11 *	17,029 96 5.64	153,141 460 3.00	50,495 127 2.52	20,526 52 2.53	15,231 39 2.56	372 5 *
3,500-3,999 grams										
Live births	126,195 308 2.44	- - -	526 7 *	710 6 *	5,532 20 3.62	65,420 157 2.40	30,969 67 2.16	14,072 30 2.13	8,804 20 2.27	162 - -
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										
4,000-4,499 grams										
Live births	25,402 60 2.36	- - -	- - -	125 1 *	1,005 6 *	12,025 34 2.83	6,638 9 *	3,628 7 *	1,948 3 *	33 - -
4,500-4,999 grams										
Live births	3,475 13 *	- - -	- - -	15 - -	139 3 *	1,669 7 *	886 1 *	503 2 *	258 - -	5 - -
5,000 grams or more										
Live births	484 5 *	- - -	- - -	2 - -	40 - -	275 2 *	92 - -	40 2 *	33 - -	2 1 *
Not stated										
Live births	121 48 396.69	- - -	- - -	- - -	-	- - -	- - -	- - -	- - -	121 48 396.69
American Indian¹										
Total										
Live births	49,443 456 9.22	341 137 401.76	710 28 39.44	912 26 28.51	4,907 70 14.27	25,542 131 5.13	9,212 33 3.58	4,247 16 *	3,485 13 *	87 3 *
Less then 2,500 grams										
Live births	3,706 235 63.41	318 137 430.82	456 27 59.21	507 21 41.42	1,196 27 22.58	946 15 *	120 4 *	70 2 *	77 - -	16 2 *
Less then 500 grams										
Live births Infant deaths Infant mortality rate	71 56 788.73	65 53 815.38	2 1 *	1 - -	-	- - -	- - -	- -	- - -	3 2 *
500-749 grams										
Live births	115 64 556.52	103 60 582.52	12 4 *	- - -	- - -	- - -	- - -	- - -	- - -	- - -
750-999 grams										
Live births	124 16 *	78 12 *	38 4 *	6 - -	- - -	1 - -	1 - -	- - -	- - -	- - -
1,000-1,249 grams										
Live births	138 20 144.93	28 7 *	78 7 *	19 4 *	6 1 *	4 - -	2 - -	- - -	- - -	1 - -
1,250-1,499 grams										
Live births	189 18 *	14 3 *	104 1 *	26 5 *	30 5 *	10 2 *	4 1 *	- - -	1 - -	- - -

See footnotes at end of table.

_					Gest	ation				
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 Indian¹										
1,500-1,999 grams										
Live births	710 28 39.44	14 - -	167 8 *	198 3 *	201 10 *	91 6 *	12 - -	9 1 *	11 - -	7 - -
2,000-2,499 grams										
Live births	2,359 33 13.99	16 2 *	55 1 *	257 8 *	959 10 *	840 7 *	101 3 *	61 1 *	65 - -	5 - -
2,500-2,999 grams										
Live births	8,417 75 8.91	23 - -	82 1 *	148 3 *	1,521 23 15.12	4,764 38 7.98	1,000 7 *	395 2 *	467 1 *	17 - -
3,000-3,499 grams										
Live births Infant deaths Infant mortality rate	18,380 81 4.41	- - -	114 - -	151 1 *	1,347 12 *	10,522 46 4.37	3,399 7 *	1,531 7 *	1,288 7 *	28 - -
3,500-3,999 grams										
Live births	14,198 51 3.59	- - -	58 - -	89 1 *	648 6 *	7,171 26 3.63	3,430 9 *	1,584 3 *	1,205 5 *	13 - -
4,000-4,499 grams										
Live births	3,940 8 *	- - -	- - -	15 - -	163 2 *	1,787 3 *	1,066 3 *	543 - -	362 - -	4 -
4,500-4,999 grams										
Live births	692 3 *	- - -	- - -	2 - -	29 - -	298 2 *	176 - -	113 1 *	73 - -	1 - -
5,000 grams or more										
Live births	102 2 *	- - -	- - -	- - -	3 - -	54 - -	21 2 *	11 - -	13 - -	- - -
Not stated										
Live births	8 1 *	- - -	- - -	- - -	-	- - -	- - -	- - -	- - -	8 1 *
Asian or Pacific Islander										
Total										
Live births	254,488 1,216 4.78	1,277 552 432.26	2,543 109 42.86	3,370 50 14.84	20,560 115 5.59	145,126 262 1.81	49,745 62 1.25	19,512 34 1.74	11,869 20 1.69	486 12 *
Less then 2,500 grams										
Live births	20,674 845 40.87	1,228 552 449.51	1,945 105 53.98	2,291 42 18.33	7,121 75 10.53	6,641 51 7.68	748 7 *	326 5 *	322 4 *	52 4 *
See footnotes at end of table										

Birthweight —					Gest	ation				
	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	309 278 899.68	301 272 903.65	7 5 *	- - -	1 1 *	- - -	- - -	- - -	- - -	- - -
500-749 grams										
Live births	460 228 495.65	395 208 526.58	57 16 *	3 - -	2 2 *	2 - -	- - -	- - -	- -	1 1 *
750-999 grams										
Live births Infant deaths Infant mortality rate	502 78 155.38	287 58 202.09	182 16 *	14 - -	3 1 *	9 - -	2 - -	- - -	1 - -	4 2 *
1,000-1,249 grams										
Live births Infant deaths Infant mortality rate	731 42 57.46	133 6 *	428 25 58.41	95 5 *	40 5 *	24 1 *	6 - -	- - -	3 - -	2 -
1,250-1,499 grams										
Live births Infant deaths Infant mortality rate	945 51 53.97	43 2 *	478 25 52.30	213 10 *	147 10 *	46 2 *	8 - -	4 1 *	2 - -	4
1,500-1,999 grams										
Live births Infant deaths Infant mortality rate	3,809 74 19.43	38 2 *	617 10 *	1,036 18 *	1,501 23 15.32	493 15 *	56 1 *	29 2 *	30 2 *	9 1 *
2,000-2,499 grams										
Live births Infant deaths Infant mortality rate	13,918 95 6.83	31 3 *	176 7 *	930 9 *	5,427 33 6.08	6,067 33 5.44	676 6 *	293 2 *	286 2 *	32 - -
2,500-2,999 grams										
Live births Infant deaths Infant mortality rate	58,566 123 2.10	49 - -	215 2 *	479 1 *	7,310 21 2.87	37,828 73 1.93	7,785 11 *	2,741 9 *	2,062 5 *	97 - -
3,000-3,499 grams										
Live births Infant deaths Infant mortality rate	108,085 157 1.45	- - -	278 2 *	411 4 *	4,404	66,238 103 1.55	22,909 20 0.87	8,414 8 *	5,237 5 *	194 - -
3,500-3,999 grams										
Live births	55,218 64 1.16	- - -	105 - -	151 1 *	1,438 3 *	28,991 25 0.86	14,798 19 *	6,305 11 *	3,331 2 *	99 2 *
4,000-4,499 grams										
Live births Infant deaths Infant mortality rate	10,476 20 1.91	- - -	- - -	33 2 *	236 1 *	4,778 9 *	3,117 4 *	1,533 1 *	759 2 *	20 - -
See footnotes at end of table.										

06/09/11 Page 8 Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age: United states, 2007 period data

Birthweight	Gestation										
	Total	<28 Weeks	28-31 Weeks	32-33 Weeks	34-36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated	
Asian or Pacific Islander											
4,500-4,999 grams											
Live births Infant deaths Infant mortality rate	1,265 1 *	- - -	- - -	3 - -	44 - -	562 - -	346 - -	168 - -	140 1 *	2 -	
5,000 grams or more											
Live births	182 - -	- - -	- - -	2 - -	7 - -	88 - -	42 -	25 - -	18 - -	- - -	
Not stated											
Live births Infant deaths Infant mortality rate	22 6 *	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	22 6 *	

^{-/} 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.

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

Birthweight and race of mother	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Total (all birthweights)	4,316,233	29,153 6.75	19,094 4.42	15,139 3.51	3,956 0.92	10,059 2.33
Less than 2,500 grams	355,745	19,963 56.12	16,005 44.99	13,287 37.35	2,717 7.64	3,959 11.13
Less than 500 grams	7,446	6,398 859.25	6,216 834.81	6,022 808.76	194 26.05	182 24.44
500-749 grams	12,063	5,479 454.20	4,580 379.67	3,659 303.32	921 76.35	898 74.44
750-999 grams	12,818	1,975 154.08	1,424 111.09	957 74.66	468 36.51	550 42.91
1,000-1,249 grams	14,936	1,083 72.51	770 51.55	553 37.02	217 14.53	313 20.96
1,250-1,499 grams	17,986	782 43.48	533 29.63	383 21.29	149 8.28	250 13.90
1,500-1,999 grams	69,067	1,853 26.83	1,213 17.56	900 13.03	314 4.55	639 9.25
2,000-2,499 grams	221,429	2,394 10.81	1,268 5.73	813 3.67	455 2.05	1,126 5.09
2,500-2,999 grams	797,926	3,305 4.14	1,234 1.55	741 0.93	493 0.62	2,072 2.60
3,000-3,499 grams	1,687,045	3,556 2.11	1,077 0.64	584 0.35	493 0.29	2,479 1.47
3,500-3,999 grams	1,144,002	1,729 1.51	488 0.43	295 0.26	193 0.17	1,241 1.08
4,000-4,499 grams	286,218	392 1.37	136 0.48	89 0.31	46 0.16	256 0.89
4,500-4,999 grams	40,218	75 1.86	30 0.75	23 0.57	7 *	45 1.12
5,000 grams or more	4,536	24 5.29	16 *	13	3 *	7 *
Not statedRate	543	109 200.74	108 198.90	105 193.37	3	1 *

See footnotes at end of table.

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

Birthweight and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Total (all birthweights)	3,336,626	18,749 5.62	12,261 3.67	9,677 2.90	2,585 0.77	6,487 1.94
Less than 2,500 grams	239,449	12,266 51.23	9,974 41.65	8,274 34.55	1,701 7.10	2,291 9.57
Less than 500 grams	4,194	3,585 854.79	3,511 837.15	3,411 813.30	101 24.08	74 17.64
500-749 grams	6,939	3,221 464.19	2,788 401.79	2,256 325.12	532 76.67	433 62.40
750-999 grams	7,968	1,260 158.13	948 118.98	642 80.57	306 38.40	312 39.16
1,000-1,249 grams	9,448	709 75.04	533 56.41	399 42.23	133 14.08	176 18.63
1,250-1,499 grams	11,772	501 42.56	362 30.75	275 23.36	87 7.39	139 11.81
1,500-1,999 grams	46,845	1,312 28.01	890 19.00	668 14.26	221 4.72	422 9.01
2,000-2,499 grams	152,283	1,678 11.02	943 6.19	622 4.08	321 2.11	735 4.83
2,500-2,999 grams	563,026	2,225 3.95	890 1.58	560 0.99	330 0.59	1,335 2.37
3,000-3,499 grams	1,300,414	2,520 1.94	810 0.62	450 0.35	360 0.28	1,710 1.31
3,500-3,999 grams	948,391	1,305 1.38	386 0.41	238 0.25	148 0.16	919 0.97
4,000-4,499 grams	246,400	304 1.23	111 0.45	74 0.30	37 0.15	193 0.78
4,500-4,999 grams	34,786	58 1.67	24 0.69	19	5 *	33 0.95
5,000 grams or more	3,768	16 *	12	10	2	4 *
Not statedRate	392	54 137.76	53 135.20	51 130.10	2 *	1 *

See footnotes at end of table.

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2007 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]

Distribution and some of marks	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Black						
Total (all birthweights)	675,676	8,732 12.92	5,748 8.51	4,594 6.80	1,154 1.71	2,984 4.42
Less than 2,500 grams	91,916	6,617 71.99	5,155 56.08	4,277 46.53	878 9.55	1,462 15.91
Less than 500 grams	2,872	2,479 863.16	2,383 829.74	2,302 801.53	81 28.20	96 33.43
500-749 grams	4,549	1,965 431.96	1,547 340.07	1,201 264.01	346 76.06	419 92.11
750-999 grams	4,224	620 146.78	405 95.88	259 61.32	146 34.56	216 51.14
1,000-1,249 grams	4,619	313 67.76	196 42.43	126 27.28	70 15.15	117 25.33
1,250-1,499 grams	5,080	213 41.93	123 24.21	72 14.17	51 10.04	90 17.72
1,500-1,999 grams	17,703	439 24.80	250 14.12	176 9.94	74 4.18	189 10.68
2,000-2,499 grams	52,869	588 11.12	251 4.75	142 2.69	109 2.06	337 6.37
2,500-2,999 grams	167,917	882 5.25	260 1.55	131 0.78	129 0.77	622 3.70
3,000-3,499 grams	260,166	798 3.07	188 0.72	84 0.32	104 0.40	610 2.34
3,500-3,999 grams	126,195	308 2.44	73 0.58	40 0.32	33 0.26	235 1.86
4,000-4,499 grams	25,402	60 2.36	15 *	8	7 *	44 1.73
4,500-4,999 grams	3,475	13	5 *	3	2	8 *
5,000 grams or more	484	5 *	3	2 *	1 *	2 *
Not statedRate	121	48 396.69	48 396.69	48 396.69	- -	-

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2007 period data -Cont

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

Birthweight and race of mother	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
American Indian¹						
Total (all birthweights)	49,443	456 9.22	225 4.55	166 3.36	59 1.19	231 4.67
Less than 2,500 grams	3,706	235 63.41	170 45.87	136 36.70	34 9.17	65 17.54
Less than 500 grams	71	56 788.73	52 732.39	48 676.06	4	3 *
500-749 grams	115	64 556.52	54 469.57	45 391.30	9	10
750-999 grams	124	16 *	12	8	4	4 *
1,000-1,249 grams	138	20 144.93	11	7 *	4 *	8 *
1,250-1,499 grams	189	18	11	9	2 *	6 *
1,500-1,999 grams	710	28 39.44	14	8	6	14
2,000-2,499 grams	2,359	33 13.99	14	10	4	19
2,500-2,999 grams	8,417	75 8.91	22 2.61	12	10	52 6.18
3,000-3,499 grams	18,380	81 4.41	20 1.09	8	11	62 3.37
3,500-3,999 grams	14,198	51 3.59	8	4 *	4	43 3.03
4,000-4,499 grams	3,940	8	2	2	- -	6 *
4,500-4,999 grams	692	3	1	1	- -	2 *
5,000 grams or more	102	2	1	1 *	- -	1
Not statedRate	8	1	1	1 *	- -	-

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2007 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]

Distribution and some of marks	Live		Total	Early	Late	Post-
Birthweight and race of mother	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Asian or Pacific Islander						
Total (all birthweights)	254,488	1,216 4.78	860 3.38	701 2.75	158 0.62	357 1.40
Less than 2,500 grams	20,674	845 40.87	705 34.10	600 29.02	105 5.08	141 6.82
Less than 500 grams	309	278 899.68	269 870.55	261 844.66	8 *	9
500-749 grams	460	228 495.65	191 415.22	158 343.48	33 71.74	37 80.43
750-999 grams	502	78 155.38	59 117.53	47 93.63	12	18
1,000-1,249 grams	731	42 57.46	30 41.04	21 28.73	9	12
1,250-1,499 grams	945	51 53.97	36 38.10	27 28.57	9	15
1,500-1,999 grams	3,809	74 19.43	59 15.49	47 12.34	12	14
2,000-2,499 grams	13,918	95 6.83	60 4.31	39 2.80	21 1.51	35 2.51
2,500-2,999 grams	58,566	123 2.10	62 1.06	38 0.65	24 0.41	62 1.06
3,000-3,499 grams	108,085	157 1.45	59 0.55	41 0.38	18	97 0.90
3,500-3,999 grams	55,218	64 1.16	20 0.36	12	8 *	44 0.80
4,000-4,499 grams	10,476	20 1.91	7 *	5 *	2	12
4,500-4,999 grams	1,265	1	-	-	- -	1 *
5,000 grams or more	182	- -	-	- -	- -	-
Not statedRate	22	6 *	6 *	5 *	1	-

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
,	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
All birthweights						
All Causes	4,316,233	29,153 675.4	19,094 442.4	15,139 350.7	3,956 91.7	
Congenital malformations (Q00-Q99)	•	5,823 134.9	4,091 94.8	3,129 72.5	962 22.3	
Short gestation and low birthweight nec (P07)		4,863 112.7	4,746 110.0	4,615 106.9	132 3.1	
Sudden infant death syndrome (R95)		2,461 57.0	207 4.8	27 0.6	180 4.2	
Maternal complications of pregnancy (P01)	•	1,773 41.1	1,754 40.6	1,733 40.2	20 0.5	
Accidents (unintentional injures) (V01-X59)		1,283 29.7	122 2.8	28 0.6	94	
Complications of placenta, cord, membranes (PO2)		1,120 25.9	1,108 25.7	1,065 24.7	43 1.0	
Bacterial sepsis of newborn (P36)		828 19.2	782 18.1	325 7.5	457 10.6	
Respiratory distress of newborn (P22)		800 18.5	780 18.1	604 14.0	176 4.1	
Diseases of the circulatory system (I00-I99)		621 14.4	134 3.1	70 1.6	64 1.5	
Neonatal hemorrhage (P50-P52, P54)		604 14.0	593 13.7	414 9.6	179 4.1	
All other causes		8,977 208.0	4,778 110.7	3,130 72.5	1,648 38.2	
Less then 2,500 grams						
All Causes	355,745	19,963 5,611.6	16,005 4,499.0	13,287 3,735.0		3,959 1,112.9
Congenital malformations (Q00-Q99)		3,594 1,010.3	2,808 789.3	2,283 641.8	525 147.6	
Short gestation and low birthweight nec (P07)		4,775 1,342.3	4,660 1,309.9	4,531 1,273.7		
Sudden infant death syndrome (R95)		501 140.8	41 11.5	3 *	38 10.7	
Maternal complications of pregnancy (P01)	•	1,722 484.1	1,702 478.4	1,682 472.8		
Accidents (unintentional injures) (V01-X59)		224 63.0	25 7.0	8 *	17	
Complications of placenta, cord, membranes (PO2)		1,037 291.5	1,027 288.7	993 279.1	33 9.3	
Bacterial sepsis of newborn (P36)		705 198.2	662 186.1	267 75.1		
Respiratory distress of newborn (P22)		780 219.3	762 214.2	591 166.1	171 48.1	18
Diseases of the circulatory system (IOO-I99)		298 83.8	69 19.4	42 11.8	27 7.6	230

[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			Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Neonatal hemorrhage (P50-P52, P54)		558 156.9	551 154.9	389 109.3	162 45.5	
All other causes		5,769 1,621.7	3,697 1,039.2	2,498 702.2		
2,500 grams or more						
All Causes	.3,959,945	9,081 229.3	2,981 75.3	1,746 44.1		
Congenital malformations (Q00-Q99)		2,225 56.2	1,279 32.3	843 21.3		
Short gestation and low birthweight nec (P07)		36 0.9	34 0.9	32 0.8		
Sudden infant death syndrome (R95)		1,959 49.5	165 4.2	24	142 3.6	
Maternal complications of pregnancy (P01)		33 0.8	33 0.8	33 0.8	-	· _
Accidents (unintentional injures) (V01-X59)		1,059 26.7	97 2.4	19	77	
Complications of placenta, cord, membranes (PO2)		80 2.0	78 2.0	68 1.7	10	
Bacterial sepsis of newborn (P36)		122 3.1	119 3.0	57 1.4	61 1.5	
Respiratory distress of newborn (P22)		20 0.5	18	13	£	
Diseases of the circulatory system (IOO-I99)		323 8.2	65 1.6	28 0.7	37	
Neonatal hemorrhage (P50-P52, P54)		45 1.1	41 1.0	24	17	
All other causes		3,179 80.3	1,053 26.6	605 15.3	448 11.3	
Not stated birthweight						
All Causes	. 543	109 20,073.7	108 19,889.5	105 19,337.0	3	3 1
Congenital malformations (Q00-Q99)		* 4	* 4	*	3 *	1 _
Short gestation and low birthweight nec (P07)		52 9,576.4	52 9,576.4	52 9 , 576.4		. <u>-</u>
Sudden infant death syndrome (R95)		-	_ _	- -	-	· _
Maternal complications of pregnancy (P01)		18	18	18	- -	. <u>-</u>
Accidents (unintentional injures) (V01-X59)		-	_ _	- -	-	
Complications of placenta, cord, membranes (PO2)		3	3	*	3 -	_ -
Bacterial sepsis of newborn (P36)		2	2	*	1 ,	1

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
,	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races						
Respiratory distress of newborn (P22)		_	-	-	-	- -
Diseases of the circulatory system (IOO-I99)		-	-	-	-	_ -
Neonatal hemorrhage (P50-P52, P54)	•	, 1 *	,1 *	*	. –	
All other causes		29 5,340.7	27 4,972.4	26 4,788.2	1	1 *
White						
All birthweights						
All Causes3	,336,626	18,749 561.9	12,261 367.5	9,677 290.0	2,585 77.5	
Congenital malformations (Q00-Q99)	•	4,343 130.2	3,113 93.3	2,415 72.4	699 20.9	
Short gestation and low birthweight nec (PO7)	•	2,673 80.1	2,620 78.5	2,545 76.3	76 2.3	
Sudden infant death syndrome (R95)		1,634 49.0	134 4.0	16	118 3.5	
Maternal complications of pregnancy (P01)		1,053 31.6	1,044 31.3	1,032 30.9	12	
Accidents (unintentional injures) (V01-X59)		822 24.6	80 2.4	20 0.6	60 1.8	
Complications of placenta, cord, membranes (PO2)		717 21.5	710 21.3	684 20.5	26 0.8	
Bacterial sepsis of newborn (P36)		506 15.2	482 14.4	189 5.7	293 8.8	
Respiratory distress of newborn (P22)		490 14.7	479 14.4	368 11.0	112 3.4	
Diseases of the circulatory system (IOO-I99)		396 11.9	88 2.6	45 1.3	43 1.3	
Neonatal hemorrhage (P50-P52, P54)		417 12.5	410 12.3	299 9.0	111 3.3	
All other causes		5,697 170.7	3,101 92.9	2,065 61.9	1,035 31.0	
Less then 2,500 grams						
All Causes	239,449	12,266 5,122.6	9,974 4,165.4	8,274 3,455.4	1,701 710.4	
Congenital malformations (Q00-Q99)		2,636 1,100.9	2,110 881.2	1,741 727.1	370 154.5	
Short gestation and low birthweight nec (P07)		2,628 1,097.5	2,577 1,076.2	2,503 1,045.3	74 30.9	
Sudden infant death syndrome (R95)		285 119.0	27 11.3	2 *	25 10.4	
Maternal complications of pregnancy (P01)	·	1,016 424.3	1,007 420.5	995 415.5	12	
Con fortunation of and of table						

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Accidents (unintentional injures) (V01-X59)		125 52.2	16	5 *		
Complications of placenta, cord, membranes (PO2)	•	655 273.5	649 271.0	631 263.5		
Bacterial sepsis of newborn (P36)	•	423 176.7	401 167.5	148 61.8		
Respiratory distress of newborn (P22)	•	475 198.4	465 194.2	357 149.1		
Diseases of the circulatory system (IOO-I99)		181 75.6	43 18.0	27 11.3		
Neonatal hemorrhage (P50-P52, P54)	-	379 158.3	375 156.6	277 115.7		
All other causes		3,461 1,445.4	2,304 962.2	1,587 662.8		,
2,500 grams or more						
All Causes	096,785	6,429 207.6	2,234 72.1	1,352 43.7		,
Congenital malformations (Q00-Q99)	-	1,703 55.0	1,000 32.3	672 21.7		
Short gestation and low birthweight nec (P07)		25 0.8	23 0.7	21 0.7		
Sudden infant death syndrome (R95)		1,349 43.6	107 3.5	14	93 3.(
Maternal complications of pregnancy (P01)		26 0.8	26 0.8	26 0.8	-	-
Accidents (unintentional injures) (V01-X59)		697 22.5	63 2.0	14	49 1.6	
Complications of placenta, cord, membranes (PO2)		61 2.0	60 1.9	52 1.7		
Bacterial sepsis of newborn (P36)		83 2.7	81 2.6	41 1.3		
Respiratory distress of newborn (P22)		15 *	14	10	4	
Diseases of the circulatory system (IOO-I99)		214 6.9	46 1.5	18	27	
Neonatal hemorrhage (P50-P52, P54)		37 1.2	33 1.1	20 0.6		
All other causes	•	2,219 71.7	781 25.2	463 15.0	318 10.3	
Not stated birthweight						
All Causes	392		53 13,520.4	51 13,010.2		1 *
Congenital malformations (Q00-Q99)		3	3		2	1 -
Short gestation and low birthweight nec (P07)		20 5,102.0	20 5,102.0	20		-
See feetnetes at and of table						

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
White						
Sudden infant death syndrome (R95)	•	_	-	-	-	- -
Maternal complications of pregnancy (P01)		11	11	11		-
Accidents (unintentional injures) (V01-X59)	•	_	-	-		-
Complications of placenta, cord, membranes (PO2)		, 1 *	,1 *	*	L .	_ ·
Bacterial sepsis of newborn (P36)		_	-	-		-
Respiratory distress of newborn (P22)		_	-	-		-
Diseases of the circulatory system (IOO-I99)		_	-	-		-
Neonatal hemorrhage (P50-P52, P54)	•	, 1 *	1 *	*		_ ·
All other causes		17 *	16	15 *		1 *
Black						
All birthweights						
All Causes	675 , 676	8,732 1,292.3	5,748 850.7	4,594 679.9	1,154 170.8	
Congenital malformations (Q00-Q99)	•	1,105 163.5	714 105.7	514 76.1	200 29.0	
Short gestation and low birthweight nec (P07)	·	1,931 285.8	1,871 276.9	1,819 269.2	5. 7.	
Sudden infant death syndrome (R95)		701 103.7	66 9.8	9	5. 8.3	
Maternal complications of pregnancy (P01)		625 92.5	614 90.9	606 89.7	:	3 10
Accidents (unintentional injures) (V01-X59)		395 58.5	34 5.0	6	28 4.3	
Complications of placenta, cord, membranes (PO2)		348 51.5	344 50.9	330 48.8	14	
Bacterial sepsis of newborn (P36)		276 40.8	256 37.9	116 17.2	14: 20.	
Respiratory distress of newborn (P22)	•	276 40.8	267 39.5	212 31.4	5! 8.:	
Diseases of the circulatory system (IOO-I99)	·	178 26.3	32 4.7	14	1′	
Neonatal hemorrhage (P50-P52, P54)		152 22.5	147 21.8	94 13.9	5: 7.8	
All other causes		2,746 406.4	1,403 207.6	873 129.2	530 78.4	
Less then 2,500 grams						
All Causes	91,916	6,617 7,199.0	5,155 5,608.4	4,277 4,653.2	878 955.2	1,462 2 1,590.6

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Black						
Congenital malformations (Q00-Q99)		735 799.6	520 565.7	397 431.9		
Short gestation and low birthweight nec (P07)		1,894 2,060.6	1,834 1,995.3	1,783 1,939.8		
Sudden infant death syndrome (R95)		197 214.3	14	1		
Maternal complications of pregnancy (P01)		614 668.0	604 657.1	596 648.4		
Accidents (unintentional injures) (V01-X59)		89 96.8	7	3	4	
Complications of placenta, cord, membranes (PO2)		332 361.2	329 357.9	316 343.8		3 3
Bacterial sepsis of newborn (P36)	•	245 266.5	227 247.0	103 112.1	125	5 18
Respiratory distress of newborn (P22)		272 295.9	264 287.2	209	55	5 8
Diseases of the circulatory system (IOO-I99)		99	19	10	Ç	9 80
Neonatal hemorrhage (P50-P52, P54)	•	107.7	143	93) 3
All other causes		158.8 1,994	155.6 1,193	101.2 767	426	801
2,500 grams or more		2,169.4	1,297.9	834.5	463.5	871.4
All Causes	583,639	2,067	545	269	276	1,522
		354.2	93.4	46.1	47.3	260.8
Congenital malformations (Q00-Q99)	•	370 63.4	193 33.1	117 20.0		
Short gestation and low birthweight nec (P07)		9	9	*	9 -	-
Sudden infant death syndrome (R95)		505 86.5	51 8.7	8 *		
Maternal complications of pregnancy (P01)		4 *	*	*	4 -	_
Accidents (unintentional injures) (V01-X59)		307 52.6	27 4.6	3 *		
Complications of placenta, cord, membranes (PO2)		14	13	12	1	. 1
Bacterial sepsis of newborn (P36)	-	29 5.0	28 4.8	12	16	
Respiratory distress of newborn (P22)		4	3 *		3	_ - - *
Diseases of the circulatory system (IOO-I99)		79	12	4 *	8	3 66
Neonatal hemorrhage (P50-P52, P54)		13.5	. 4			3
All other causes		741	199	95		
		127.0	34.1	16.3	17.8	93.0

Documentation Table 5

[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	121		48 39,669.4	48 39,669.4		
Congenital malformations (Q00-Q99)		-	-	-		
Short gestation and low birthweight nec (P07)		28 23,140.5	28 23,140.5	28 23,140.5		
Sudden infant death syndrome (R95)		-	- -	- -		
Maternal complications of pregnancy (P01)		6 *	6 *	6		
Accidents (unintentional injures) (V01-X59)		- -	- -	- -		
Complications of placenta, cord, membranes (P02)	•	2 *	2	2 *		
Bacterial sepsis of newborn (P36)		1	1	1 *		
Respiratory distress of newborn (P22)		- -	- -	-		
Diseases of the circulatory system (IOO-I99)		- -	- -	-		
Neonatal hemorrhage (P50-P52, P54)		- -	- -	-		
All other causes		11	11	11		
American Indian¹						
All birthweights						
All Causes	49,443	456 922.3	225 455.1	166 335.7		
Congenital malformations (Q00-Q99)		91 184.1	60 121.4	49 99.1		1 33 * 62.
Short gestation and low birthweight nec (P07)	•	47 95.1	45 91.0	43 87.0		2 2
Sudden infant death syndrome (R95)		70 141.6	4 *	-		4 66 * 133.5
Maternal complications of pregnancy (P01)	•	17 *	17 *	17		
Accidents (unintentional injures) (V01-X59)		34 68.8	3 *	1 *		2 31 * 62.
Complications of placenta, cord, membranes (PO2)		13	13	13		
Bacterial sepsis of newborn (P36)		18	16	9		7 2
Respiratory distress of newborn (P22)		. 3	3 *	*	2	1

[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 1	Neonatal
American Indian ¹						
Diseases of the circulatory system (IOO-I99)	•	12	3 *	2 *	1 *	
Neonatal hemorrhage (P50-P52, P54)		, 6 *	, 6 *	*	1 *	5 - -
All other causes	•	144 291.2	54 109.2	29 58.7	26 52.6	
Less then 2,500 grams						
All Causes	3,706	235 6,341.1	170 4,587.2	136 3,669.7		65 1,753.9
Congenital malformations (Q00-Q99)		51 1,376.1	40 1,079.3	35 944.4		11
Short gestation and low birthweight nec (P07)		47 1,268.2	45 1,214.2	43 1,160.3		2 *
Sudden infant death syndrome (R95)		11	-	-	- -	11
Maternal complications of pregnancy (P01)		15 *	15	15 *	- -	<u>-</u> -
Accidents (unintentional injures) (V01-X59)	•	, 6 *	,1 *	_	- 1 *	5 *
Complications of placenta, cord, membranes (PO2)		12	12	12	-	- -
Bacterial sepsis of newborn (P36)		16 *	14	9		2
Respiratory distress of newborn (P22)		2	2	2 *	2 -	 -
Diseases of the circulatory system (IOO-I99)		2	,1 *	*	1 -	- 1
Neonatal hemorrhage (P50-P52, P54)		, 6 *	, 6 *	*	1 *	5 - -
All other causes		66 1,780.9	34 917.4	18		32 863.5
2,500 grams or more						
All Causes	45 , 729	220 481.1	54 118.1	29 63.4	26 56.9	166 363.0
Congenital malformations (Q00-Q99)		40 87.5	20 43.7	14	6	20 43.7
Short gestation and low birthweight nec (P07)		-	- -	- -	-	- -
Sudden infant death syndrome (R95)		59 129.0	4 *	-	4 *	55 120.3
Maternal complications of pregnancy (P01)		, 1 *	,1 *	*	1 -	 -
Accidents (unintentional injures) (V01-X59)		28 61.2	2	1 *		26 56.9
Complications of placenta, cord, membranes (P02)	•	1	,1 *	1	1 -	 -
Con fortunate of and of table						

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
American Indian ¹						
Bacterial sepsis of newborn (P36)		2	2	-	2	2 -
Respiratory distress of newborn (P22)	•	1	1	- -	-	L -
Diseases of the circulatory system (IOO-I99)		10	2	1 *	- - 1	L 8
Neonatal hemorrhage (P50-P52, P54)		- -	-	<u>-</u>	-	-
All other causes	•	78 170.6	20 43.7	10	1(57 124.6
Not stated birthweight						
All Causes	8	1	1	1 *	-	-
Congenital malformations (Q00-Q99)		- -	-	<u>-</u>	-	-
Short gestation and low birthweight nec (P07)		-	-	<u>-</u>	-	-
Sudden infant death syndrome (R95)		- -	-	- -	-	-
Maternal complications of pregnancy (P01)		1	1	1 *	-	-
Accidents (unintentional injures) (V01-X59)		- -	- -	- -	-	-
Complications of placenta, cord, membranes (PO2)		- -	-	- -	-	-
Bacterial sepsis of newborn (P36)		- -	- -	- -	-	-
Respiratory distress of newborn (P22)	•	-	-	- -	-	-
Diseases of the circulatory system (IOO-I99)	•	- -	- -	- -	-	-
Neonatal hemorrhage (P50-P52, P54)		_ _	- -	-	-	-
All other causes	•	-	- -	_ _	-	-
Asian or Pacific Islander						
All birthweights						
All Causes	254,488	1,216 477.8	860 337.9	701 275.5	158 62.3	
Congenital malformations (Q00-Q99)		284 111.6	203 79.8	151 59.3		
Short gestation and low birthweight nec (P07)		212 83.3	210 82.5	208 81.7		2 2
Sudden infant death syndrome (R95)		55 21.6	3 *	1 *		2 52 20.4
See footnotes at end of table.						

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
Asian or Pacific Islander						
Maternal complications of pregnancy (P01)		78 30.6	78 30.6	78 30.6		
Accidents (unintentional injures) (V01-X59)		32 12.6	5 *	1 *	4	
Complications of placenta, cord, membranes (P02)	•	41 16.1	40 15.7	37 14.5		
Bacterial sepsis of newborn (P36)	•	28 11.0	27 10.6	11	16	
Respiratory distress of newborn (P22)		31 12.2	31 12.2	23 9.0	8	
Diseases of the circulatory system (IOO-I99)		35 13.8	11	8 *	3	
Neonatal hemorrhage (P50-P52, P54)		30 11.8	30 11.8	20 7.9	10	-
All other causes		390 153.2	221 86.8	163 64.1		
Less then 2,500 grams						
All Causes	20,674	845 4,087.3	705 3,410.1	600 2,902.2		
Congenital malformations (Q00-Q99)		171 827.1	138 667.5	111 536.9	27 130.6	
Short gestation and low birthweight nec (P07)		206 996.4	204 986.7	202 977.1		
Sudden infant death syndrome (R95)		8	-	- -	-	8 *
Maternal complications of pregnancy (P01)		76 367.6	76 367.6	76 367.6		- -
Accidents (unintentional injures) (V01-X59)		4 *	1	- -	1	
Complications of placenta, cord, membranes (P02)		37 179.0	36 174.1	34 164.5		
Bacterial sepsis of newborn (P36)		20 96.7	19	7	12	
Respiratory distress of newborn (P22)		31 149.9	31 149.9	23 111.3	3	
Diseases of the circulatory system (IOO-I99)		16	6	4 *	2	
Neonatal hemorrhage (P50-P52, P54)		27 130.6	27 130.6	18	9	
All other causes		249 1,204.4	167 807.8	125 604.6		
2,500 grams or more		,				
All Causes	233,792	365 156.1	149 63.7	96 41.1		
Congenital malformations (Q00-Q99)		112 47.9	65 27.8	40 17.1	25 10.7	47
See footnotes at end of table						

[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)		47 20.1	3 *	1 *		2 44 * 18.8
Maternal complications of pregnancy (P01)		2	2	2 *		
Accidents (unintentional injures) (V01-X59)		27 11.5	4 *	1 *		3 23 * 9.8
Complications of placenta, cord, membranes (P02)	•	4 *	4 *	3 *		1 -
Bacterial sepsis of newborn (P36)	•	7 *	7 *	4 *		3 -
Respiratory distress of newborn (P22)	•	-	-	_ _		
Diseases of the circulatory system (IOO-I99)	•	19	5 *	4 *		1 14
Neonatal hemorrhage (P50-P52, P54)		3	3	2 *		1 -
All other causes		141 60.3	54 23.1	37 15.8		6 87 * 37.2
Not stated birthweight						
All Causes	22	6 *	6	5 *		1 -
Congenital malformations (Q00-Q99)		1	1	1		
Short gestation and low birthweight nec (P07)		4	4 *	4 *		
Sudden infant death syndrome (R95)		- -	-	- -		
Maternal complications of pregnancy (P01)		- -	- -	- -		
Accidents (unintentional injures) (V01-X59)	•	- -	-	- -		
Complications of placenta, cord, membranes (PO2)		- -	-	_		
Bacterial sepsis of newborn (P36)		1	1	_		1 -
Respiratory distress of newborn (P22)	•	- -	- -	- -		
Diseases of the circulatory system (IOO-I99)	•	- -	- -	- -		
Neonatal hemorrhage (P50-P52, P54)		- -	- -	- -		
All other causes		- -	-	-		-

^{*/}Figure does not meet standard of reliability or precision; based on fewer than 20 death in the numerator. -/ Quality zero. $^1/$ Includes Aleuts and Eskimos.

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2007

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
United States /2					
Total	467	364	338	26	103
White	304	233	214	19	71
Black	127	106	100	6	21
Black	127	100	100	0	ZI
Alabama					
Total	-	_	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Alaska					
Total	3	1	1	_	2
White	-	_	_	_	-
Black	-	-	-	-	-
Arizona					
Total	21	12	10	2	9
White	15	10	8	2	5
Black	_	_	_	-	_
Arkansas	_	_	_		_
Total				-	
White	-	_	_	-	-
Black	-	-	-	-	-
California					
Total	128	108	101	7	20
White	93	79	73	6	14
Black	20	17	16	1	3
Colorado					
Total	_	_	_	_	_
White	_	_	_	_	_
Black	_	-	_	_	-
Company to the					
Connecticut					
Total	-	-	_	-	-
White	-	-	-	-	-
Black	_	-	-	-	-
Delaware					
Total	-	_	_	_	-
White	-	_	-	_	-
Black	-	-	-	-	-
Dist of Columbia					
Total	1	1	1	_	_
White	1	1	1	_	_
Black	_	-	-	-	-
Elorido					
Florida					
Total	-	_	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Georgia					
Total	7	6	4	2	1
White	4	3	3	-	1
Black	3	3	1	2	-
Hawaii					
Hawaii Total	_	_	_	_	_
White	_	_	_	_	
Black	_	=	=	_	=
DIGCV	-	_	-	_	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2007

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
daho					
Total	-	-	-	-	-
White	-	-	_	_	-
Black	-	-	-	-	-
llinois					
Total	17	14	13	1	3
White	7	7	6	1	_
Black	10	7	7	-	3
ndiana					
Total	2	2	2	-	-
White	1	1	1	_	-
Black	1	1	1	-	-
owa					
Total	_	_	_	_	_
White	_	_	_	_	_
Black	_	_	_	_	_
DIACK	-	-	-	-	-
ansas					
Total	-	-	-	-	-
White	-	_	_	-	-
Black	-	-	-	-	-
entucky					
Total	3	2	2	_	1
				-	
White	3	2	2		1
Black	-	-	-	-	-
ouisiana					
Total	39	29	28	1	10
White	12	10	10	_	2
Black	25	18	17	1	7
aine					
Total	_	_	_	_	_
White	_	_	_	_	_
Black	-	-	-	-	-
aryland					
Total	1	_	_	_	1
White	1	-	-	-	1
Black	-	-	-	-	-
assachusetts					
Total	3	2	2	_	1
White	1	_	_	_	1
Black	2	2	2	-	_
1 ala 1 aran					
ichigan			_	_	
Total	4	4	3	1	-
White	3	3	3	-	-
Black	1	1	-	1	-
innesota					
Total	_	_	_	_	_
White	_	_	_	_	_
Black	_	_		_	- -
DIACK	-	-	-	-	_
ississippi					
Total	1	-	-	-	1
	1 1	- -	-	-	1 1

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2007

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Missouri					
Total	3	3	3	-	-
White	1	1	1	-	-
Black	2	2	2	-	-
Montana					
Total	-	-	-	_	-
White	-	-	-	-	-
Black	_	-	-	_	-
Nebraska					
Total	-	_	_	-	-
White	-	-	-	-	-
Black	_	-	-	-	-
Nevada					
Total	9	9	9	-	-
White	3	3	3	-	-
Black	3	3	3	-	-
New Hampshire					
Total	-	_	_	-	-
White	-	-	-	-	-
Black	_	-	-	_	-
New Jersey					
Total	4	4	4	-	-
White	1	1	1	-	
Black	2	2	2	_	-
New Mexico					_
Total	3	2	2	-	1
White	3	2	2	-	1
Black	-	-	-	-	-
New York					•
Total	14	12	12	_	2
White	10	8	8	_	2
Black	4	4	4	_	-
New York City		_			_
Total	6	5	2	3	1
White	5 1	4 1	1 1	3	1
Black	1	1	1	-	-
North Carolina					
Total	1	1	1	-	-
White	1	1	1	-	-
Black	-	-	-	-	-
North Dakota					
Total	-	-	-	-	-
White	-	-	_	-	-
Black	-	-	-	-	-
Ohio					
Total	18	16	16	-	2
White	7	5	5	-	2
Black	11	11	11	-	-
Oklahoma					
Total	2	2	2	-	-
White	1	1	1	-	-
Black	1	1	1	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2007

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Oregon					
Total	-		-	-	-
White	-		-	-	-
Black	-	-	-	-	-
Pennsylvania					
Total	5	3	3	_	2
White	1	1	1	_	-
Black	4	2	2	-	2
Rhode Island					
Total	_	_	_	_	_
White	_	_	_	_	_
Black		-	-	-	-
South Carolina					
Total	_	_	_	_	_
White	_	_	_	_	
Black	_	-			<u>-</u>
DIGCK	-	-	-	-	-
South Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Tennessee					
Total	-	-	-	_	-
White	-	_	_	_	-
Black	-	-	-	-	-
Texas					
Total	165	123	114	9	42
White	124	89	82	7	35
Black	35	29	28	1	6
Utah					
Total	4	1	1	_	3
White	4	1	1	_	3
Black	-	_	_	_	-
Vermont					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Virginia					
Total	2	2	2	-	-
White	-	_	_	_	-
Black	2	2	2	-	-
Washington					
Total	1	_	_	_	1
White	1	_	_	_	1
Black	_	-	-	-	-
West Virginia					
West Virginia Total	_	_	_	_	_
White	_	_		-	-
White Black	_	-		-	- -
Diden	_	_	_	_	
Wisconsin					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2007

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

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

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