

# Public Use Data File Documentation

## 2005 Linked Birth/Infant Death Birth Cohort Data Set

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# 2005 Linked Birth/Infant Death Birth Cohort Data Set

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[Infant mortality statistics from the 2005 Period Linked Birth/Infant Death Data Set](#)

[User's Guide for the 2005 Natality File](#)

[Deaths: Final data for 2005 \(see Technical Notes\)](#)

## Introduction

This documentation is for the 2005 birth cohort linked birth/infant death data set (linked file). Previous birth cohort linked files were released for data years 1983-91. Beginning with 1995 data, the linked file was released in two different formats - period data and birth cohort data.

*Period data* - The numerator for the 2005 period linked file consists of all infant deaths occurring in 2005 linked to their corresponding birth certificates, whether the birth occurred in 2004 or 2005. The denominator for this data set is all births occurring in 2005.

*Birth cohort data* - The numerator of the 2005 birth cohort linked file consists of deaths to infants born in 2005 linked to their corresponding birth certificates, whether the death occurred in 2005 or 2006. The denominator for this data set is all births occurring in 2005.

For most purposes, differences between the birth cohort and period linked files are negligible. However, birth cohort files are preferred for multivariate and some other types of detailed analysis because they follow a given cohort of births for an entire year to ascertain their mortality experience. This is generally considered to be a more robust methodology than the period file, which is essentially cross-sectional in nature.

The 2005 birth cohort linked file includes several separate data files. The first file includes linked birth and death certificate data for all US infants born in 2005 who died before their first birthday - 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 file. The third file is the 2005 NCHS natality file for the US with a few minor modifications - referred to as the denominator-plus file. These same three data files are also available for Puerto Rico, the Virgin Islands, and Guam (there were no 2005 unlinked records for these three reporting areas).

For the denominator-plus file, selected variables from the numerator file have been added to the denominator file to facilitate processing. These variables include age at death (and recodes), underlying cause of death (and the 130-cause recode), manner of death, method of disposition, place of injury, autopsy, and record weight. These variables are the most widely used variables from the numerator file. When the number of variables required from the numerator file is limited, the denominator-plus file may be used by itself for ease of programming. Infant death identification numbers are also included, so that the same infant can be uniquely identified and matched between the numerator and denominator-plus files.

## **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/vital\\_certs\\_rev.htm](http://www.cdc.gov/nchs/vital_certs_rev.htm)). Twelve states, Florida, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York (but not New York City), Pennsylvania, South Carolina, Tennessee, Texas, and Washington, and Puerto Rico implemented the revised certificate by January 1, 2005 and one during 2005 (Vermont). Where comparable, revised data are combined with data from the remaining states and the District of Columbia. (Revised data are denoted by “R;” unrevised data are denoted by “U” in the “Rev” column of the record layout.) 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 seventeen states (California, Connecticut, Florida, Idaho, Kansas, Michigan, Montana, Nebraska, New Hampshire, New Jersey, New York, Oklahoma, South Carolina, South Dakota, Utah, Washington, and Wyoming), which implemented the 2003 revision of the U.S. Standard Certificate of Death by January 1, 2005 and for the District of Columbia which revised during 2005. 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. The 2003 revision is described in detail elsewhere. (See the 2003 Revision website at: [http://www.cdc.gov/nchs/vital\\_certs\\_rev.htm](http://www.cdc.gov/nchs/vital_certs_rev.htm)).

### **Incomplete National Reporting - Using Reporting Flags**

As a result of the phased transition to the 2003 U.S. Standard Certificate of Live Birth, the 2005 cohort 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. 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. 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. 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 not reported), and “1” (item reported). 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 2005 cohort 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. For further information please contact us at [births@cdc.gov](mailto:births@cdc.gov) or (301)458-4111.

### **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, and are shown separately. Accordingly, use of the reporting flag for this item will produce 2005 data for the month prenatal care began for the revised states which implemented the revised certificate by January 1<sup>st</sup>, 2005.

#### Sample SAS program

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

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

#### **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*. For 2005 birth certificates, the following areas reported multiple race data for all or part of the year: California, Florida, Hawaii, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York (but not New York City), Michigan (partial), Minnesota, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Vermont, and Washington.

For 2005, multiple race data was reported for all or part of the year on the death certificates of California, Connecticut, the District of Columbia (partial), Florida, Hawaii, Idaho, Kansas, Maine, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New York, Oklahoma, South Carolina, South Dakota, Utah, Washington, Wisconsin and Wyoming. In order to provide uniformity and comparability of the data before all or most of the data are available in the new multiple-race format, it was necessary to “bridge” the responses of those for whom more than one

race was reported (multiple race) to one, single race. See the “Technical Notes” of “Births: Final Data for 2005” and “Deaths: Final Data for 2005” which are included in this User’s Guide for more information.

## **Weighting**

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

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

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

## **Birthweight**

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

## **Methodology**

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

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

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

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

To initiate processing, NCHS obtained matching birth certificate numbers from states for all infant deaths that occurred in their jurisdiction. We use 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 are incorporated, and a final, national linked file is 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 2005 cohort linked file 1.3% of all infant death records could not be linked to their corresponding birth certificates. Unlinked records are included in a separate data file in this data set. The unlinked record file uses the same record layout as the numerator file of linked birth and infant death records. However, except as noted below, locations reserved for information from the matching birth certificate are blank since no matching birth certificate could be found for these records. The sex field contains the sex of infant as reported on the death certificate, rather than the sex of infant from the birth certificate, which is not available. The race field contains the race of the decedent as reported on the death certificate rather than the race of mother as reported on the birth certificate as is the case with the linked record file. The race of mother on the birth certificate is generally considered to be more accurate than the race information from the death certificate (see section on Race and Hispanic origin in "Deaths: Final Data for 2005" included in this User's Guide). 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**

While the overall percent linked for infant deaths in the 2005 cohort file is 98.7%, there are differences in percent linked by certain variables. These differences have important implications for how the data is analyzed.

Table 1 below shows the percent of infant deaths linked by state of occurrence of death. While many states link all of their infant deaths, linkage rates for some states are below the national average. Note in particular the percent linked for California (96.5), Louisiana (92.5), Nevada (97.7), Ohio (97.2), and Texas (95.9). 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.

In general, a slightly higher percentage of postneonatal (28 days to under 1 year) than neonatal (less than 28 days) deaths were linked (99.0 and 98.5, respectively.) While the weighting protocol has been designed to correct for possible bias due to variations in match rates by characteristics, no statistical method can correct perfectly for data limitations. Therefore, variations in the percent of records linked should be taken into consideration when comparing infant mortality rates by detailed characteristics.

United States	98.7	Nebraska	100.0
Alabama	100.0	Nevada	97.7
Alaska	98.3	New Hampshire	100.0
Arizona	98.3	New Jersey	99.2
Arkansas	100.0	New Mexico	99.4
California	96.5	New York State	99.0
Colorado	99.6	New York City	99.6
Connecticut	100.0	North Carolina	99.8
Delaware	100.0	North Dakota	100.0
District of Columbia	100.0	Ohio	97.2
Florida	99.6	Oklahoma	99.5
Georgia	99.9	Oregon	98.2
Hawaii	100.0	Pennsylvania	99.6
Idaho	100.0	Rhode Island	100.0
Illinois	98.2	South Carolina	99.4
Indiana	99.4	South Dakota	100.0
Iowa	100.0	Tennessee	100.0
Kansas	100.0	Texas	95.9
Kentucky	99.4	Utah	99.6
Louisiana	92.5	Vermont	100.0
Maine	100.0	Virginia	100.0
Maryland	100.0	Washington	99.8
Massachusetts	100.0	West Virginia	100.0
Michigan	100.0	Wisconsin	100.0
Minnesota	99.7	Wyoming	100.0
Mississippi	99.8	Puerto Rico	100.0
Missouri	99.9	Virgin Islands	100.0
Montana	100.0	Guam	100.0



## Demographic and Medical Classification

The documents listed below describe in detail the procedures employed for demographic classification on both the birth and death records and medical classification on death records. These documents, while not absolutely essential to the proper interpretation of the data for a number of general applications, should nevertheless be studied carefully prior to any detailed analysis of demographic or medical data variables. In particular, there are a number of exceptions to the ICD rules in multiple cause-of-death coding which, if not treated properly, may result in faulty analysis of the data. Volumes 1, 2 and 3 of the ICD-10 may be purchased from the World Health Organization (WHO) Publication Center USA, 49 Sheridan Avenue, Albany, New York, 12210 (<http://www.who.int/whosis/icd10/index.html>). Many of the instruction manuals listed below are available electronically on the NCHS website at: <http://www.cdc.gov/nchs/about/major/dvs/im.htm>. In addition, users who do not already have access to these documents may request them from the Chief, Mortality Medical Classification Branch, Division of Vital Statistics, National Center for Health Statistics, P.O. Box 12214, Research Triangle Park, North Carolina 27709. The technical appendix for natality and the mortality final report for 2004 included in this User's Guide 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, 2007. 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, 2007. 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, 2007. NCHS Instruction Manual, Part 2c. Hyattsville, Maryland: Public Health Service.
- D. National Center for Health Statistics. Specifications for U.S. Standard Certificate of Birth – 2003 Revision. (replaces NCHS Instruction Manual, Part 3a). Available at: <http://www.cdc.gov/nchs/about/major/dvs/im.htm>.
- E. National Center for Health Statistics. Specifications for U.S. Standard Certificate of Death – 2003 Revision. (replaces NCHS Instruction Manual, Part 4). Available at: <http://www.cdc.gov/nchs/about/major/dvs/im.htm>.
- 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.

Also see: [http://www.cdc.gov/nchs/vital\\_certs\\_rev.htm](http://www.cdc.gov/nchs/vital_certs_rev.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. For example, the increase in Necrotizing enterocolitis of newborn (ICD-10 code P77) among infants for 2005 is largely due to a coding rule change (specifically, ICD-10 code P60 can be due to ICD-10 codes P77-P78). The result of the rule change is that Necrotizing enterocolitis of newborn is selected as the underlying cause more often than was previously the case.

### **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.

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

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

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

that relate to modifying and combining categories are seldom applicable to entity coding (except where provided NCHS Instruction Manual Part 2b).

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

### **Record Axis Codes**

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

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

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

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

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

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

cause of death classification thereby facilitating joint analysis of these variables. A potential disadvantage of record axis data is that some detail is sacrificed in a number of the linkages.

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

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

### **Additional Information**

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

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

Linked Birth/Infant Death Data Set: 2005 Birth Cohort Data

I. Numerator File:

United States

A. Record count:	27,968
B. Record length:	1259
C. Data counts:	a. By occurrence: 27,968 b. By residence: 27,893 c. To foreign residents: 75

Territories

A. Record count:	510
B. Record length:	1259

II. Denominator File:

United States

A. Record count:	4,145,887
B. Record length:	900
C. Data counts:	a. By occurrence: 4,145,887 b. By residence: 4,138,577 c. To foreign residents: 7,310

Territories

A. Record count:	55,359
B. Record length:	900

III. Unlinked File:

United States

A. Record count:	364
B. Record length:	1259
C. Data counts:	a. By occurrence: 364 b. By residence: 360 c. To foreign residents: 4

Territories

A. Record count:	No unlinked records
B. Record length:	NA



## Linked 2005 Cohort Selected Data Elements and Locations

Data Items	Denominator Plus File	Numerator File		Unlinked File
		Birth	Death	
<b>General</b>				
Infant death number	10-14	10-14	--	--
Year of birth	15-18	15-18	--	15-18*
Year of death	--	--	1188-91	1188-91
Resident status	138	138	1151	1151
Record weight	893-900	893-900	--	--
Match status	868	868	--	--
<b>Infant</b>				
Age at death	--	--	872-77	872-77 <sup>+</sup>
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	--	--
Birth place	42, 59	42,59	--	--
Day of week, birth/death	29	29	1187	1187
Month, birth/death	19-20	19-20	1258-59	1258-59
<b>Mother</b>				
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	--	--
<b>Father</b>				
Age	182-87	182-87	--	--
Race	188-91, 199-200	188-91, 199-200	--	--
Hispanic origin	195-96	195-96	--	--
<b>Pregnancy items</b>				
Total birth order	215-17	215-17	--	--
Live birth order	210-12	210-12	--	--
Month prenatal care				

began	245-7, 256-9	245-7, 256-9	--	--
Number of prenatal visits	270-3	270-3	--	--
<b>Medical and health data</b>				
Method of delivery	395-401	395-401	--	--
Medical risk factors	313-19	313-19	--	--
	328-44	328-44	--	--
Tobacco	284-94	284-94	--	--
Alcohol	295-98	295-98	--	--
Weight gain during preg	276-78	276-78	--	--
Obstetric procedures	351-61	351-61	--	--
Complications and Characteristics of L/D	365-89	365-89	--	--
Abnormal conditions	476-91	476-91	--	--
Congenital anomalies	492-525	492-525	--	--
Underlying cause of death	--	--	884-87	884-87
130 infant cause recode	--	--	889-91	889-91
Multiple conditions	--	--	903-1148	903-1148
<b>Other items</b>				
Residence reporting				
Flags	569-773	569-773	--	--
Late record flag	9	9	--	--
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
1-6	6	FILLER	<b>Filler</b>				
7	1	REVISION	<b>Revision</b>		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	<b>Filler</b>				
9	1	LATEREC	<b>Late Record Flag</b>		U,R	0	Not late record
						1	Late record
						2	Late Vermont record
10-14	5	SEQNUM	<b>Infant Death Number</b> This number uniquely identifies the same infant in the numerator and denominator-plus files.			00001- nnnnn	
15-18	4	DOB_YY	<b>Birth Year</b>		U,R	2005	2005
19-20	2	DOB_MM	<b>Birth Month</b>		U,R	01	January
						02	February
						03	March
						04	April
						05	May
						06	June
						07	July
						08	August
						09	September
						10	October
						11	November
						12	December
21-28	8	FILLER	<b>Filler</b>				
29	1	DOB_WK	<b>Weekday</b>		U,R	1	Sunday
						2	Monday
						3	Tuesday
						4	Wednesday
						5	Thursday
						6	Friday
						7	Saturday

\* 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
30-31	2	OSTATE	<b>Occurrence Territory</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R		
			<u>Outlying Areas of the U.S.</u>			GU PR VI	Guam Puerto Rico Virgin Islands
32-36	5	FILLER	<b>Filler</b>				
37-39	3	OCNTYFIPS	<b>Occurrence County</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R		
			<u>Puerto Rico</u>			127 999	San Juan County less than 250,000
			<u>Other Outlying Areas of the U.S.</u>			000 999	No county level geography County less than 250,000
40	1	OCNTYPOP	<b>Occurrence County Pop</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R	0 1 2 9	County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County less than 250,000
41	1	BFACIL	<b>Birth Place (Revised)</b>	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	<b>Birth Place</b>		U,R	1 2 3 4	Hospital Freestanding Birthing Center Clinic / Doctor's Office Residence
* 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
						5 9	Other Unknown
43-58	16	FILLER	<b>Filler</b>				
59	1	BFACIL3	<b>Birth Place Recode</b>		U,R	1 2 3	In Hospital Not in Hospital Unknown or Not Stated
60-86	27	FILLER	<b>Filler</b>				
87	1	MAGE_IMPFLG	<b>Mother's Age Imputed</b>		U,R	Blank 1	Age not imputed Age imputed
88	1	MAGE_REPFLG	<b>Reported Age of Mother Flag</b>		U,R	Blank 1	Reported age not used Reported age used
89-90	2	MAGER	<b>Mother's Age Recode 41</b>		U,R	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35	10 – 12 years 13 years 14 years 15 years 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

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

\* 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
94-95	2	MBCNTRY	<b>Mother's Birth Country</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)		R**	AA-ZZ	A complete list is shown in the Geographic Code Outline.
** Also includes unrevised territories/possessions that use new geographic coding.							
96-108	13	FILLER	<b>Filler</b>				
109-110	2	MRTERR	<b>Mother's Residence</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R		
						GU	Guam
						PR	Puerto Rico
						VI	Virgin Islands
						CC	Canada
						CU	Cuba
						MX	Mexico
						US	United States
						XX	Not Applicable
						ZZ	Not Classifiable
111-113	3	FILLER	<b>Filler</b>				
114-116	3	MRCNTY	<b>Mother's County of residence</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			<u>Puerto Rico</u>			127	San Juan
						999	County of less than 250,000 or foreign resident
			<u>Other Outlying Areas of the US</u>			000	No county level geography
						999	County of less than 250,000 or foreign resident
117-131	15	FILLER	<b>Filler</b>				
132	1	RCNTY_POP	<b>Population of Residence County</b> (This item is available in the territory file		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
			only, geographic codes are not available in the U.S.file)			0 1 2 9 Z	County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County less than 250,000 Foreign resident
133-136	4	FILLER	<b>Filler</b>				
137	1	RECTYPE	<b>Record Type</b> (This item is available in the territory file only, geographic codes are not 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.
138	1	RESTATUS	<b>Residence Status</b> <u>United States</u>		U,R	1 2 3 4	RESIDENT: State and county of occurrence and residence are the same. INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different. INTERSTATE NONRESIDENT: State of occurrence and residence are different but both are one of the 50 US states or District of Columbia. FOREIGN RESIDENT: The state of residence is not one of the 50 US states or District of Columbia.
			<u>Outlying areas of the US</u>			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	<b>Mother's Bridged Race</b> Includes only states reporting multiple race. Codes 01-14 used for individuals reporting only one race. Codes 21-24 used for individuals reporting more than one race that have been bridged to a single race.		R**	01 02 03 04 05	White – single race Black – single race American Indian/Alaska Native – single race Asian Indian – single race Chinese – 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).
			U				Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.
			R				Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.



Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			Code 24 also used for individuals reporting more than one Asian/Pacific Islander group; see "Technical Appendix."			06 07 08 09 10 11 12 13 14 21 22 23 24 Blank	Filipino – single race Japanese – single race Korean – single race Vietnamese – single race Other Asian – single race Hawaiian – single race Guamanian – single race Samoan – single race Other Pacific Islander – single race White – bridged multiple race Black – bridged multiple race American Indian / Alaska Native – bridged multiple race Asian / Pacific Islander – bridged multiple race Not on certificate
			** Also includes unrevised states that report multiple race.				
141-142	2	MRACE	<b>Mother's Race</b> Includes only states exclusively reporting single race. Some areas report additional Asian or Pacific Islander (API) codes for race. Codes 18-68 replace former code 08 for these areas. Code 78 replaces former code 08 for all other areas.		U		
			<u>United States</u>			01 02 03 04 05 06 07 18 28 38 48 58 68 78 Blank	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
* 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
			<u>Puerto Rico</u>			01 02 00 Blank	White Black Other races Not on certificate
			<u>Guam</u>			01 02 03 04 05 06 07 08 58 Blank	White Black American Indian / Alaska Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Guamanian Not on certificate
			<u>All other Outlying Areas of the US</u>			01 02 03 04 05 06 07 08 Blank	White Black American Indian / Alaska Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Other Asian or Pacific Islander Not on certificate
143	1	MRACEREC	<b>Mother's Race Recode</b> Includes individuals reporting only one race and individuals reporting more than one race bridged to a single race.		U,R		
			<u>United States and all Outlying Areas of the United States except Puerto Rico</u>			1 2 3 4	White Black American Indian / Alaskan Native Asian / Pacific Islander
			<u>Puerto Rico</u>			1 2 0	White Black Other (not classified as White or Black)

\* 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
144	1	MRACEIMP	<b>Mother's Race Imputed Flag</b>		U,R	Blank 1 2	Mother's race not imputed Unknown race imputed All other races, formerly coded 09, imputed.
145-147	3	FILLER	<b>Filler</b>				
148	1	UMHISP	<b>Mother's Hispanic Origin</b>	569	U,R	0 1 2 3 4 5 9	Non-Hispanic Mexican Puerto Rican Cuban Central American Other and Unknown Hispanic Origin unknown or not stated
149	1	MRACEHISP	<b>Mother's Race/Hispanic Origin</b>	569	U,R	1 2 3 4 5 6 7 8 9	Mexican Puerto Rican Cuban Central or South American Other and Unknown Hispanic Non-Hispanic White Non-Hispanic Black Non-Hispanic Other Races Origin unknown or not stated
150-152	3	FILLER	<b>Filler</b>				
153	1	MAR	<b>Mother's Marital Status</b>		U,R	1 2 9  1 2 3 9	<u>United States and all Outlying Areas of the US except Puerto Rico</u> Yes No Unknown or not Stated  <u>Puerto Rico</u> Yes Unmarried parents living together Unmarried parents not living together Unknown or not stated
154	1	MAR_IMP	<b>Mother's Marital Status Imputed Flag</b>		U,R	Blank 1	Marital Status not imputed Marital Status imputed

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

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
155	1	MEDUC	<b>Mother's Educ –Revised</b>	571	R	1 2 3 4 5 6 7 8 9 Blank	8 <sup>th</sup> grade or less 9 <sup>th</sup> through 12 <sup>th</sup> grade with no diploma High school graduate or GED completed Some college credit, but not a degree. Associate degree (AA,AS) Bachelor's degree (BA, AB, BS) Master's degree (MA, MS, MEng, MEd, MSW, MBA) Doctorate (PhD, EdD) or Professional Degree (MD, DDS, DVM, LLB, JD) Unknown Not on certificate
156-157	2	UMEDUC	<b>Mother's Educ –Unrevised</b>	647	U	00 01-08 09 10 11 12 13 14 15 16 17 99 Blank	No formal education Years of elementary school 1 year of high school 2 years of high school 3 years of high school 4 years of high school 1 year of college 2 years of college 3 years of college 4 years of college 5 or more years of college Not stated Not on certificate
158	1	MEDUC_REC	<b>Mother's Education Recode</b>	647	U	1 2 3 4 5 6 Blank	0 – 8 years 9 – 11 years 12 years 13 – 15 years 16 years and over Not stated Not on certificate
159-174	16	FILLER	<b>Filler</b>				
175	1	FAGERPT_FLG	<b>Father's Reported Age Used</b>		U,R	Blank 1	Father's reported age not used Father's reported age used
176-181	6	FILLER	<b>Filler</b>				

\* 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
182-183	2	FAGECOMB	<b>Father's Combined Age (Revised)</b>		R	09-98 99 Blank	Father's combined age in years Unknown or not stated Not on certificate
184-185	2	UFAGECOMB	<b>Father's Combined Age (Unrevised)</b>		U	10-98 99	Father's combined age in years Unknown or not stated
186-187	2	FAGEREC11	<b>Father's Age Recode 11</b>		U,R	01 02 03 04 05 06 07 08 09 10 11	Under 15 years 15-19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years 50-54 years 55-98 years Not stated
188-189	2	FBRACE	<b>Father's Bridged Race</b> Includes only states reporting multiple race. Codes 01-14 used for individuals reporting only one race. Codes 21-24 used for individuals reporting more than one race that have been bridged to a single race. Code 24 also used for individuals reporting more than one Asian/Pacific Islander group; see "Technical Appendix."		R**	01 02 03 04 05 06 07 08 09 10 11 12 13 14 21 22 23 24 99 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 Asian / Pacific Islander – bridged multiple race Unknown or not stated, also includes states not reporting multiple race. Not on certificate

\*\* Also includes unrevised states that report multiple 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).

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
190	1	FILLER	<b>Filler</b>				
191	1	FRACEREC	<b>Father's Race Recode</b> Includes individuals reporting only one race and individuals reporting more than one race bridged to a single race.		U,R		
			<u>United States and all Outlying Areas of the US except Puerto Rico</u>			1 2 3 4 9	White Black American Indian / Alaskan Native Asian / Pacific Islander Unknown or not stated
			<u>Puerto Rico</u>			1 2 9 0	White Black Unknown or not stated Other (not classified as White or Black)
192-194	3	FILLER	<b>Filler</b>				
195	1	UFHISP	<b>Father's Hispanic Origin-Unrevised</b>	570	U,R	0 1 2 3 4 5 9	Non-Hispanic Mexican Puerto Rican Cuban Central American Other and Unknown Hispanic Origin unknown or not stated
196	1	FRACEHISP	<b>Father's Race/Hispanic Origin</b>	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	<b>Filler</b>				
			* 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
199-200	2	UFRACE	<b>Father's Race (Unrevised)</b>		U		
			<u>United States</u>			01	White
						02	Black
						03	American Indian / Alaska Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						18	Asian Indian
						28	Korean
						38	Samoan
						48	Vietnamese
						58	Guamanian
						68	Other Asian or Pacific Islander in areas reporting codes 18-58.
						78	Combined other Asian or Pacific Islander, includes 18-68 for areas that do not report them separately.
						99	Unknown or not stated
						Blank	Not on certificate
			<u>Puerto Rico</u>			01	White
						03	Black
						00	Other races not classified white or black
						99	Unknown or not stated
						Blank	Not on certificate
			<u>Guam</u>			01	White
						02	Black
						03	American Indian / Alaska Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						08	Other Asian or Pacific Islander
						58	Guamanian
						99	Unknown or not stated
						Blank	Not on certificate
			<u>All other Outlying Areas of the US</u>			01	White
						02	Black
						03	American Indian / Alaska Native

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						08	Other Asian or Pacific Islander
						99	Unknown or not stated
						Blank	Not on certificate
201-203	3	FILLER	<b>Filler</b>				
204-205	2	PRIORLIVE	<b>Prior Births Now Living</b>		U,R	00-30 99	Number of children still living Unknown or not stated
206-207	2	PRIORDEAD	<b>Prior Births Now Dead</b>		U,R	00-30 99	Number of children dead Unknown or not stated
208-209	2	PRIORTERM	<b>Prior Other Terminations</b>		U,R	00-30 99	Number other terminations Unknown or not stated
210-211	2	LBO	<b>Live Birth Order</b>		U,R	01-31  99	Sum of all previous live births (now living and now dead) plus current birth Unknown or not stated
212	1	LBO_REC	<b>Live Birth Order Recode</b>		U,R	1-7 8 9	Number of live birth order. 8 or more live births Unknown or not stated
213-214	2	FILLER	<b>Filler</b>				
215-216	2	TBO	<b>Total Birth Order</b>		U,R	01-40 99	Sum of all previous pregnancies plus current birth Unknown or not stated
217	1	TBO_REC	<b>Total Birth Order Recode</b>		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	<b>Filler</b>				
220-221	2	DLLB_MM	<b>Date of Last Live Birth Month</b>		R	01	January
		* 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	Rev*	Values	Definition
						02	February
						03	March
						04	April
						05	May
						06	June
						07	July
						08	August
						09	September
						10	October
						11	November
						12	December
						88	Not applicable
						99	Unknown or not stated
222-225	4	DLLB_YY	<b>Date of Last Live Birth Year</b>		R	nnnn 8888 9999	Year of last live birth Not applicable Unknown or not stated
226-244	19	FILLER	<b>Filler</b>				
245-246	2	PRECARE	<b>Month Prenatal Care Began (Revised)</b>				
			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	<b>Month Prenatal Care Began Recode (Revised)</b>				
			668		R	1 2 3 4 5 Blank	1 <sup>st</sup> to 3 <sup>rd</sup> month 4 <sup>th</sup> to 6 <sup>th</sup> month 7 <sup>th</sup> to final month No prenatal care Unknown or not stated Not on certificate
248-255	8	FILLER	<b>Filler</b>				
256-257	2	MPCB	<b>Month Prenatal Care Began (Unrevised)</b>				
			669		U	00 01-10 99 Blank	No prenatal care Month prenatal care began Unknown or not stated Not on certificate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
258	1	MPCB_REC6	<b>Month Prenatal Care Began Recode 6 (Unrevised)</b>	669	U	1 2 3 4 5 6 Blank	1 <sup>st</sup> to 2 <sup>nd</sup> month 3 <sup>rd</sup> month 4 <sup>th</sup> to 6 <sup>th</sup> month 7 <sup>th</sup> to final month No prenatal care Unknown or not stated Not on certificate
259	1	MPCB_REC5	<b>Month Prenatal Care Began Recode 5 (Unrevised)</b>	669	U	1 2 3 4 5 Blank	1 <sup>st</sup> trimester (1 <sup>st</sup> to 3 <sup>rd</sup> month) 2 <sup>nd</sup> trimester (4 <sup>th</sup> to 6 <sup>th</sup> month) 3 <sup>rd</sup> trimester (7 <sup>th</sup> to final month) No prenatal care Unknown or not stated Not on certificate
260-269	10	FILLER	<b>Filler</b>				
270-271	2	UPREVIS	<b>Number of Prenatal Visits</b>		U,R	00-49 99	Number of prenatal visits Unknown or not stated
272-273	2	PREVIS_REC	<b>Number of Prenatal Visits Recode</b>		U,R	01 02 03 04 05 06 07 08 09 10 11 12	No visits 1 to 2 visits 3 to 4 visits 5 to 6 visits 7 to 8 visits 9 to 10 visits 11 to 12 visits 13 to 14 visits 15 to 16 visits 17 to 18 visits 19 or more visits Unknown or not stated
274	1	FILLER	<b>Filler</b>				
275	1	APNCU	<b>Adequacy of Prenatal Care Utilization Index (Revised)</b>	668	R	1 2 3	Inadequate Intermediate Adequate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						4 9 Blank	Adequate + Unknown Not on certificate
276-277	2	WTGAIN	<b>Weight Gain</b>	648	U,R	00-97 98 99	Weight gain in pounds 98 pounds and over Unknown or not stated
278	1	WTGAIN_REC	<b>Weight Gain Recode</b>	648	U,R	1 2 3 4 5 6 7 8 9	Less than 16 pounds 16 to 20 pounds 21 to 25 pounds 26 to 30 pounds 31 to 35 pounds 36 to 40 pounds 41 to 45 pounds 46 or more pounds Unknown or not stated
279	1	U_APNCU	<b>Adequacy of Prenatal Care Utilization Index (Unrevised)</b>	669	U	1 2 3 4 9 Blank	Inadequate Intermediate Adequate Adequate + Unknown Not on certificate
280	1	DFPC_IMP	<b>Day of Date First Prenatal Care Imputed</b>		R	Blank 1	Day of date first prenatal care not imputed Day of date first prenatal care imputed
281-283	3	FILLER	<b>Filler</b>				
284-285	2	CIG_1	<b>Cigarettes 1<sup>st</sup> Trimester</b>	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	<b>Cigarettes 2<sup>nd</sup> Trimester</b>	575	R	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
288-289	2	CIG_3	<b>Cigarettes 3<sup>rd</sup> Trimester</b>	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	<b>Tobacco Use</b>	667	U	1 2 9 Blank	Yes No Unknown or not stated Not on certificate
291-292	2	CIGS	<b>Cigarettes per Day</b>	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	<b>Cigarette Recode</b>	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	<b>Cigarette Recode</b>	575	R	Y N U Blank	Yes No Unknown or not stated Not on certificate
295	1	ALCOHOL	<b>Alcohol Use</b>	649	U	1 2 9 Blank	Yes No Unknown or not stated Not on certificate
296-297	2	DRINKS	<b>Drinks per Week</b>	649	U	00-97 98 99 Blank	Number of drinks weekly 98 or more drinks weekly Unknown or not stated Not on certificate
298	1	DRINKS_REC	<b>Drinks Recode</b>	649	U	0 1	Non drinker 1 drink per week

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						2	2 drinks per week
						3	3-4 drinks per week
						4	5 or more drinks per week
						5	Unknown or not stated
						Blank	Not on certificate
299-312	14	FILLER	Filler				
313-319	9	<b><u>Risk Factors (Revised)</u></b>					
		The checkbox items below follow this code structure:				Y	Yes
						N	No
						U	Unknown or not stated
						Blank	Not on certificate
313	1	RF_DIAB	<b>Prepregnancy Diabetes</b>	582	R		
314	1	RF_GEST	<b>Gestational Diabetes</b>	583	R		
315	1	RF_PHYP	<b>Prepregnancy Hypertesion</b>	584	R		
316	1	RF_GHYP	<b>Gestational Hypertension</b>	585	R		
317	1	RF_ECLAM	<b>Eclampsia</b>	586	R		
318	1	RF_PPTERM	<b>Previous Preterm Birth</b>	587	R		
319	1	RF_PPOUTC	<b>Poor Pregnancy Outcome</b>	588	R		
320-323	4	FILLER	Filler				
324	1	RF_CESAR	<b>Previous Cesarean Deliveries</b>	593	R	Y	Yes
						N	No
						U	Unknown or not stated
						Blank	Not on certificate
325-326	2	RF_CESARN	<b>Number of Previous Cesarean Deliveries</b>	594	R	00	None
						01-30	Number of previous cesareans
						99	Unknown or not stated
						Blank	Not on certificate
327	1	FILLER	Filler				
328-344	17	<b><u>Risk Factors</u></b>			U		
		The checkbox items indented below follow this structure:				1	Yes
		The version is all 1989 Standard unless otherwise noted.				2	No
						9	Unknown
						Blank	Not on certificate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
328	1	URF_ANEMIA	<b>Anemia</b>	681			
329	1	URF_CARDC	<b>Cardiac</b>	682			
330	1	URF_LUNG	<b>Acute or Chronic Lung Disease</b>	683			
331	1	URF_DIAB	<b>Diabetes</b>	684	U,R		
332	1	URF_GEN	<b>Genital Herpes</b>	685			
333	1	URF_HYDR	<b>Hydramnios / Oligohydramnios</b>	686			
334	1	URF_HEMO	<b>Hemoglobinopathy</b>	687			
335	1	URF_CHYPER	<b>Chronic Hypertension</b>	688	U,R		
336	1	URF_PHYPER	<b>Prepregnancy Associated Hypertension</b>	689	U,R		
337	1	URF_ECLAM	<b>Eclampsia</b>	690	U,R		
338	1	URF_INCERV	<b>Incompetent Cervix</b>	691			
339	1	URF_PRE4000	<b>Previous Infant 4000+ Grams</b>	692			
340	1	URF_PRETERM	<b>Previous Preterm/Small for Gestation</b>	693			
341	1	URF_RENAL	<b>Renal Disease</b>	694			
342	1	URF_RH	<b>Rh Sensitization</b>	695			
343	1	URF_UTERINE	<b>Uterine Bleeding</b>	696			
344	1	URF_OTHER	<b>Other medical risk factors</b>	697			
345-350	6	FILLER	<b>Filler</b>				
351-354	4	<b><u>Obstetric Procedures (Revised)</u></b>					
		The checkbox items indented below follow this structure:				Y	Yes
						N	No
						U	Unknown or not stated
						Blank	Not on certificate
351	1	OP_CERV	<b>Cervical Cerclage</b>	601	R		
352	1	OP_TOCOL	<b>Tocolysis</b>	602	R		
353	1	OP_ECVS	<b>Successful External Cephalic Version</b>	603	R		
354	1	OP_ECVF	<b>Failed External Cephalic Version</b>	604	R		
355-361	7	<b><u>Obstetric Procedures (Unrevised)</u></b>					
		The checkbox items indented below follow this structure:				1	Yes
		The version is all 1989 Standard unless otherwise noted.				2	No
						9	Unknown or not stated
						Blank	Not on certificate
355	1	UOP_AMNIO	<b>Amniocentesis</b>	701			
356	1	UOP_MONIT	<b>Electronic Fetal Monitoring</b>	702			
357	1	UOP_INDUC	<b>Induction of Labor</b>	703	U,R		
358	1	UOP_STIML	<b>Stimulation of Labor</b>	704			
359	1	UOP_TOCOL	<b>Tocolysis</b>	705	U,R		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
360	1	UOP_ULTRA	<b>Ultrasound</b>	706			
361	1	UOP_OTHER	<b>Other Obstetric Procedures</b>	707			
362-364	3	<b><u>Onset of Labor</u></b> The checkbox items below follow this structure:				Y N U Blank	Yes No Unknown or not stated Not on certificate
362	1	ON_RUPTR	<b>Premature Rupture of Membrane</b>	605	R		
363	1	ON_PRECIP	<b>Precipitous Labor</b>	606	R		
364	1	ON_PROL	<b>Prolonged Labor</b>	607	R		
365-373	9	<b><u>Characteristics of Labor and Delivery (Revised)</u></b> The checkbox items below follow this structure:				Y N U Blank	Yes No Unknown or not stated Not on certificate
365	1	LD_INDL	<b>Induction of Labor</b>	608	R		
366	1	LD_AUGM	<b>Augmentation of Labor</b>	609	R		
367	1	LD_NVPR	<b>Non-Vertex Presentation</b>	610	R		
368	1	LD_STER	<b>Steroids</b>	611	R		
369	1	LD_ANTI	<b>Antibiotics</b>	612	R		
370	1	LD_CHOR	<b>Chorioamnionitis</b>	613	R		
371	1	LD_MECS	<b>Meconium Staining</b>	614	R		
372	1	LD_FINT	<b>Fetal Intolerance</b>	615	R		
373	1	LD_ANES	<b>Anesthesia</b>	616	R		
374-389	16	<b><u>Complications of Labor and Delivery (Unrevised)</u></b> The checkbox items indented below follow this structure: The version is all 1989 Standard unless otherwise noted.				1 2 9 Blank	Yes No Unknown or not stated Not on certificate
374	1	ULD_FEBR	<b>Febrile</b>	711			
375	1	ULD_MECO	<b>Meconium</b>	712	U,R		
376	1	ULD_RUPTR	<b>Premature Rupture of Membrane</b>	713			
377	1	ULD_ABRUP	<b>Abruptio Placenta</b>	714			
378	1	ULD_PREPLA	<b>Placenta Previa</b>	715			
379	1	ULD_EXCBL	<b>Other Excessive Bleeding</b>	716			
380	1	ULD_SEIZ	<b>Seizures During Labor</b>	717			
381	1	ULD_PRECIP	<b>Precipitous Labor</b>	718	U,R		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
382	1	ULD_PROLG	<b>Prolonged Labor</b>	719			
383	1	ULD_DYSFN	<b>Dysfunctional Labor</b>	720			
384	1	ULD_BREECH	<b>Breech</b>	721	U,R		
385	1	ULD_CEPHAL	<b>Cephalopelvic Disproportion</b>	722			
386	1	ULD_CORD	<b>Cord Prolapse</b>	723			
387	1	ULD_ANEST	<b>Anesthetic Complications</b>	724			
388	1	ULD_DISTR	<b>Fetal Distress</b>	725			
389	1	ULD_OTHER	<b>Other Complications</b>	726			
390-394	5	<b><u>Method of Delivery (Revised)</u></b>					
390	1	ME_ATTf	<b>Attempted Forceps</b>	617	R	Y N U Blank	Yes No Unknown Not on certificate
391	1	ME_ATTv	<b>Attempted Vacuum</b>	618	R	Y N U Blank	Yes No Unknown Not on certificate
392	1	ME_PRES	<b>Fetal Presentation</b>	619	R	1 2 3 9 Blank	Cephalic Breech Other Unknown Not on certificate
393	1	ME_ROUT	<b>Route &amp; Method of Delivery</b>	620	R	1 2 3 4 9 Blank	Spontaneous Forceps Vacuum Cesarean Unknown Not on certificate
394	1	ME_TRIAL	<b>Trial of Labor Attempted</b>	621	R	Y N X U Blank	Yes No Not applicable Unknown Not on certificate

395-400      6      **Method of Delivery (Unrevised)**

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition	
			The checkbox items indented below follow this structure:				1	Yes
						2	No	
						9	Unknown or not stated	
395	1	UME_VAG	<b>Vaginal</b>	730	U			
396	1	UME_VBAC	<b>Vaginal after C-Section</b>	731	U			
397	1	UME_PRIMC	<b>Primary C-Section</b>	732	U			
398	1	UME_REPEC	<b>Repeat C-Section</b>	733	U			
399	1	UME_FORCP	<b>Forceps</b>	734	U,R			
400	1	UME_VAC	<b>Vacuum</b>	735	U,R			
401	1	RDMETH_REC	<b>Delivery Method Recode (Revised)</b>		R	1	Vaginal (excludes vaginal after previous C-section)	
						2	Vaginal after previous c-section	
						3	Primary C-section	
						4	Repeat C-section	
						5	Vaginal (unknown if previous c-section) (2003 Standard only)	
						6	C-section (unknown if previous c-section) (2003 Standard only)	
						9	Not stated	
402	1	UDMETH_REC	<b>Delivery Method Recode (Unrevised)</b>		U	1	Vaginal (excludes vaginal after previous C-section)	
						2	Vaginal after previous c-section	
						3	Primary C-section	
						4	Repeat C-section	
						9	Not stated	
403	1	DMETH_REC			U,R	1	Vaginal	
						2	C-Section	
						9	Unknown	
404-409	6	FILLER	<b>Filler</b>					
410	1	ATTEND	<b>Attendant</b>		U,R	1	Doctor of Medicine (MD)	
						2	Doctor of Osteopathy (DO)	
						3	Certified Nurse Midwife (CNM)	
						4	Other Midwife	
						5	Other	
						9	Unknown or not stated	

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						09	September
						10	October
						11	November
						12	December
						99	Unknown or not stated
440-441	2	DLMP_DD	<b>Last Normal Menses Day</b>		U,R	01-31	As applicable to month of LMP
						99	Unknown or not stated
442-445	4	DLMP_YY	<b>Last Normal Menses Year</b>		U,R	nnnn	Year of last normal menses
						9999	Unknown or not stated
446-447	2	ESTGEST	<b>Obstetric/Clinical Gestation Est.</b>	573	U,R	0-98	0 through 98 <sup>th</sup> week of gestation
						99	Unknown or not stated
448-450	3	FILLER	<b>Filler</b>				
451-452	2	COMBGEST	<b>Gestation – Detail in Weeks</b>		U,R	17-47	17 <sup>th</sup> through 47 <sup>th</sup> week of gestation
						99	Unknown
453-454	2	GESTREC10	<b>Gestation Recode 10</b>		U,R	01	Under 20 weeks
						02	20-27 weeks
						03	28-31 weeks
						04	32-35 weeks
						05	36 weeks
						06	37-39 weeks
						07	40 weeks
						08	41 weeks
						09	42 weeks and over
						10	Unknown
455	1	GESTREC3	<b>Gestation Recode 3</b>		U,R	1	Under 37 weeks
						2	37 weeks and over
						3	Not stated
456	1	OBGEST_FLG	<b>Clinical Estimate of Gestation Used Flag</b>		U,R	Blank	Clinical Estimate is not used
						1	Clinical Estimate is used
457	1	GEST_IMP	<b>Gestation Imputed Flag</b>		U,R	Blank	Gestation is not imputed
						1	Gestation is imputed
458-466	9	FILLER	<b>Filler</b>				
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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
467-470	4	BRTHWGT	<b>Imputed Birthweight</b>		U,R	0227-8165 9999	Number of grams Not stated birthweight
471-472	2	BWTR14	<b>Birthweight Recode 14</b>		U,R	01 02 03 04 05 06 07 08 09 10 11 12 13 14	499 grams or less 500 – 749 grams 750 - 999 grams 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	<b>Birthweight Recode 4</b>		U,R	1 2 3 4	1499 grams or less 1500 – 2499 grams 2500 grams or more Unknown or not stated
474	1	FILLER	<b>Filler</b>				
475	1	BWTIMP	<b>Imputed Birth Weight Flag</b>		U,R	Blank 1	Birth Weight is not imputed Birth Weight is imputed
476-482	7	<b><u>Abnormal Conditions of the Newborn (Revised)</u></b> The checkbox items 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	<b>Assisted Ventilation</b>	628	R		
477	1	AB_AVEN6	<b>Assisted Ventilation &gt;6 hrs</b>	629	R		
478	1	AB_NICU	<b>Admission to NICU</b>	630	R		
479	1	AB_SURF	<b>Surfactant</b>	631	R		
480	1	AB_ANTI	<b>Antibiotics</b>	632	R		
481	1	AB_SEIZ	<b>Seizures</b>	633	R		
482	1	AB_BINJ	<b>Birth Injury</b>	634	R		

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483-491	9	<b><u>Abnormal Conditions of the Newborn (Unrevised)</u></b>					
		The checkbox items indented below follow this structure:				1	Complication reported
						2	Complication not reported
						9	Complication not classifiable
						Blank	Not on certificate
483	1	UAB_ANEM	<b>Anemia</b>	740	U		
484	1	UAB_INJURY	<b>Birth Injury</b>	741	U		
485	1	UAB_ALCOH	<b>Fetal Alcohol Syndrome</b>	742	U		
486	1	UAB_HYAL	<b>Hyaline Membrane Disease</b>	743	U		
487	1	UAB_MECON	<b>Meconium Aspiration Syndrome</b>	744	U		
488	1	UAB_VENL30	<b>Assisted Ventilation &lt; 30 min</b>	745	U		
489	1	UAB_VEN30M	<b>Assisted Ventilation &gt;= 30 min</b>	746	U		
490	1	UAB_NSEIZ	<b>Seizures</b>	747	U		
491	1	UAB_OTHER	<b>Other Abnormal Conditions</b>	748	U		

492-503	12	<b><u>Congenital Anomalies of the Newborn (Revised)</u></b>					
		The checkbox items below follow this structure:				Y	Yes, anomaly reported
						N	No, anomaly not reported
						U	Unknown
						Blank	Not on certificate
492	1	CA_ANEN	<b>Anencephaly</b>	635	R		
493	1	CA_MNSB	<b>Meningocele/Spina Bifida</b>	636	R		
494	1	CA_CCHD	<b>Cyanotic Congenital Heart Disease</b>	637	R		
495	1	CA_CDH	<b>Congenital Diaphragmatic Hernia</b>	638	R		
496	1	CA_OMP	<b>Omphalocele</b>	639	R		
497	1	CA_GAST	<b>Gastroschisis</b>	640	R		
498	1	CA_LIMB	<b>Limb Reduction Defect</b>	641	R		
499	1	CA_CLEFT	<b>Cleft Lip w/ or w/o Cleft Palate</b>	642	R		
500	1	CA_CLPAL	<b>Cleft Palate alone</b>	643	R		
501	1	CA_DOWN	<b>Downs Syndrome</b>	644	R	C	Confirmed
						P	Pending
						N	No
						U	Unknown
						Blank	Not on certificate
502	1	CA_DISOR	<b>Suspected Chromosomal Disorder</b>	645	R	C	Confirmed
						P	Pending
						N	No
						U	Unknown
						Blank	Not on certificate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
503	1	CA_HYPO	<b>Hypospadias</b>	646	R	Y N U Blank	Yes, Anomaly reported No, Anomaly not reported Unknown Not on certificate
504-525	22	<b><u>Congenital Anomalies of the Newborn (Unrevised)</u></b> The checkbox items indented below follow this structure: The version is all 1989 Standard unless otherwise noted.					1 Anomaly reported 2 Anomaly not reported 9 Anomaly not classifiable Blank Not on certificate
504	1	UCA_ANEN	<b>Anencephalus</b>	752	U,R		
505	1	UCA_SPINA	<b>Spina Bifida / Meningocele</b>	753	U,R		
506	1	UCA_HYDRO	<b>Hydrocephalus</b>	754			
507	1	UCA_MICRO	<b>Microcephalus</b>	755			
508	1	UCA_NERV	<b>Other Central Nervous System Anoms.</b>	756			
509	1	UCA_HEART	<b>Heart Malformations</b>	757			
510	1	UCA_CIRC	<b>Other Circulatory/Respiration Anoms.</b>	758			
511	1	UCA_RECTAL	<b>Rectal Atresia / Stenosis</b>	759			
512	1	UCA_TRACH	<b>Tracheo-Esophageal Fistula</b>	760			
513	1	UCA_OMPHA	<b>Omphalocele / Gastroschisis</b>	761	U,R		
514	1	UCA_GASTRO	<b>Other Gastrointestinal Anoms.</b>	762			
515	1	UCA_GENITAL	<b>Malformed Genitalia</b>	763			
516	1	UCA_RENAL	<b>Renal Agenesis</b>	764			
517	1	UCA_UROGEN	<b>Other Urogenital Anoms.</b>	765			
518	1	UCA_CELFTLP	<b>Cleft Lip / Palate</b>	766	U,R		
519	1	UCA_ADACTY	<b>Polydactyly / Syndactyly / Adactyly</b>	767			
520	1	UCA_CLUBFT	<b>Club Foot</b>	768			
521	1	UCA_HERNIA	<b>Diaphragmatic Hernia</b>	769			
522	1	UCA_MUSCU	<b>Other Musculoskeletal Anoms.</b>	770			
523	1	UCA_DOWNS	<b>Downs Syndrome</b>	771	U,R		
524	1	UCA_CHROM	<b>Other Chromosomal Anoms.</b>	772			
525	1	UCA_OTHER	<b>Other Congenital Anoms.</b>	773			
526-568	43	FILLER	<b>Filler</b>				
569-773	205	<b><u>Flag File for Reporting Flags</u></b> The reporting flags indented below follow this coding structure:					0 Not reporting 1 Reporting
569	1	F_MORIGIN	<b>Origin of Mother</b>		U,R		
570	1	F_FORIGIN	<b>Origin of Father</b>		U,R		
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571	1	F_MEDUC	<b>Education of Mother</b>		R		
572	1	FILLER	<b>Filler</b>				
573	1	F_CLINEST	<b>Clinical Estimate of Gestation</b>		U,R		
574	1	F_APGAR5	<b>Five minute APGAR</b>		U,R		
575	1	F_TOBACO	<b>Tobacco use</b>		R		
576-581	6	FILLER	<b>Filler</b>				
582	1	F_RF_PDIAB	<b>Prepregnancy Diabetes</b>		R		
583	1	F_RF_GDIAB	<b>Gestational Diabetes</b>		R		
584	1	F_RF_PHYPER	<b>Prepregnancy Hypertension</b>		R		
585	1	F_RF_GHYPER	<b>Gestational Hypertension</b>		R		
586	1	F_RF_ECLAMP	<b>Eclampsia</b>		R		
587	1	F_RF_PPB	<b>Previous Preterm Birth</b>		R		
588	1	F_RF_PPO	<b>Poor Pregnancy Outcome</b>		R		
589-592	4	FILLER	<b>Filler</b>				
593	1	F_RF_CESAR	<b>Previous Cesarean</b>		R		
594	1	F_RF_NCESAR	<b>Number of Previous Cesareans</b>		R		
595-600	6	FILLER	<b>Filler</b>				
601	1	F_OB_CERVIC	<b>Cervical Cerclage</b>		R		
602	1	F_OB_TOCO	<b>Tocolysis</b>		R		
603	1	F_OB_SUCC	<b>Successful External Cephalic Version</b>		R		
604	1	F_OB_FAIL	<b>Failed External Cephalic Version</b>		R		
605	1	F_OL_RUPTURE	<b>Premature Rupture of Membranes</b>		R		
606	1	F_OL_PRECIP	<b>Precipitous Labor</b>		R		
607	1	F_OL_PROLONG	<b>Prolonged Labor</b>		R		
608	1	F_LD_INDUCT	<b>Induction of Labor</b>		R		
609	1	F_LD_AUGMENT	<b>Augmentation of Labor</b>		R		
610	1	F_LD_NVRTX	<b>Non-Vertex Presentation</b>		R		
611	1	F_LD_STEROIDS	<b>Steroids</b>		R		
612	1	F_LD_ANTIBIO	<b>Antibiotics</b>		R		
613	1	F_LD_CHORIO	<b>Chorioamnionitis</b>		R		
614	1	F_LD_MECON	<b>Meconium Staining</b>		R		
615	1	F_LD_FINTOL	<b>Fetal Intolerance</b>		R		
616	1	F_LD_ANESTH	<b>Anesthesia</b>		R		
617	1	F_MD_ATTFOR	<b>Attempted Forceps</b>		R		
618	1	F_MD_ATTVAC	<b>Attempted Vacuum</b>		R		
619	1	F_MD_PRESENT	<b>Fetal Presentation</b>		R		
620	1	F_MD_ROUTE	<b>Final Route and Method of Delivery</b>		R		
621	1	F_MD_TRIAL	<b>Trial of Labor Attempted</b>		R		
622-627	6	FILLER	<b>Filler</b>				
628	1	F_AB_VENT	<b>Assisted Ventilation</b>		R		
629	1	F_AB_VENT6	<b>Assisted Ventilation &gt;6 hrs</b>		R		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
630	1	F_AB_NICU	Admission to NICU		R		
631	1	F_AB_SURFAC	Surfactant		R		
632	1	F_AB_ANTIBIO	Antibiotics		R		
633	1	F_AB_SEIZ	Seizures		R		
634	1	F_AB_INJ	Birth Injury		R		
635	1	F_CA_ANEN	Anencephaly		R		
636	1	F_CA_MENIN	Meningomyelocele/Spina Bifida		R		
637	1	F_CA_HEART	Cyanotic Congenital Heart Disease		R		
638	1	F_CA_HERNIA	Congenital Diaphragmatic Hernia		R		
639	1	F_CA_OMPHA	Omphalocele		R		
640	1	F_CA_GASTRO	Gastroschisis		R		
641	1	F_CA_LIMB	Limb Reduction Defect		R		
642	1	F_CA_CLEFTLP	Cleft Lip w/ or w/o Cleft Palate		R		
643	1	F_CA_CLEFT	Cleft Palate Alone		R		
644	1	F_CA_DOWNS	Downs Syndrome		R		
645	1	F_CA_CHROM	Suspected Chromosomal Disorder		R		
646	1	F_CA_HYPOS	Hypospadias		R		
647	1	F_MED	Mother's Education		U		
648	1	F_WTGAIN	Weight Gain		U,R		
649	1	F_ALCOL	Alcohol use		U		
650	1	F_API	API Codes		U		
651-666	16	FILLER	Filler				
667	1	F_TOBAC	Tobacco Use		U		
668	1	F_MPCB	Month Prenatal Care Began		R		
669	1	F_MPCB_U	Month Prenatal Care Began		U		
670-680	11	FILLER	Filler				
681	1	F_URF_ANEMIA	Anemia		U		
682	1	F_URF_CARDIAC	Cardiac		U		
683	1	F_URF_LUNG	Acute or Chronic Lung Disease		U		
684	1	F_URF_DIABETES	Diabetes		U		
685	1	F_URF_HERPES	Genital Herpes		U		
686	1	F_URF_HYDRA	Hydramnios / Oligohydramnios		U		
687	1	F_URF_HEMO	Hemoglobinopathy		U		
688	1	F_URF_CHYPER	Chronic Hypertension		U		
689	1	F_URF_PHYPER	Pregnancy Associated Hypertension		U		
690	1	F_URF_ECLAMP	Eclampsia		U		
691	1	F_URF_INCERVIX	Incompetent Cervix		U		
692	1	F_URF_PRE4000	Previous Infant 4000+ Grams		U		
693	1	F_URF_PRETERM	Previous Preterm/Small for Gestation		U		
694	1	F_URF_RENAL	Renal Disease		U		
695	1	F_URF_RH	Rh Sensitization		U		

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	696	1	F_URF_UTERINE	<b>Uterine Bleeding</b>			U
	697	1	F_URF_OTHERMR	<b>Other Medical Risk Factors</b>			U
	698-700	3	FILLER	<b>Filler</b>			
	701	1	F_UOB_AMNIO	<b>Amniocentesis</b>			U
	702	1	F_UOB_MONITOR	<b>Electronic Fetal Monitoring</b>			U
	703	1	F_UOB_INDUCT	<b>Induction of Labor</b>			U
	704	1	F_UOB_STIMUL	<b>Stimulation of Labor</b>			U
	705	1	F_UOB_TOCOL	<b>Tocolysis</b>			U
	706	1	F_UOB_ULTRAS	<b>Ultrasound</b>			U
	707	1	F_UOB_OTHEROB	<b>Other Obstetric Procedures</b>			U
	708-710	3	FILLER	<b>Filler</b>			
	711	1	F_ULD_FEVRILE	<b>Febrile</b>			U
	712	1	F_ULD_MECONIUM	<b>Meconium</b>			U
	713	1	F_ULD_RUPTURE	<b>Premature Rupture of Membrane</b>			U
	714	1	F_ULD_ABRUPTIO	<b>Abruption Placenta</b>			U
	715	1	F_ULD_PREPLACE	<b>Placenta Previa</b>			U
	716	1	F_ULD_EXCEBLD	<b>Other Excessive Bleeding</b>			U
	717	1	F_ULD_SEIZURE	<b>Seizures During Labor</b>			U
	718	1	F_ULD_PRECIP	<b>Precipitous Labor</b>			U
	719	1	F_ULD_PROLONG	<b>Prolonged Labor</b>			U
	720	1	F_ULD_DYSFUNC	<b>Dysfunctional Labor</b>			U
	721	1	F_ULD_BREECH	<b>Breech</b>			U
	722	1	F_ULD_CEPHALO	<b>Cephalopelvic Disproportion</b>			U
	723	1	F_ULD_CORD	<b>Cord Prolapse</b>			U
	724	1	F_ULD_ANESTHE	<b>Anesthetic Complications</b>			U
	725	1	F_ULD_DISTRESS	<b>Fetal Distress</b>			U
	726	1	F_ULD_OTHERLD	<b>Other Complications</b>			U
	727-729	3	FILLER	<b>Filler</b>			
	730	1	F_U_VAGINAL	<b>Vaginal</b>			U
	731	1	F_U_VBAC	<b>Vaginal after C-Section</b>			U
	732	1	F_U_PRIMAC	<b>Primary C-Section</b>			U
	733	1	F_U_REPEAC	<b>Repeat C-Section</b>			U
	734	1	F_U_FORCEP	<b>Forceps</b>			U
	735	1	F_U_VACUUM	<b>Vacuum</b>			U
	736-739	4	FILLER	<b>Filler</b>			
	740	1	F_UAB_ANEMIA	<b>Anemia</b>			U
	741	1	F_UAB_INJURY	<b>Birth Injury</b>			U
	742	1	F_UAB_ALCOSYN	<b>Fetal Alcohol Syndrome</b>			U
	743	1	F_UAB_HYALINE	<b>Hyaline Membrane Disease</b>			U
	744	1	F_UAB_MECONSYN	<b>Meconium Aspiration Syndrome</b>			U
	745	1	F_UAB_VENL30	<b>Assisted Ventilation &lt;30 minutes</b>			U

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746	1	F_UAB_VEN30M	<b>Assisted Ventilation &gt;=30 minutes</b>		U		
747	1	F_UAB_NSEIZ	<b>Seizures</b>		U		
748	1	F_UAB_OTHERAB	<b>Other Abnormal Conditions</b>		U		
749-751	3	FILLER	<b>Filler</b>				
752	1	F_UCA_ANEN	<b>Anencephalus</b>		U		
753	1	F_UCA_SPINA	<b>Spina Bifida / Meningocele</b>		U		
754	1	F_UCA_HYDRO	<b>Hydrocephalus</b>		U		
755	1	F_UCA_MICROCE	<b>Microcephalus</b>		U		
756	1	F_UCA_NERVOUS	<b>Other Central Nervous System Anomalies</b>		U		
757	1	F_UCA_HEART	<b>Heart Malformations</b>		U		
758	1	F_UCA_CIRCUL	<b>Other Circulatory / Respiration Anomalies</b>		U		
759	1	F_UCA_RECTAL	<b>Rectal Atresia / Stenosis</b>		U		
760	1	F_UCA_TRACHEO	<b>Tracheo-Esophageal Fistula</b>		U		
761	1	F_UCA_OMPHALO	<b>Omphalocele / Gastroschisis</b>		U		
762	1	F_UCA_GASTRO	<b>Other Gastrointestinal Anomalies</b>		U		
763	1	F_UCA_GENITAL	<b>Malformed Genitalia</b>		U		
764	1	F_UCA_RENALAG	<b>Renal Agenesis</b>		U		
765	1	F_UCA_UROGEN	<b>Other Urogenital Anomalies</b>		U		
766	1	F_UCA_CLEFTLP	<b>Cleft Lip / Palate</b>		U		
767	1	F_UCA_ADACTYL	<b>Polydactyly / Syndactyly / Adactyly</b>		U		
768	1	F_UCA_CLUB	<b>Club Foot</b>		U		
769	1	F_UCA_HERNIA	<b>Diaphragmatic Hernia</b>		U		
770	1	F_UCA_MUSCULO	<b>Other Musculoskeletal Anomalies</b>		U		
771	1	F_UCA_DOWNS	<b>Downs Syndrome</b>		U		
772	1	F_UCA_CHROMO	<b>Other Chromosomal Anomalies</b>		U		
773	1	F_UCA_OTHRCON	<b>Other Congenital Anomalies</b>		U		
774-799	26	FILLER	<b>Filler</b>				
800-823	24	<b><u>Mother's Race Edited</u></b>			R**	100-999	Mother's Race Edited Code A00-R99
800	3	MRACE1E					
803	3	MRACE2E					
806	3	MRACE3E					
809	3	MRACE4E					
812	3	MRACE5E					
815	3	MRACE6E					
818	3	MRACE7E					
821	3	MRACE8E					

\*\* Also includes unrevised states that are reporting multiple race

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824-834	11	FILLER	<b>Filler</b>				
835-858	24	<b><u>Father's Race Edited</u></b>			R**	100-999 A00-R99	Father's Race Edited Code
835	3	FRACE1E					
838	3	FRACE2E					
841	3	FRACE3E					
844	3	FRACE4E					
847	3	FRACE5E					
850	3	FRACE6E					
853	3	FRACE7E					
856	3	FRACE8E					
** Also includes unrevised states that are reporting multiple race							
859-867	9	FILLER	<b>Filler</b>				
868	1	FLGND	Flag indicating records in both numerator and denominator file				
						1	Record in both files
						Blank	Record not in numerator file
869-871	3	FILLER	<b>Filler</b>				
872-874	3	AGED	<b>Age at Death in Days</b>			000-365	Number of days
875	1	AGER5	<b>Infant age recode 5</b>			1	Under 1 hour
						2	1 – 23 hours
						3	1 – 6 days
						4	7 – 27 days (late neonatal)
						5	28 days and over (postneonatal)
876-877	2	AGER22	<b>Infant age recode 22</b>			Blank	Age 1 year and over or not stated
						01	Under 1 hour (includes not stated hours and minutes)
						02	1 – 23 hours
						03	1 day (includes not stated days)
						04	2 days
						05	3 days
						06	4 days
						07	5 days
						08	6 days
* 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
						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	<b>Manner of Death</b>			1	Accident
						2	Suicide
						3	Homicide
						4	Pending investigation
						5	Could not determine
						6	Self-inflicted
						7	Natural
						Blank	Not specified
879	1	DISPO	<b>Method of Disposition</b>			B	Burial
						C	Cremation
						D	Donation
						E	Entombment
						O	Other
						R	Removal from state
						U	Unknown
880	1	AUTOPSY	<b>Autopsy</b>			Y	Yes
						N	No
						U	Unknown
881	1	FILLER	<b>Filler</b>				
882	1	PLACE	<b>Place of injury for causes W00-Y34, except Y06.- and Y07.-</b>			0	Home
						1	Residential institution
						2	School, other institution and public administrative area

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						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
						9	Unspecified place
						Blank	Cause other than W00-Y34, except Y06.- and Y07.-
883	1	FILLER	<b>Filler</b>				
884-887	4	UC0D	<b>ICD Code (10<sup>th</sup> Revision)</b> See the <u>International Classification of Diseases, 1992</u> Revision, Volume 1.				
888	1	FILLER	<b>Filler</b>				
889-891	3	UCODR130	<b>130 Infant Cause Recode</b>			001-158	Code Range
892	1	FILLER	<b>Filler</b>				
893-900	8	RECWT	<b>Record Weight</b> (no weights computed for possessions file) 1.XXXXXX				

**Here ends the Denominator file. Documentation of the Mortality Section of the Numerator (Linked) file begins at position 901.**

901-902	2	FILLER	<b>Filler</b>				
903-904	2	EANUM	<b>Number of Entity-Axis Conditions</b>			00-20	Code range
905-1044	140	ENTITY	<b>Entity-Axis Conditions</b> Space has been provided for a maximum of 20 conditions. Each condition takes 7 positions in the record. The 7 <sup>th</sup> position will be blank. Records that do not have 20 conditions are blank in the unused area.				
			Position 1:	Part/line number on certificate			
			1	... Part I, line 1 (a)			
			2	... Part I, line 2 (b)			

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition	
			3	...			Part I, line 3 (c)	
			4	...			Part I, line 4 (d)	
			5	...			Part I, line 5 (e)	
			6	...			Part II	
			Position 2:				Sequence of condition within part/line	
			1-7	...			Code range	
			Position 3 – 6: Condition code					
			See Table 1 for a complete list of codes					
			905-911	7			1 <sup>st</sup> Condition	
			912-918	7			2 <sup>nd</sup> Condition	
			919-925	7			3 <sup>rd</sup> Condition	
			926-932	7			4 <sup>th</sup> Condition	
			933-939	7			5 <sup>th</sup> Condition	
			940-946	7			6 <sup>th</sup> Condition	
			947-953	7			7 <sup>th</sup> Condition	
			954-960	7			8 <sup>th</sup> Condition	
			961-967	7			9 <sup>th</sup> Condition	
			968-974	7			10 <sup>th</sup> Condition	
			975-981	7			11 <sup>th</sup> Condition	
			982-988	7			12 <sup>th</sup> Condition	
			989-995	7			13 <sup>th</sup> Condition	
			996-1002	7			14 <sup>th</sup> Condition	
			1003-1009	7			15 <sup>th</sup> Condition	
			1010-1016	7			16 <sup>th</sup> Condition	
			1017-1023	7			17 <sup>th</sup> Condition	
			1024-1030	7			18 <sup>th</sup> Condition	
			1031-1037	7			19 <sup>th</sup> Condition	
			1038-1044	7			20 <sup>th</sup> Condition	
1045-1046	2	FILLER	<b>Filler</b>					
1047-1048	2	RANUM	<b>Number of Record-Axis Conditions</b>			00-20	Code range	
1049-1148	100	RECORD	<b>Record-Axis Conditions</b> Space has been provided for a maximum of 20 conditions. Each condition takes 5 positions in the record. The 5 <sup>th</sup> position will be blank. Records that do not have 20 conditions are blank in the unused area.					
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U			Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.					
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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
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Positions 1 – 4: Condition Code  
See Table 1 for a complete list of codes

1049-1053	5		1 <sup>st</sup> Condition
1054-1058	5		2 <sup>nd</sup> Condition
1059-1063	5		3 <sup>rd</sup> Condition
1064-1068	5		4 <sup>th</sup> Condition
1069-1073	5		5 <sup>th</sup> Condition
1074-1078	5		6 <sup>th</sup> Condition
1079-1083	5		7 <sup>th</sup> Condition
1084-1088	5		8 <sup>th</sup> Condition
1089-1093	5		9 <sup>th</sup> Condition
1094-1098	5		10 <sup>th</sup> Condition
1099-1103	5		11 <sup>th</sup> Condition
1104-1108	5		12 <sup>th</sup> Condition
1109-1113	5		13 <sup>th</sup> Condition
1114-1118	5		14 <sup>th</sup> Condition
1119-1123	5		15 <sup>th</sup> Condition
1124-1128	5		16 <sup>th</sup> Condition
1129-1133	5		17 <sup>th</sup> Condition
1134-1138	5		18 <sup>th</sup> Condition
1139-1143	5		19 <sup>th</sup> Condition
1144-1148	5		20 <sup>th</sup> Condition

1149-1150	2	FILLER	<b>Filler</b>				
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1151	1	D_RESTATUS	<b>Death Resident Status</b>				
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United States Occurrence	1	RESIDENTS State and County of Occurrence and Residence are the same.
	2	INTRASTATE NONRESIDENTS State of Occurrence and Residence are the same, but County is different.
	3	INTERSTATE NONRESIDENTS State of Occurrence and Residence are different, but both are in the U.S.
	4	FOREIGN RESIDENTS State of Occurrence is one of the 50 States or the District of Columbia, but Place of Residence is outside of the U.S.

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			Puerto Rico Occurrence		1		RESIDENTS Territory and County-equivalent of Occurrence and Residence are the same.
					2		INTRASTATE NONRESIDENTS Territory of Occurrence and Residence are the same, but County-equivalent is different.
					3		INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but both are a Territory.
					4		FOREIGN RESIDENTS Occurred in Puerto Rico to a resident of any other place.
			Virgin Islands Occurrence		1		RESIDENTS Territory and County-equivalent of Occurrence and Residence are the same.
					2		INTRASTATE NONRESIDENTS Territory of Occurrence and Residence are the same, but County-equivalent is different.
					3		INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but both are a Territory.
					4		FOREIGN RESIDENTS Occurred in 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 both are a Territory.
					4		FOREIGN RESIDENTS Occurred in Guam to a resident of any place other than Guam or the U.S.
1152-1153	2	STOCCFIPD	<b>State of Occurrence (FIPS) of Death</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)				

PR Puerto Rico

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						VI GU	Virgin Islands Guam
1154-1156	3	CNTOCFIPD	<p><b>County of Occurrence (FIPS) of Death</b>  Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document.</p> <p>(This item is available in the territory file only, geographic codes are not available in the U.S.file)</p>			001-999	Code range County of less than 250,000
1157-1159	3	FILLER	<b>Filler</b>				
1160-1161	2	STRESFIPD	<p><b>State of Residence (FIPS)</b>  (This item is available in the territory file only, geographic codes are not available in the U.S.file)</p> <p>Territories</p> <p>Puerto Rico Occurrence</p> <p>Virgin Islands Occurrence</p> <p>Guam Occurrence</p>			PR VI GU  PR US,ZZ  VI US, ZZ  GU US ZZ	Puerto Rico Virgin Islands Guam  Puerto Rico Foreign residents  Virgin Islands Foreign residents  Guam U.S. resident. Also considered a resident of Guam. Foreign residents
1162-1163	2	FILLER	<b>Filler</b>				
		* 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
1164-1165	2	DRCNTY	<b>State/Country of Residence of Death Recode</b> (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			Territorial residents			PR VI GU	Puerto Rico Virgin Islands Guam
			Foreign residents			CC MX CU YY	Canada Mexico Cuba Remainder of the world
			Puerto Rico Occurrence			PR US,ZZ	Puerto Rico Foreign residents
			Virgin Islands Occurrence			VI US, ZZ	Virgin Islands Foreign residents
			Guam Occurrence			GU US ZZ	Guam U.S. resident. Also considered a resident of Guam Foreign residents

1166-1167	3	CNTYRFPD	<b>County of Residence (FIPS) of Death</b> Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document. (This item is available in the territory file only, geographic codes are not available in the U.S.file)			000 001-999	Foreign residents Code range County of less than 250,000
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1169-1181 13 FILLER **Filler**

1182 1 CNTRSPPD **Population Size of County of Residence of Death**  
Based on the results of the 2000 Census

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			(This item is available in the territory file only, geographic codes are not available in the U.S.file)			0	County of 1,000,000 or more
						1	County of 500,000 to 1,000,000
						2	County of 250,000 to 500,000
						9	County of less than 250,000
						Z	Foreign residents
1183-1185	3	FILLER	<b>Filler</b>				
1186	1	HOSPD	<b>Place of Death and Decedent's Status</b>			1	Hospital, clinic or Medical Center – Inpatient
						2	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	<b>Day of Week of Death</b>			1	Sunday
						2	Monday
						3	Tuesday
						4	Wednesday
						5	Thursday
						6	Friday
						7	Saturday
						9	Unknown
1188-1191	4	DTHYR	<b>Death Year</b>			2005	2005
						2006	2006
1192-1257	66	FILLER	<b>Filler</b>				
1258-1259	2	DOD_MM	<b>Month of Death</b>			01	January
						02	February
						03	March
						04	April
						05	May
						06	June

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						07	July
						08	August
						09	September
						10	October
						11	November
						12	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  
 Recode T Sex Age Cause Title and ICD-10 Codes Included

001	1	Certain infectious and parasitic diseases (A00-B99)
002		Certain intestinal infectious diseases (A00-A08)
003		Diarrhea and gastroenteritis of infectious origin (A09)
004		Tuberculosis (A16-A19)
005		Tetanus (A33,A35)
006		Diphtheria (A36)
007		Whooping cough (A37)
008		Meningococcal infection (A39)
009	3	Septicemia (A40-A41)
010		Congenital syphilis (A50)
011		Gonococcal infection (A54)
012	1	Viral diseases (A80-B34)
013		Acute poliomyelitis (A80)
014		Varicella (chickenpox) (B01)
015		Measles (B05)
016		Human immunodeficiency virus (HIV) disease (B20-B24)
017		Mumps (B26)
018		Other and unspecified viral diseases (A81-B00,B02-B04,B06-B19,B25,B27-B34)
019		Candidiasis (B37)
020		Malaria (B50-B54)
021		Pneumocystosis (B59)
022		All other and unspecified infectious and parasitic diseases (A20-A32,A38,A42-A49,A51-A53,A55-A79,B35-B36,B38-B49,B55-B58,B60-B99)
023	1	Neoplasms (C00-D48)
024	1	Malignant neoplasms (C00-C97)
025		Hodgkin's disease and non-Hodgkin's lymphomas (C81-C85)
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)
031		Hemorrhagic conditions and other diseases of blood and blood-forming organs (D65-D76)
032		Certain disorders involving the immune mechanism (D80-D89)
033	1	Endocrine, nutritional and metabolic diseases (E00-E88)
034		Short stature, not elsewhere classified (E34.3)
035		Nutritional deficiencies (E40-E64)
036		Cystic fibrosis (E84)
037	3	Volume depletion, disorders of fluid, electrolyte and acid-base balance (E86-E87)
038		All other endocrine, nutritional and metabolic diseases (E00-E32,E34.0-E34.2,E34.4-E34.9,E65-E83,E85,E88)
039	1	Diseases of the nervous system (G00-G98)
040		Meningitis (G00,G03)
041		Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) (G12.0)
042		Infantile cerebral palsy (G80)
043		Anoxic brain damage, not elsewhere classified (G93.1)
044		Other diseases of nervous system (G04,G06-G11,G12.1-G12.9,G20-G72,G81-G92,G93.0,G93.2-G93.9,G95-G98)
045		Diseases of the ear and mastoid process (H60-H93)
046	1	Diseases of the circulatory system (I00-I99)
047		Pulmonary heart disease and diseases of pulmonary circulation (I26-I28)
048		Pericarditis, endocarditis and myocarditis (I30,I33,I40)
049		Cardiomyopathy (I42)
050		Cardiac arrest (I46)
051		Cerebrovascular diseases (I60-I69)
052		All other diseases of circulatory system (I00-I25,I31,I34-I38,I44-I45,I47-I51, I70-I99)
053	1	Diseases of the respiratory system (J00-J98)
054		Acute upper respiratory infections (J00-J06)
055	1	Influenza and pneumonia (J10-J18)

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 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

056			Influenza (J10-J11)
057			Pneumonia (J12-J18)
058			Acute bronchitis and acute bronchiolitis (J20-J21)
059			Bronchitis, chronic and unspecified (J40-J42)
060			Asthma (J45-J46)
061			Pneumonitis due to solids and liquids (J69)
062			Other and unspecified diseases of respiratory system (J22,J30-J39,J43-J44,J47-J68,J70-J98)
063	1		Diseases of the digestive system (K00-K92)
064			Gastritis, duodenitis, and noninfective enteritis and colitis (K29,K50-K55)
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)
067	1		Diseases of the genitourinary system (N00-N95)
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	1		Certain conditions originating in the perinatal period (P00-P96)
071	1		Newborn affected by maternal factors and by complications of pregnancy, labor and delivery (P00-P04)
072			Newborn affected by maternal hypertensive disorders (P00.0)
073			Newborn affected by other maternal conditions which may be unrelated to present pregnancy (P00.1-P00.9)
074	1		Newborn affected by maternal complications of pregnancy (P01)
075			Newborn affected by incompetent cervix (P01.0)
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	1		Newborn affected by complications of placenta, cord and membranes (P02)
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 (P03)
085			Newborn affected by noxious influences transmitted via placenta or breast milk (P04)
086	1		Disorders related to length of gestation and fetal malnutrition (P05-P08)
087			Slow fetal growth and fetal malnutrition (P05)
088	1		Disorders related to short gestation and low birthweight, not elsewhere 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 (P08)
092			Birth trauma (P10-P15)
093	1		Intrauterine hypoxia and birth asphyxia (P20-P21)
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)
100			Interstitial emphysema and related conditions originating in the perinatal period (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	1		Infections specific to the perinatal period (P35-P39)
106			Bacterial sepsis of newborn (P36)
107			Omphalitis of newborn with or without mild hemorrhage (P38)

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 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
108			All other infections specific to the perinatal period (P35,P37,P39)
109	1		Hemorrhagic and hematological disorders of newborn (P50-P61)
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)
116			Hydrops fetalis not due to hemolytic disease (P83.2)
117			Other perinatal conditions (P29,P70.3-P70.9,P71-P76,P78-P81,P83.0-P83.1, P83.3-P83.9,P90-P96)
118	1		Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)
119			Anencephaly and similar malformations (Q00)
120			Congenital hydrocephalus (Q03)
121			Spina bifida (Q05)
122			Other congenital malformations of nervous system (Q01-Q02,Q04,Q06-Q07)
123			Congenital malformations of heart (Q20-Q24)
124			Other congenital malformations of circulatory system (Q25-Q28)
125			Congenital malformations of respiratory system (Q30-Q34)
126			Congenital malformations of digestive system (Q35-Q45)
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)
130			Edward's syndrome (Q91.0-Q91.3)
131			Patau's syndrome (Q91.4-Q91.7)
132			Other congenital malformations and deformations (Q10-Q18,Q86-Q89)
133			Other chromosomal abnormalities, not elsewhere classified (Q92-Q99)
134	1		Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)
135			Sudden infant death syndrome (R95)
136			Other symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R53,R55-R94,R96-R99)
137			All other diseases (Residual) (F01-F99,H00-H57,L00-M99)
138	1		External causes of mortality (*U01,V01-Y84)
139	1		Accidents (unintentional injuries) (V01-X59)
140	1		Transport accidents (V01-V99)
141			Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2, 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)
143			Falls (W00-W19)
144			Accidental discharge of firearms (W32-W34)
145			Accidental drowning and submersion (W65-W74)
146			Accidental suffocation and strangulation in bed (W75)
147			Other accidental suffocation and strangulation (W76-W77,W81-W84)
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	1		Assault (homicide) (*U01,X85-Y09)
153			Assault (homicide) by hanging, strangulation and suffocation (X91)
154			Assault (homicide) by discharge of firearms (*U01.4,X93-X95)
155			Neglect, abandonment and other maltreatment syndromes (Y06-Y07)
156			Assault (homicide) by other and unspecified means (*U01.0-*U01.3,*U01.5-*U01.9,X85-X90,X92,X96-X99,Y00-Y05,Y08-Y09)
157			Complications of medical and surgical care (Y40-Y84)

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)



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, 2005 Link Birth Cohort Data.

(Residence of birth is of the mother)

State	Live births		Infant deaths			
	Occurrence	Residence	Unweighted Occurrence	Residence	Weighted 1/ Occurrence	Residence
United States /2	4145887	4138577	27968	27893	28332	28255
Alabama	59300	60453	568	574	569	575
Alaska	10366	10459	60	62	61	63
Arizona	96549	96199	626	629	637	640
Arkansas	38384	39208	289	314	290	315
California	550143	548882	2830	2835	2913	2918
Colorado	69210	68944	465	444	466	445
Connecticut	42145	41718	240	250	240	250
Delaware	12265	11643	103	102	103	102
Dist of Columbia	14312	7971	147	109	147	109
Florida	226759	226243	1656	1649	1662	1655
Georgia	143491	142200	1164	1145	1164	1145
Hawaii	17923	17924	120	115	121	116
Idaho	22526	23062	126	143	127	144
Illinois	175721	179020	1243	1289	1262	1308
Indiana	87864	87193	711	730	715	735
Iowa	39338	39311	185	201	185	201
Kansas	40743	39888	298	299	298	299
Kentucky	54593	56444	341	379	347	385
Louisiana	60489	60941	571	543	609	579
Maine	13989	14112	93	93	93	93
Maryland	71302	74980	535	555	536	556
Massachusetts	77839	76866	389	382	390	383
Michigan	126618	127706	1005	1006	1006	1007
Minnesota	70953	70919	388	373	388	373
Mississippi	41179	42395	447	477	455	485
Missouri	79531	78618	622	577	624	579
Montana	11556	11583	90	90	90	90
Nebraska	26350	26145	162	152	162	152
Nevada	36958	37268	214	210	219	215
New Hampshire	13968	14424	74	80	74	80
New Jersey	110837	113778	556	583	560	587
New Mexico	28346	28835	164	168	166	170
New York	125301	128858	752	775	760	783
New York City	122724	117507	686	656	687	657
North Carolina	123951	123096	1100	1098	1104	1102
North Dakota	9622	8390	58	55	58	55
Ohio	148912	148388	1191	1149	1223	1179
Oklahoma	50657	51801	395	402	400	407
Oregon	46715	45922	271	250	279	257
Pennsylvania	144965	145399	1081	1053	1086	1058
Rhode Island	13486	12697	99	82	99	82
South Carolina	55324	57711	483	523	483	523
South Dakota	11958	11462	85	83	85	83
Tennessee	87083	81748	801	709	802	710
Texas	392222	385920	2406	2387	2505	2485
Utah	52563	51556	249	234	250	235
Vermont	6138	6473	43	40	43	40
Virginia	102647	104555	750	766	751	767
Washington	82372	82703	400	405	402	407
West Virginia	21150	20836	178	177	178	177
Wisconsin	69771	70984	425	442	425	442
Wyoming	6779	7239	33	49	33	49
Foreign Residents	-	7310	-	75	-	77
Puerto Rico	50577	50564	464	461	464	461
Virgin Islands	1592	1605	9	12	9	12
Guam	3190	3180	37	37	37	37

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

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

Documentation Table 2

Live births, infant deaths, and infant mortality rates by race of mother, sex and birthweight of child: United States, 2005  
birth cohort data

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

Race of mother and sex	Total	<500 grams	500-749 grams	750-999 grams	1000-1249 grams	1250-1499 grams	1500-1999 grams	2000-2499 grams	2500 grams or more	Not stated
All races <sup>1</sup>										
Both sexes										
Live births.....	4,138,577	7,274	11,755	12,526	14,352	17,123	66,584	210,540	3,797,881	542
Infant deaths.....	28,255	6,241	5,494	1,891	1,037	814	1,752	2,256	8,650	121
Infant mortality rate.....	6.83	857.99	467.38	150.97	72.25	47.54	26.31	10.72	2.28	223.25
Male										
Live births.....	2,119,104	3,619	6,001	6,531	7,353	8,593	32,618	96,772	1,957,321	296
Infant deaths.....	15,924	3,142	3,178	1,223	625	443	970	1,203	5,061	80
Infant mortality rate.....	7.51	868.20	529.58	187.26	85.00	51.55	29.74	12.43	2.59	270.27
Female										
Live births.....	2,019,473	3,655	5,754	5,995	6,999	8,530	33,966	113,768	1,840,560	246
Infant deaths.....	12,330	3,099	2,315	668	411	370	782	1,054	3,589	42
Infant mortality rate.....	6.11	847.88	402.33	111.43	58.72	43.38	23.02	9.26	1.95	170.73
White										
Both sexes										
Live births.....	3,229,497	4,058	6,866	7,732	9,222	11,516	45,938	146,566	2,997,238	361
Infant deaths.....	18,361	3,489	3,276	1,219	694	535	1,176	1,590	6,320	63
Infant mortality rate.....	5.69	859.78	477.13	157.66	75.25	46.46	25.60	10.85	2.11	174.52
Male										
Live births.....	1,655,919	2,019	3,490	4,058	4,847	5,834	22,771	67,826	1,544,879	195
Infant deaths.....	10,394	1,749	1,861	784	416	289	653	870	3,729	43
Infant mortality rate.....	6.28	866.27	533.24	193.20	85.83	49.54	28.68	12.83	2.41	220.51
Female										
Live births.....	1,573,578	2,039	3,376	3,674	4,375	5,682	23,167	78,740	1,452,359	166
Infant deaths.....	7,968	1,740	1,415	435	278	246	523	720	2,591	19
Infant mortality rate.....	5.06	853.36	419.14	118.40	63.54	43.29	22.58	9.14	1.78	*
Black										
Both sexes										
Live births.....	633,153	2,864	4,341	4,172	4,378	4,659	16,632	49,415	546,550	142
Infant deaths.....	8,406	2,456	1,948	586	279	227	473	554	1,830	53
Infant mortality rate.....	13.28	857.54	448.74	140.46	63.73	48.72	28.44	11.21	3.35	373.24
Male										
Live births.....	321,271	1,432	2,218	2,129	2,111	2,286	7,802	22,086	281,127	80
Infant deaths.....	4,703	1,247	1,164	384	167	130	269	272	1,040	31
Infant mortality rate.....	14.64	870.81	524.80	180.37	79.11	56.87	34.48	12.32	3.70	387.50
Female										
Live births.....	311,882	1,432	2,123	2,043	2,267	2,373	8,830	27,329	265,423	62
Infant deaths.....	3,703	1,210	785	202	112	97	204	282	790	21
Infant mortality rate.....	11.87	844.97	369.76	98.87	49.40	40.88	23.10	10.32	2.98	338.71

<sup>1</sup>/ Includes races other than white and black.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:  
United states, 2005 birth cohort data

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

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
All races <sup>1</sup>										
Total										
Live births .....	4,138,577	31,606	51,822	243,945	195,571	2,199,904	790,465	355,868	239,850	29,546
Infant deaths .....	28,255	12,933	2,385	2,672	1,093	5,760	1,527	755	629	500
Infant mortality rate .....	6.83	409.19	46.02	10.95	5.59	2.62	1.93	2.12	2.62	16.92
Less than 2,500 grams										
Live births .....	340,154	30,511	39,790	116,976	40,070	86,976	11,450	5,063	6,090	3,228
Infant deaths .....	19,484	12,910	2,268	1,926	499	1,169	204	105	115	288
Infant mortality rate .....	57.28	423.13	57.00	16.46	12.45	13.44	17.82	20.74	18.88	89.22
Less than 500 grams										
Live births .....	7,274	6,839	243	20	4	7	10	7	1	143
Infant deaths .....	6,241	5,930	164	15	3	3	10	6	1	108
Infant mortality rate .....	857.99	867.09	674.90	*	*	*	*	*	*	755.24
500-749 grams										
Live births .....	11,755	10,129	1,279	114	5	28	10	4	3	183
Infant deaths .....	5,494	5,004	349	44	-	9	4	2	2	79
Infant mortality rate .....	467.38	494.03	272.87	385.96	*	*	*	*	*	431.69
750-999 grams										
Live births .....	12,526	7,675	4,073	436	35	119	28	12	11	137
Infant deaths .....	1,891	1,410	383	51	4	16	4	1	-	22
Infant mortality rate .....	150.97	183.71	94.03	116.97	*	*	*	*	*	160.58
1,000-1,249 grams										
Live births .....	14,352	3,277	7,851	2,190	159	426	128	76	72	173
Infant deaths .....	1,037	372	445	148	11	27	9	5	5	14
Infant mortality rate .....	72.25	113.52	56.68	67.58	*	63.38	*	*	*	*
1,250-1,499 grams										
Live births .....	17,123	907	9,110	5,359	418	742	186	87	128	186
Infant deaths .....	814	86	371	226	39	57	6	7	6	16
Infant mortality rate .....	47.54	94.82	40.72	42.17	93.30	76.82	*	*	*	*
1,500-1,999 grams										
Live births .....	66,584	1,004	12,777	36,566	5,445	7,788	1,074	511	775	644
Infant deaths .....	1,752	85	422	692	141	297	36	26	30	23
Infant mortality rate .....	26.31	84.66	33.03	18.92	25.90	38.14	33.52	50.88	38.71	35.71
2,000-2,499 grams										
Live births .....	210,540	680	4,457	72,291	34,004	77,866	10,014	4,366	5,100	1,762
Infant deaths .....	2,256	23	134	751	301	759	135	57	71	26
Infant mortality rate .....	10.72	33.82	30.07	10.39	8.85	9.75	13.48	13.06	13.92	14.76
2,500-2,999 grams										
Live births .....	748,529	1,095	4,316	62,478	73,107	443,883	89,338	36,407	32,581	5,324
Infant deaths .....	3,121	23	55	438	340	1,614	319	163	138	31
Infant mortality rate .....	4.17	21.00	12.74	7.01	4.65	3.64	3.57	4.48	4.24	5.82
3,000-3,499 grams										
Live births .....	1,597,746	-	5,153	42,455	57,302	940,927	315,395	131,667	94,208	10,639
Infant deaths .....	3,393	-	41	208	182	1,904	582	247	200	28
Infant mortality rate .....	2.12	-	7.96	4.90	3.18	2.02	1.85	1.88	2.12	2.63

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:  
United states, 2005 birth cohort data

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

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
All races <sup>1</sup>										
3,500-3,999 grams										
Live births .....	1,115,475	-	2,563	17,811	20,366	576,083	281,085	131,336	78,848	7,383
Infant deaths .....	1,621	-	20	72	50	839	318	169	136	17
Infant mortality rate .....	1.45	-	7.80	4.04	2.46	1.46	1.13	1.29	1.72	*
4,000-4,499 grams										
Live births .....	289,269	-	-	3,577	4,001	131,702	80,487	43,655	23,773	2,074
Infant deaths .....	399	-	-	9	16	194	83	55	36	6
Infant mortality rate .....	1.38	-	-	*	*	1.47	1.03	1.26	1.51	*
4,500-4,999 grams										
Live births .....	42,143	-	-	541	638	18,097	11,631	7,059	3,867	310
Infant deaths .....	97	-	-	13	4	35	19	15	4	6
Infant mortality rate .....	2.30	-	-	*	*	1.93	*	*	*	*
5,000 grams or more										
Live births .....	4,719	-	-	107	87	2,236	1,079	681	483	46
Infant deaths .....	19	-	-	5	1	6	2	3	-	2
Infant mortality rate .....	*	-	-	*	*	*	*	*	-	*
Not stated										
Live births .....	542	-	-	-	-	-	-	-	-	542
Infant deaths .....	121	-	-	-	-	-	-	-	-	121
Infant mortality rate .....	223.25	-	-	-	-	-	-	-	-	223.25
White										
Total										
Live births .....	3,229,497	18,549	35,083	177,559	147,051	1,723,239	628,396	285,363	190,725	23,532
Infant deaths .....	18,361	7,551	1,586	1,838	799	4,160	1,126	535	454	312
Infant mortality rate .....	5.69	407.08	45.21	10.35	5.43	2.41	1.79	1.87	2.38	13.26
Less than 2,500 grams										
Live births .....	231,898	17,865	26,716	83,206	27,804	58,663	7,659	3,462	4,210	2,313
Infant deaths .....	11,978	7,536	1,492	1,313	360	804	143	68	77	185
Infant mortality rate .....	51.65	421.83	55.85	15.78	12.95	13.71	18.67	19.64	18.29	79.98
Less than 500 grams										
Live births .....	4,058	3,785	145	12	4	5	6	1	1	99
Infant deaths .....	3,489	3,297	97	9	3	2	6	-	1	73
Infant mortality rate .....	859.78	871.07	668.97	*	*	*	*	*	*	737.37
500-749 grams										
Live births .....	6,866	5,843	801	78	4	15	6	-	1	118
Infant deaths .....	3,276	2,968	215	35	-	5	2	-	1	50
Infant mortality rate .....	477.13	507.96	268.41	448.72	*	*	*	-	*	423.73
750-999 grams										
Live births .....	7,732	4,678	2,519	289	19	92	22	9	8	96
Infant deaths .....	1,219	907	237	42	3	13	2	1	-	14
Infant mortality rate .....	157.66	193.89	94.08	145.33	*	*	*	*	*	*
1,000-1,249 grams										
Live births .....	9,222	2,001	5,072	1,468	103	280	82	53	37	126
Infant deaths .....	694	245	297	105	9	18	5	2	2	9
Infant mortality rate .....	75.25	122.44	58.56	71.53	*	*	*	*	*	*

See footnotes at end of table.

## Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:  
United states, 2005 birth cohort data

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

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
White										
1,250-1,499 grams										
Live births	11,516	541	6,173	3,611	274	497	132	66	86	136
Infant deaths	535	48	252	151	29	38	4	5	4	5
Infant mortality rate	46.46	88.72	40.82	41.82	105.84	76.46	*	*	*	*
1,500-1,999 grams										
Live births	45,938	615	9,011	25,247	3,742	5,268	713	357	535	450
Infant deaths	1,176	59	293	454	99	198	26	13	17	17
Infant mortality rate	25.60	95.93	32.52	17.98	26.46	37.59	36.47	*	*	*
2,000-2,499 grams										
Live births	146,566	402	2,995	52,501	23,658	52,506	6,698	2,976	3,542	1,288
Infant deaths	1,590	12	100	516	218	530	97	47	51	17
Infant mortality rate	10.85	*	33.39	9.83	9.21	10.09	14.48	15.79	14.40	*
2,500-2,999 grams										
Live births	533,841	684	2,784	45,778	54,193	315,198	62,204	25,777	23,229	3,994
Infant deaths	2,203	15	44	317	252	1,133	218	113	92	19
Infant mortality rate	4.13	*	15.80	6.92	4.65	3.59	3.50	4.38	3.96	*
3,000-3,499 grams										
Live births	1,241,931	-	3,632	31,379	44,736	735,145	243,363	101,995	73,198	8,483
Infant deaths	2,462	-	36	134	127	1,394	425	172	152	21
Infant mortality rate	1.98	-	9.91	4.27	2.84	1.90	1.75	1.69	2.08	2.48
3,500-3,999 grams										
Live births	930,616	-	1,951	13,801	16,482	482,690	234,283	109,412	65,750	6,247
Infant deaths	1,250	-	14	56	38	650	253	126	101	12
Infant mortality rate	1.34	-	*	4.06	2.31	1.35	1.08	1.15	1.54	*
4,000-4,499 grams										
Live births	250,377	-	-	2,884	3,248	114,103	69,846	37,919	20,559	1,818
Infant deaths	315	-	-	6	16	149	70	40	28	5
Infant mortality rate	1.26	-	-	*	*	1.31	1.00	1.05	1.36	*
4,500-4,999 grams										
Live births	36,489	-	-	429	520	15,580	10,120	6,206	3,359	275
Infant deaths	74	-	-	9	4	25	16	12	3	4
Infant mortality rate	2.03	-	-	*	*	1.60	*	*	*	*
5,000 grams or more										
Live births	3,984	-	-	82	68	1,860	921	592	420	41
Infant deaths	16	-	-	3	1	5	2	3	-	2
Infant mortality rate	*	-	-	*	*	*	*	*	-	*
Not stated										
Live births	361	-	-	-	-	-	-	-	-	361
Infant deaths	63	-	-	-	-	-	-	-	-	63
Infant mortality rate	174.52	-	-	-	-	-	-	-	-	174.52
Black										
Total										
Live births	633,153	11,531	13,910	52,122	36,278	326,451	108,304	47,349	34,128	3,080
Infant deaths	8,406	4,756	688	677	242	1,276	306	162	149	148
Infant mortality rate	13.28	412.45	49.46	12.99	6.67	3.91	2.83	3.42	4.37	48.05

See footnotes at end of table.

Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:  
United states, 2005 birth cohort data

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

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Black										
Less than 2,500 grams										
Live births .....	86,461	11,185	10,998	26,938	9,422	21,578	2,965	1,259	1,514	602
Infant deaths .....	6,524	4,749	670	501	113	298	53	28	34	77
Infant mortality rate .....	75.46	424.59	60.92	18.60	11.99	13.81	17.88	22.24	22.46	127.91
Less than 500 grams										
Live births .....	2,864	2,724	89	8	-	2	4	5	-	32
Infant deaths .....	2,456	2,353	61	6	-	1	4	5	-	26
Infant mortality rate .....	857.54	863.80	685.39	*	-	*	*	*	-	812.50
500-749 grams										
Live births .....	4,341	3,820	409	34	1	12	4	4	2	55
Infant deaths .....	1,948	1,788	120	9	-	3	2	2	1	23
Infant mortality rate .....	448.74	468.06	293.40	*	*	*	*	*	*	418.18
750-999 grams										
Live births .....	4,172	2,635	1,337	122	14	21	6	3	3	31
Infant deaths .....	586	431	134	9	1	2	2	-	-	6
Infant mortality rate .....	140.46	163.57	100.22	*	*	*	*	*	*	*
1,000-1,249 grams										
Live births .....	4,378	1,102	2,386	602	51	122	40	16	27	32
Infant deaths .....	279	107	119	34	2	6	4	1	1	4
Infant mortality rate .....	63.73	97.10	49.87	56.48	*	*	*	*	*	*
1,250-1,499 grams										
Live births .....	4,659	313	2,479	1,430	114	200	43	14	33	33
Infant deaths .....	227	36	99	56	9	15	1	2	1	8
Infant mortality rate .....	48.72	115.02	39.94	39.16	*	*	*	*	*	*
1,500-1,999 grams										
Live births .....	16,632	352	3,083	9,092	1,345	2,006	301	125	198	130
Infant deaths .....	473	23	107	197	30	81	8	10	13	3
Infant mortality rate .....	28.44	65.34	34.71	21.67	22.30	40.38	*	*	*	*
2,000-2,499 grams										
Live births .....	49,415	239	1,215	15,650	7,897	19,215	2,567	1,092	1,251	289
Infant deaths .....	554	10	29	190	71	189	32	8	18	6
Infant mortality rate .....	11.21	*	23.87	12.14	8.99	9.84	12.47	*	*	*
2,500-2,999 grams										
Live births .....	154,649	346	1,254	13,022	14,071	91,436	19,165	7,613	7,034	708
Infant deaths .....	745	7	9	101	75	389	78	41	37	8
Infant mortality rate .....	4.82	*	*	7.76	5.33	4.25	4.07	5.39	5.26	*
3,000-3,499 grams										
Live births .....	241,637	-	1,193	8,539	9,329	138,868	48,049	20,025	14,639	995
Infant deaths .....	720	-	5	56	45	400	115	55	40	4
Infant mortality rate .....	2.98	-	*	6.56	4.82	2.88	2.39	2.75	2.73	*
3,500-3,999 grams										
Live births .....	121,098	-	465	3,022	2,834	61,140	30,243	14,289	8,597	508
Infant deaths .....	291	-	4	13	10	154	46	28	30	5
Infant mortality rate .....	2.40	-	*	*	*	2.52	1.52	1.96	3.49	*

See footnotes at end of table.

## Documentation Table 3

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and gestational age:  
United states, 2005 birth cohort data

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

Birthweight	Gestation									
	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Black										
4,000-4,499 grams										
Live births .....	25,089	-	-	507	531	11,515	6,845	3,584	2,003	104
Infant deaths .....	56	-	-	2	-	30	10	6	7	-
Infant mortality rate .....	2.23	-	-	*	-	2.61	*	*	*	-
4,500-4,999 grams										
Live births .....	3,623	-	-	79	82	1,669	943	527	304	19
Infant deaths .....	17	-	-	4	-	5	3	3	-	2
Infant mortality rate .....	*	-	-	*	-	*	*	*	-	*
5,000 grams or more										
Live births .....	454	-	-	15	9	245	94	52	37	2
Infant deaths .....	1	-	-	-	-	1	-	-	-	-
Infant mortality rate .....	*	-	-	*	*	*	-	-	-	*
Not stated										
Live births .....	142	-	-	-	-	-	-	-	-	142
Infant deaths .....	53	-	-	-	-	-	-	-	-	53
Infant mortality rate .....	373.24	-	-	-	-	-	-	-	-	373.24

-/ Quality zero.

\*/Figure does not meet standard of reliability or precision; see Technical notes.

<sup>1</sup>/ Includes races other than white and black.

Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2004 birth cohort data

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

Birthweight and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races <sup>1</sup>						
Total (all birthweights).....	4,138,577	28,255	18,763	14,999	3,764	9,492
Rate.....		6.83	4.53	3.62	0.91	2.29
Less than 2,500 grams.....	340,154	19,484	15,706	13,190	2,516	3,778
Rate.....		57.28	46.17	38.78	7.40	11.11
Less than 500 grams.....	7,274	6,241	6,094	5,912	182	146
Rate.....		857.99	837.78	812.76	25.02	20.07
500-749 grams.....	11,755	5,494	4,639	3,815	824	854
Rate.....		467.38	394.64	324.54	70.10	72.65
750-999 grams.....	12,526	1,891	1,383	905	478	508
Rate.....		150.97	110.41	72.25	38.16	40.56
1,000-1,249 grams.....	14,352	1,037	748	501	247	288
Rate.....		72.25	52.12	34.91	17.21	20.07
1,250-1,499 grams.....	17,123	814	550	392	158	264
Rate.....		47.54	32.12	22.89	9.23	15.42
1,500-1,999 grams.....	66,584	1,752	1,131	875	257	620
Rate.....		26.31	16.99	13.14	3.86	9.31
2,000-2,499 grams.....	210,540	2,256	1,159	790	369	1,097
Rate.....		10.72	5.50	3.75	1.75	5.21
2,500-2,999 grams.....	748,529	3,121	1,209	750	459	1,912
Rate.....		4.17	1.62	1.00	0.61	2.55
3,000-3,499 grams.....	1,597,746	3,393	1,055	555	500	2,338
Rate.....		2.12	0.66	0.35	0.31	1.46
3,500-3,999 grams.....	1,115,475	1,621	488	267	221	1,132
Rate.....		1.45	0.44	0.24	0.20	1.01
4,000-4,499 grams.....	289,269	399	130	76	53	269
Rate.....		1.38	0.45	0.26	0.18	0.93
4,500-4,999 grams.....	42,143	97	45	33	11	52
Rate.....		2.30	1.07	0.78	*	1.23
5,000 grams or more.....	4,719	19	13	11	2	6
Rate.....		*	*	*	*	*
Not stated.....	542	121	117	116	1	4
Rate.....		223.25	215.87	214.02	*	*

See footnotes at end of table.



Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2004 birth cohort data -Cont

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

Birthweight and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
<b>White</b>						
Total (all birthweights).....	3,229,497	18,361	12,156	9,648	2,508	6,205
Rate.....		5.69	3.76	2.99	0.78	1.92
Less than 2,500 grams.....	231,898	11,978	9,828	8,266	1,561	2,151
Rate.....		51.65	42.38	35.64	6.73	9.28
Less than 500 grams.....	4,058	3,489	3,433	3,335	98	56
Rate.....		859.78	845.98	821.83	24.15	13.80
500-749 grams.....	6,866	3,276	2,850	2,380	470	426
Rate.....		477.13	415.09	346.64	68.45	62.04
750-999 grams.....	7,732	1,219	955	645	311	264
Rate.....		157.66	123.51	83.42	40.22	34.14
1,000-1,249 grams.....	9,222	694	510	363	147	183
Rate.....		75.25	55.30	39.36	15.94	19.84
1,250-1,499 grams.....	11,516	535	382	273	109	153
Rate.....		46.46	33.17	23.71	9.47	13.29
1,500-1,999 grams.....	45,938	1,176	821	657	164	355
Rate.....		25.60	17.87	14.30	3.57	7.73
2,000-2,499 grams.....	146,566	1,590	876	614	263	713
Rate.....		10.85	5.98	4.19	1.79	4.86
2,500-2,999 grams.....	533,841	2,203	903	569	333	1,300
Rate.....		4.13	1.69	1.07	0.62	2.44
3,000-3,499 grams.....	1,241,931	2,462	824	443	380	1,639
Rate.....		1.98	0.66	0.36	0.31	1.32
3,500-3,999 grams.....	930,616	1,250	394	214	180	856
Rate.....		1.34	0.42	0.23	0.19	0.92
4,000-4,499 grams.....	250,377	315	101	58	43	214
Rate.....		1.26	0.40	0.23	0.17	0.85
4,500-4,999 grams.....	36,489	74	35	26	9	38
Rate.....		2.03	0.96	0.71	*	1.04
5,000 grams or more.....	3,984	16	11	10	1	5
Rate.....		*	*	*	*	*
Not stated.....	361	63	61	61	-	2
Rate.....		174.52	168.98	168.98	-	*

See footnotes at end of table.

Documentation Table 4

Live births, infant deaths, and infant mortality rates by birthweight, race of mother, and age at death: United states, 2004 birth cohort data -Cont

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

Birthweight and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
<b>Black</b>						
Total (all birthweights).....	633,153	8,406	5,645	4,602	1,043	2,761
Rate.....		13.28	8.92	7.27	1.65	4.36
Less than 2,500 grams.....	86,461	6,524	5,071	4,267	804	1,453
Rate.....		75.46	58.65	49.35	9.30	16.81
Less than 500 grams.....	2,864	2,456	2,372	2,295	78	84
Rate.....		857.54	828.21	801.33	27.23	29.33
500-749 grams.....	4,341	1,948	1,559	1,252	308	389
Rate.....		448.74	359.13	288.41	70.95	89.61
750-999 grams.....	4,172	586	362	220	141	224
Rate.....		140.46	86.77	52.73	33.80	53.69
1,000-1,249 grams.....	4,378	279	189	109	80	90
Rate.....		63.73	43.17	24.90	18.27	20.56
1,250-1,499 grams.....	4,659	227	132	97	35	95
Rate.....		48.72	28.33	20.82	7.51	20.39
1,500-1,999 grams.....	16,632	473	237	160	78	236
Rate.....		28.44	14.25	9.62	4.69	14.19
2,000-2,499 grams.....	49,415	554	219	134	85	335
Rate.....		11.21	4.43	2.71	1.72	6.78
2,500-2,999 grams.....	154,649	745	242	140	103	503
Rate.....		4.82	1.56	0.91	0.67	3.25
3,000-3,499 grams.....	241,637	720	175	83	92	545
Rate.....		2.98	0.72	0.34	0.38	2.26
3,500-3,999 grams.....	121,098	291	75	40	34	216
Rate.....		2.40	0.62	0.33	0.28	1.78
4,000-4,499 grams.....	25,089	56	22	15	7	33
Rate.....		2.23	0.88	*	*	1.32
4,500-4,999 grams.....	3,623	17	8	6	2	9
Rate.....		*	*	*	*	*
5,000 grams or more.....	454	1	-	-	-	1
Rate.....		*	-	-	-	*
Not stated.....	142	53	52	51	1	1
Rate.....		373.24	366.20	359.15	*	*

See footnotes at end of table.

-/ Quantity zero.

\*Figure does not meet standard of reliability or precision; see Technical notes.

<sup>1</sup>/ Includes races other than white and black.

Documentation Table 5

Live births by birthweight and race of mother and infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2002 birth cohort data

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races <sup>1</sup>						
All birthweights						
All causes .....	4,138,577	28,255 682.72	18,763 453.37	14,999 362.42	3,764 90.95	9,492 229.35
Congenital malformations (Q00-Q99).....		5,544 133.96	3,900 94.24	2,993 72.32	906 21.89	1,644 39.72
Short gestation and low birthweight nec (P07).....		4,693 113.40	4,579 110.64	4,478 108.20	101 2.44	113 2.73
Sudden infant death syndrome (R95).....		2,200 53.16	196 4.74	37 0.89	158 3.82	2,004 48.42
Maternal complications of pregnancy (P01).....		1,763 42.60	1,745 42.16	1,717 41.49	28 0.68	18 *
Complications of placenta, cord, membranes (P02).....		1,098 26.53	1,076 26.00	1,041 25.15	34 0.82	22 0.53
Respiratory distress of newborn (P22).....		861 20.80	841 20.32	696 16.82	145 3.50	20 0.48
Accidents (unintentional injuries) (V01-X59).....		1,083 26.17	123 2.97	27 0.65	96 2.32	959 23.17
Bacterial sepsis of newborn (P36).....		842 20.35	803 19.40	329 7.95	473 11.43	40 0.97
Diseases of the circulatory system (I00-I99).....		525 12.69	120 2.90	56 1.35	64 1.55	406 9.81
Intrauterine hypoxia, birth asphyxia (P20-P21).....		527 12.73	496 11.98	374 9.04	123 2.97	30 0.72
All other causes.....		9,119 220.34	4,884 118.01	3,250 78.53	1,634 39.48	4,235 102.33
Less than 2,500 grams						
All causes .....	340,154	19,484 5,727.99	15,706 4,617.32	13,190 3,877.66	2,516 739.66	3,778 1,110.67
Congenital malformations (Q00-Q99).....		3,322 976.62	2,610 767.30	2,184 642.06	426 125.24	711 209.02
Short gestation and low birthweight nec (P07).....		4,599 1,352.03	4,486 1,318.81	4,385 1,289.12	101 29.69	112 32.93
Sudden infant death syndrome (R95).....		460 135.23	31 9.11	9 *	22 6.47	428 125.83
Maternal complications of pregnancy (P01).....		1,697 498.89	1,681 494.19	1,654 486.25	27 7.94	16 *
Complications of placenta, cord, membranes (P02).....		1,004 295.16	986 289.87	961 282.52	25 7.35	17 *
Respiratory distress of newborn (P22).....		845 248.42	826 242.83	685 201.38	141 41.45	19 *
Accidents (unintentional injuries) (V01-X59).....		193 56.74	27 7.94	9 *	18 *	166 48.80
Bacterial sepsis of newborn (P36).....		754 221.66	717 210.79	282 82.90	434 127.59	38 11.17
Diseases of the circulatory system (I00-I99).....		281 82.61	71 20.87	35 10.29	36 10.58	210 61.74

See footnotes at end of table.

Documentation Table 5

Live births by birthweight and race of mother and infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2002 birth cohort data -Cont

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
All races <sup>1</sup>						
Intrauterine hypoxia, birth asphyxia (P20-P21).....		276	267	210	56	9
		81.14	78.49	61.74	16.46	*
All other causes.....		6,054	4,003	2,775	1,227	2,051
		1,779.78	1,176.82	815.81	360.72	602.96
2,500 grams or more						
All causes .....	3,797,881	8,650	2,940	1,693	1,247	5,710
		227.76	77.41	44.58	32.83	150.35
Congenital malformations (Q00-Q99).....		2,218	1,285	805	480	933
		58.40	33.83	21.20	12.64	24.57
Short gestation and low birthweight nec (P07).....		42	40	40	-	1
		1.11	1.05	1.05	-	*
Sudden infant death syndrome (R95).....		1,738	164	28	136	1,574
		45.76	4.32	0.74	3.58	41.44
Maternal complications of pregnancy (P01).....		44	42	41	1	2
		1.16	1.11	1.08	*	*
Complications of placenta, cord, membranes (P02).....		84	79	70	9	5
		2.21	2.08	1.84	*	*
Respiratory distress of newborn (P22).....		14	13	9	4	1
		*	*	*	*	*
Accidents (unintentional injuries) (V01-X59).....		888	96	18	78	792
		23.38	2.53	*	2.05	20.85
Bacterial sepsis of newborn (P36).....		88	86	47	39	2
		2.32	2.26	1.24	1.03	*
Diseases of the circulatory system (I00-I99).....		244	49	21	27	196
		6.42	1.29	0.55	0.71	5.16
Intrauterine hypoxia, birth asphyxia (P20-P21).....		251	230	163	66	21
		6.61	6.06	4.29	1.74	0.55
All other causes.....		3,038	855	449	406	2,183
		79.99	22.51	11.82	10.69	57.48
Not stated birthweight						
All causes .....	542	121	117	116	1	4
		22,324.72	21,586.72	21,402.21	*	*
Congenital malformations (Q00-Q99).....		4	4	4	-	-
		*	*	*	-	-
Short gestation and low birthweight nec (P07).....		53	53	53	-	-
		9,778.60	9,778.60	9,778.60	-	-
Sudden infant death syndrome (R95).....		2	-	-	-	2
		*	-	-	-	*
Maternal complications of pregnancy (P01).....		22	22	22	-	-
		4,059.04	4,059.04	4,059.04	-	-
Complications of placenta, cord, membranes (P02).....		10	10	10	-	-
		*	*	*	-	-
Respiratory distress of newborn (P22).....		2	2	2	-	-
		*	*	*	-	-
Accidents (unintentional injuries) (V01-X59).....		1	-	-	-	1
		*	-	-	-	*

See footnotes at end of table.

Documentation Table 5

Live births by birthweight and race of mother and infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2002 birth cohort data -Cont

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
<b>All races<sup>1</sup></b>						
Bacterial sepsis of newborn (P36).....	-	-	-	-	-	-
Diseases of the circulatory system (I00-I99).....	-	-	-	-	-	-
Intrauterine hypoxia, birth asphyxia (P20-P21).....	-	-	-	-	-	-
All other causes.....	27	26	25	1	1	1
	4,981.55	4,797.05	4,612.55	*	*	*
<b>White</b>						
<b>All birthweights</b>						
All causes .....	3,229,497	18,361	12,156	9,648	2,508	6,205
		568.54	376.41	298.75	77.66	192.14
Congenital malformations (Q00-Q99).....		4,168	2,974	2,282	692	1,194
		129.06	92.09	70.66	21.43	36.97
Short gestation and low birthweight nec (P07).....		2,606	2,555	2,493	62	50
		80.69	79.11	77.19	1.92	1.55
Sudden infant death syndrome (R95).....		1,500	140	26	114	1,360
		46.45	4.34	0.81	3.53	42.11
Maternal complications of pregnancy (P01).....		1,034	1,023	1,004	19	11
		32.02	31.68	31.09	*	*
Complications of placenta, cord, membranes (P02).....		747	736	709	27	11
		23.13	22.79	21.95	0.84	*
Respiratory distress of newborn (P22).....		530	520	432	88	10
		16.41	16.10	13.38	2.72	*
Accidents (unintentional injuries) (V01-X59).....		731	80	20	60	651
		22.64	2.48	0.62	1.86	20.16
Bacterial sepsis of newborn (P36).....		523	502	222	279	21
		16.19	15.54	6.87	8.64	0.65
Diseases of the circulatory system (I00-I99).....		321	79	39	40	242
		9.94	2.45	1.21	1.24	7.49
Intrauterine hypoxia, birth asphyxia (P20-P21).....		385	366	282	85	19
		11.92	11.33	8.73	2.63	*
All other causes.....		5,816	3,181	2,138	1,042	2,635
		180.09	98.50	66.20	32.27	81.59
<b>Less than 2,500 grams</b>						
All causes .....	231,898	11,978	9,828	8,266	1,561	2,151
		5,165.20	4,238.07	3,564.50	673.14	927.56
Congenital malformations (Q00-Q99).....		2,437	1,939	1,638	301	498
		1,050.89	836.14	706.35	129.80	214.75
Short gestation and low birthweight nec (P07).....		2,550	2,500	2,439	62	49
		1,099.62	1,078.06	1,051.76	26.74	21.13
Sudden infant death syndrome (R95).....		270	19	6	13	250
		116.43	*	*	*	107.81
Maternal complications of pregnancy (P01).....		995	985	967	18	10
		429.07	424.76	416.99	*	*

See footnotes at end of table.

Documentation Table 5

Live births by birthweight and race of mother and infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2002 birth cohort data -Cont

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
<b>White</b>						
Complications of placenta, cord, membranes (P02).....	677 291.94	668 288.06	648 279.43	20 8.62	9 *	
Respiratory distress of newborn (P22).....	520 224.24	510 219.92	425 183.27	86 37.09	9 *	
Accidents (unintentional injures) (V01-X59).....	105 45.28	17 *	6 *	11 *	88 37.95	
Bacterial sepsis of newborn (P36).....	456 196.64	436 188.01	186 80.21	250 107.81	20 8.62	
Diseases of the circulatory system (I00-I99).....	155 66.84	41 17.68	22 9.49	19 *	114 49.16	
Intrauterine hypoxia, birth asphyxia (P20-P21).....	190 81.93	184 79.35	150 64.68	34 14.66	6 *	
All other causes.....	3,624 1,562.76	2,528 1,090.13	1,780 767.58	747 322.12	1,096 472.62	
<b>2,500 grams or more</b>						
All causes .....	2,997,238 6,320 210.86	2,268 75.67	1,321 44.07	947 31.60	4,052 135.19	
Congenital malformations (Q00-Q99).....	1,728 57.65	1,032 34.43	641 21.39	391 13.05	696 23.22	
Short gestation and low birthweight nec (P07).....	26 0.87	25 0.83	25 0.83	- -	1 *	
Sudden infant death syndrome (R95).....	1,229 41.00	121 4.04	20 0.67	101 3.37	1,109 37.00	
Maternal complications of pregnancy (P01).....	30 1.00	29 0.97	28 0.93	1 *	1 *	
Complications of placenta, cord, membranes (P02).....	63 2.10	61 2.04	54 1.80	7 *	2 *	
Respiratory distress of newborn (P22).....	9 *	8 *	6 *	2 *	1 *	
Accidents (unintentional injures) (V01-X59).....	625 20.85	63 2.10	14 *	49 1.63	562 18.75	
Bacterial sepsis of newborn (P36).....	67 2.24	66 2.20	37 1.23	29 0.97	1 *	
Diseases of the circulatory system (I00-I99).....	167 5.57	39 1.30	17 *	21 0.70	128 4.27	
Intrauterine hypoxia, birth asphyxia (P20-P21).....	196 6.54	182 6.07	132 4.40	50 1.67	13 *	
All other causes.....	2,180 72.73	641 21.39	346 11.54	295 9.84	1,539 51.35	
<b>Not stated birthweight</b>						
All causes .....	361 17,451.52	63 16,897.51	61 16,897.51	61 16,897.51	- -	2 *
Congenital malformations (Q00-Q99).....	3 *	3 *	3 *	- -	- -	
Short gestation and low birthweight nec (P07).....	29 8,033.24	29 8,033.24	29 8,033.24	- -	- -	

See footnotes at end of table.

Documentation Table 5

Live births by birthweight and race of mother and infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2002 birth cohort data -Cont

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
<b>White</b>						
Sudden infant death syndrome (R95).....		1	-	-	-	1
		*	-	-	-	*
Maternal complications of pregnancy (P01).....		8	8	8	-	-
		*	*	*	-	-
Complications of placenta, cord, membranes (P02).....		7	7	7	-	-
		*	*	*	-	-
Respiratory distress of newborn (P22).....		1	1	1	-	-
		*	*	*	-	-
Accidents (unintentional injuries) (V01-X59).....		1	-	-	-	1
		*	-	-	-	*
Bacterial sepsis of newborn (P36).....		-	-	-	-	-
		-	-	-	-	-
Diseases of the circulatory system (I00-I99).....		-	-	-	-	-
		-	-	-	-	-
Intrauterine hypoxia, birth asphyxia (P20-P21).....		-	-	-	-	-
		-	-	-	-	-
All other causes.....		12	12	12	-	-
		*	*	*	-	-
<b>Black</b>						
<b>All birthweights</b>						
All causes .....	633,153	8,406	5,645	4,602	1,043	2,761
		1,327.64	891.57	726.84	164.73	436.07
Congenital malformations (Q00-Q99).....		1,051	708	540	168	343
		165.99	111.82	85.29	26.53	54.17
Short gestation and low birthweight nec (P07).....		1,865	1,809	1,773	35	56
		294.56	285.71	280.03	5.53	8.84
Sudden infant death syndrome (R95).....		588	47	9	38	541
		92.87	7.42	*	6.00	85.45
Maternal complications of pregnancy (P01).....		654	647	638	9	7
		103.29	102.19	100.77	*	*
Complications of placenta, cord, membranes (P02).....		307	296	290	6	11
		48.49	46.75	45.80	*	*
Respiratory distress of newborn (P22).....		291	282	233	48	9
		45.96	44.54	36.80	7.58	*
Accidents (unintentional injuries) (V01-X59).....		294	39	7	32	254
		46.43	6.16	*	5.05	40.12
Bacterial sepsis of newborn (P36).....		268	249	89	160	18
		42.33	39.33	14.06	25.27	*
Diseases of the circulatory system (I00-I99).....		168	30	13	17	138
		26.53	4.74	*	*	21.80
Intrauterine hypoxia, birth asphyxia (P20-P21).....		114	103	75	28	11
		18.01	16.27	11.85	4.42	*
All other causes.....		2,806	1,434	934	500	1,372
		443.18	226.49	147.52	78.97	216.69
<b>Less than 2,500 grams</b>						
All causes .....	86,461	6,524	5,071	4,267	804	1,453
		7,545.60	5,865.07	4,935.17	929.90	1,680.53

See footnotes at end of table.

Documentation Table 5

Live births by birthweight and race of mother and infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2002 birth cohort data -Cont

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

Cause of death, birthweight, and race of mother	Live	Total	Early	Late	Post-	
	Births	Infant	Neonatal	Neonatal	Neonatal	
<b>Black</b>						
Congenital malformations (Q00-Q99).....	691 799.20	517 597.96	417 482.30	100 115.66	174 201.25	
Short gestation and low birthweight nec (P07).....	1,830 2,116.56	1,775 2,052.95	1,739 2,011.31	35 40.48	56 64.77	
Sudden infant death syndrome (R95).....	172 198.93	10 *	3 *	7 *	162 187.37	
Maternal complications of pregnancy (P01).....	626 724.03	620 717.09	611 706.68	9 *	6 *	
Complications of placenta, cord, membranes (P02).....	289 334.25	281 325.00	276 319.22	5 *	8 *	
Respiratory distress of newborn (P22).....	285 329.63	276 319.22	229 264.86	46 53.20	9 *	
Accidents (unintentional injures) (V01-X59).....	83 96.00	10 *	3 *	7 *	73 84.43	
Bacterial sepsis of newborn (P36).....	252 291.46	234 270.64	81 93.68	153 176.96	17 *	
Diseases of the circulatory system (I00-I99).....	106 122.60	23 26.60	9 *	14 *	83 96.00	
Intrauterine hypoxia, birth asphyxia (P20-P21).....	69 79.80	66 76.33	50 57.83	16 *	3 *	
All other causes.....	2,121 2,453.13	1,260 1,457.30	849 981.95	411 475.36	862 996.98	
<b>2,500 grams or more</b>						
All causes .....	546,550	1,830 334.83	522 95.51	284 51.96	238 43.55	1,308 239.32
Congenital malformations (Q00-Q99).....	359 65.68	190 34.76	123 22.50	68 12.44	169 30.92	
Short gestation and low birthweight nec (P07).....	12 *	12 *	12 *	- -	- -	
Sudden infant death syndrome (R95).....	417 76.30	37 6.77	6 *	31 5.67	379 69.34	
Maternal complications of pregnancy (P01).....	13 *	12 *	12 *	- -	1 *	
Complications of placenta, cord, membranes (P02).....	16 *	13 *	12 *	1 *	3 *	
Respiratory distress of newborn (P22).....	5 *	5 *	3 *	2 *	- -	
Accidents (unintentional injures) (V01-X59).....	211 38.61	29 5.31	4 *	25 4.57	182 33.30	
Bacterial sepsis of newborn (P36).....	16 *	15 *	8 *	7 *	1 *	
Diseases of the circulatory system (I00-I99).....	62 11.34	7 *	4 *	3 *	55 10.06	
Intrauterine hypoxia, birth asphyxia (P20-P21).....	45 8.23	37 6.77	25 4.57	12 *	8 *	
All other causes.....	672 122.95	163 29.82	75 13.72	89 16.28	509 93.13	

See footnotes at end of table.



Documentation Table 5

Live births by birthweight and race of mother and infant deaths and infant mortality rates by age of death, birthweight, and race of mother for 10 major causes of infant death: United States, 2002 birth cohort data -Cont

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

Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal
<b>Black</b>						
Not stated birthweight						
All causes .....	142	53	52	51	1	1
		37,323.94	36,619.72	35,915.49	*	*
Congenital malformations (Q00-Q99).....		1	1	1	-	-
		*	*	*	-	-
Short gestation and low birthweight nec (P07).....		22	22	22	-	-
		15,492.96	15,492.96	15,492.96	-	-
Sudden infant death syndrome (R95).....		-	-	-	-	-
		-	-	-	-	-
Maternal complications of pregnancy (P01).....		14	14	14	-	-
		*	*	*	-	-
Complications of placenta, cord, membranes (P02).....		2	2	2	-	-
		*	*	*	-	-
Respiratory distress of newborn (P22).....		1	1	1	-	-
		*	*	*	-	-
Accidents (unintentional injuries) (V01-X59).....		-	-	-	-	-
		-	-	-	-	-
Bacterial sepsis of newborn (P36).....		-	-	-	-	-
		-	-	-	-	-
Diseases of the circulatory system (I00-I99).....		-	-	-	-	-
		-	-	-	-	-
Intrauterine hypoxia, birth asphyxia (P20-P21).....		-	-	-	-	-
		-	-	-	-	-
All other causes.....		12	11	10	1	1
		*	*	*	*	*

-/ Quality zero.

\*/Figure does not meet standard of reliability or precision; see Technical notes.

1/ Includes races other than white and black.

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2005 birth cohort data.

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2005 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
United States /2					
Total	360	272	241	31	88
White	219	171	154	17	48
Black	124	88	75	13	36
Alabama					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Alaska					
Total	2	1	1	-	1
White	1	1	1	-	-
Black	-	-	-	-	-
Arizona					
Total	14	9	3	6	5
White	11	8	3	5	3
Black	1	-	-	-	1
Arkansas					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
California					
Total	88	75	71	4	13
White	64	53	49	4	11
Black	15	14	14	-	1
Colorado					
Total	2	-	-	-	2
White	1	-	-	-	1
Black	1	-	-	-	1
Connecticut					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Delaware					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Dist of Columbia					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Florida					
Total	5	1	-	1	4
White	4	-	-	-	4
Black	1	1	-	1	-
Georgia					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Hawaii					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2005 birth cohort data.

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2005 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
<b>Idaho</b>					
Total	1	-	-	-	1
White	-	-	-	-	-
Black	1	-	-	-	1
<b>Illinois</b>					
Total	20	16	16	-	4
White	9	9	9	-	-
Black	11	7	7	-	4
<b>Indiana</b>					
Total	6	3	1	2	3
White	3	1	1	-	2
Black	3	2	-	2	1
<b>Iowa</b>					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
<b>Kansas</b>					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
<b>Kentucky</b>					
Total	6	2	2	-	4
White	3	2	2	-	1
Black	3	-	-	-	3
<b>Louisiana</b>					
Total	33	21	16	5	12
White	4	4	3	1	-
Black	28	17	13	4	11
<b>Maine</b>					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
<b>Maryland</b>					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
<b>Massachusetts</b>					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
<b>Michigan</b>					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
<b>Minnesota</b>					
Total	1	-	-	-	1
White	-	-	-	-	-
Black	1	-	-	-	1
<b>Mississippi</b>					
Total	7	4	-	4	3
White	4	1	-	1	3
Black	3	3	-	3	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2005 birth cohort data.

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2005 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Missouri					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
Montana					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Nebraska					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Nevada					
Total	6	3	2	1	3
White	6	3	2	1	3
Black	-	-	-	-	-
New Hampshire					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
New Jersey					
Total	4	4	4	-	-
White	4	4	4	-	-
Black	-	-	-	-	-
New Mexico					
Total	3	2	1	1	1
White	3	2	1	1	1
Black	-	-	-	-	-
New York					
Total	6	5	5	-	1
White	5	5	5	-	-
Black	1	-	-	-	1
New York City					
Total	3	3	3	-	-
White	1	1	1	-	-
Black	2	2	2	-	-
North Carolina					
Total	3	1	1	-	2
White	2	1	1	-	1
Black	1	-	-	-	1
North Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Ohio					
Total	29	23	21	2	6
White	15	13	11	2	2
Black	14	10	10	-	4
Oklahoma					
Total	5	2	2	-	3
White	3	1	1	-	2
Black	1	-	-	-	1

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2005 birth cohort data.

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2005 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Oregon					
Total	6	3	2	1	3
White	5	2	1	1	3
Black	-	-	-	-	-
Pennsylvania					
Total	5	5	5	-	-
White	4	4	4	-	-
Black	1	1	1	-	-
Rhode Island					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
South Carolina					
Total	2	-	-	-	2
White	-	-	-	-	-
Black	2	-	-	-	2
South Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Tennessee					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
Texas					
Total	99	89	85	4	10
White	63	56	55	1	7
Black	34	31	28	3	3
Utah					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Vermont					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Virginia					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Washington					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
West Virginia					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Wisconsin					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence:  
United States and each state, 2005 birth cohort data.

[Infant deaths are under 1 year. Neonatal death are under 28 days; early neonatal, 0-6 days; late neonatal, 7-27 days; and postneonatal, 28 days through 11 months. Data in this table is for infant deaths in 2005 that are not included in the linked file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Wyoming					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Puerto Rico					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Virgin Islands					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
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.