

**Public Use
Data File
Documentation**

2010 Cohort Linked Birth/Infant Death Data Set

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

2010 Cohort Linked Birth/Infant Death Data Set

Contents

Introduction, Methodology, and Classification of Data

File and data characteristics

List of data elements and locations

Record layout and definition of items and codes

Titles and codes for the 130 cause-of death list

Documentation tables 1-6

External Links

[Infant Mortality Statistics from the 2010 Period Linked Birth/Infant Death Data Set](#)

[User's Guide for the 2010 Natality File](#)

[Deaths: Final Data for 2010](#) (see Technical Notes)

Introduction

This documentation is for the 2010 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 2010 period linked file consists of all infant deaths occurring in 2010 linked to their corresponding birth certificates, whether the birth occurred in 2009 or 2010. The denominator for this data set is all births occurring in 2010.

Birth cohort data - The numerator of the 2010 birth cohort linked file consists of deaths to infants born in 2010 linked to their corresponding birth certificates, whether the death occurred in 2010 or 2011. The denominator for this data set is all births occurring in 2010.

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 2010 birth cohort linked file includes several data files. The first file includes linked birth and death certificate data for all US infants born in 2010 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 2010 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.

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 birth data based on both the 1989 Revision of the U.S. Standard Certificate of Live Birth (unrevised) and the 2003 revision of the U.S. Standard Certificate

of Live Birth (revised). The 2003 revision is described in detail elsewhere. (See the 2003 Revision website at: http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm). Where comparable, revised data are combined with data from the remaining reporting areas. (Revised data are denoted by “R;” unrevised data are denoted by “U” in the “Rev” column of the documentation.) Where data for the 1989 and 2003 certificate revisions are not comparable (e.g., educational attainment of the mother), unrevised and revised data are given in separate fields in the data file.

Most of the variables from the death certificate in this file are comparable despite changes to item wording and format in the 2003 revision. See more about the 2003 Revision at: http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm .

Incomplete National Reporting - Using Reporting Flags

As a result of the delayed, phased transition to the 2003 U.S. Standard Certificate of Live Birth, the 2010 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) (see the [2010 Natality User Guide](#)). Although many data items are comparable across certificate revisions and are available for the entire United States, many items have more limited reporting areas. 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 areas that do not report items when tabulating data by mother’s place of residence. Reporting flags are available for most items on the file. 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. Reporting flag codes are 0 (item reported in neither the current or previous year), 1 (item reported in both current and previous year), 2 (item reported in the previous but not in the current year), and 3 (item reported in the current but not in the previous year). When using these data, select reporting flag=1 to get valid and complete data for an item (see SAS code examples below).

Translating “blanks” - In the 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.

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

An example of SAS code that may be used to incorporate the correct use of reporting flags and the translation of blanks is shown below. This example is for the revised prenatal care item. Prenatal care data based on the revised certificate are not considered

comparable with data based on the unrevised certificate. Accordingly, use of the reporting flag for this item will produce 2010 cohort data for the month prenatal care began for the states that implemented the revised birth certificate by January 1st 2010.

Sample SAS program

```
01 DATA work;
02     INFILE 'C:\VS10LKBC.USNUMPUB' LRECL=1259;
03     INPUT
04         restatus 138
05         precare 245-246
06         f_mpcb 668;
07
08     /*Exclude foreign residents*/
09     IF restatus NE 4;
10     /*Select reporting area*/
11     IF f_mpcb=1;
12     /*Convert blanks to unknown*/
13     IF precare=. THEN precare=99;
14
15 PROC FREQ;
16     TABLE precare;
17 RUN;
```

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

Alternatives to the use of reporting flags - The use of reporting flags provides a relatively quick, accurate way to select records for all areas reporting comparable data for a given item in a particular year. However, should a limited reporting area be needed, specific state(s) of residence may also be selected, or unselected. This approach may be useful, for example, in trend analysis where reporting areas have changed over time. This approach may also be used to limit the reporting area to only states reporting multiple or single race data (see multiple race section below).

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

```
01 DATA work;
02     INFILE 'C:\VS10LKBC.USNUMPUB ' LRECL=1259;
03     INPUT
04         restatus 138
05         xmrstate $ 107-108
06         precare 245-246;
07
08     /*Exclude foreign residents*/
```

```

09         IF restatus NE 4;
10         /*Select reporting area*/
11         IF xmrstate in ('ID','KY','NY','PA','SC','TN','WA');
12         /*Convert blanks to unknown*/
13         IF precare=. THEN precare=99;
14
15     PROC FREQ;
16         TABLE precare;
17     RUN;

```

Single, Multiple, and Bridged Race

In 1997, the Office of Management and Budget (OMB) issued revised standards requiring Federal collection programs to allow respondents to select *one or more race categories*. In 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 2010](#) and [Deaths: Final Data for 2010](#).

Weighting

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

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

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

Birthweight

Beginning with the 1995 linked file, an imputation for not-stated birthweight was added to the data set, to reduce potential bias in the computation of birthweight-specific infant mortality rates. Basically, if birthweight is not stated and the period of gestation is known, birthweight is assigned the value from the previous record with the same period of gestation, race, sex, and plurality. Imputed values are flagged. The addition of this imputation has reduced the percent of not-stated responses for birthweight from 3.17 to 0.37 in the numerator file, and from 0.10 to 0.01 in the denominator file, thus greatly reducing 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.

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

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

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

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

Characteristics of Unlinked File

For the 2010 cohort linked file 1.2% 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 2010](#)). Also, date of birth as reported on the death certificate is used to generate age at death. This information is used in place of date of birth from the birth certificate, which is not available. Documentation table 6 shows counts of unlinked records by race and age at death for each state of residence. The user is cautioned in using table 6 that the race and residence items are based on information reported on the death certificate, whereas tables 1-5 present data from the linked file in which the race and residence items are based on information reported on the birth certificate.

Percent of Records Linked

The 2010 cohort linked file for the 50 States and D.C. includes 24,174 linked infant death records and 285 unlinked infant death records. The linked file is weighted to the sum of linked plus unlinked records, thus the total number of weighted infant deaths by place of occurrence is 24,459.

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. 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 are added to the file to correct for biases in the data due to poor data linkage for particular states.

Table 1. Percent of infant deaths linked by state of occurrence of death: United States, 2010 cohort linked file

United States	98.8	Nebraska	100.0
Alabama	100.0	Nevada	99.0
Alaska	97.2	New Hampshire	100.0
Arizona	97.4	New Jersey	98.7
Arkansas	98.9	New Mexico	99.2
California	97.3	New York State	99.8
Colorado	100.0	New York City	99.8
Connecticut	100.0	North Carolina	99.8
Delaware	100.0	North Dakota	100.0
District of Columbia	100.0	Ohio	98.8
Florida	100.0	Oklahoma	99.2
Georgia	97.8	Oregon	99.6
Hawaii	100.0	Pennsylvania	99.7
Idaho	100.0	Rhode Island	97.6
Illinois	99.2	South Carolina	100.0
Indiana	99.0	South Dakota	100.0

Iowa	100.0	Tennessee	99.9
Kansas	97.7	Texas	96.0
Kentucky	98.4	Utah	100.0
Louisiana	98.6	Vermont	100.0
Maine	100.0	Virginia	99.7
Maryland	100.0	Washington	99.7
Massachusetts	99.4	West Virginia	100.0
Michigan	99.4	Wisconsin	100.0
Minnesota	100.0	Wyoming	100.0
Mississippi	99.4	Puerto Rico	92.0
Missouri	98.1	Virgin Islands	100.0
Montana	100.0	Guam	100.0

Confidentiality

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

Resources

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 variables. In particular, there are a number of details about multiple cause-of-death coding which, if not understood and analyzed properly, may result in faulty analysis of the data. Volumes 1, 2 and 3 of the ICD-10 may be purchased from the World Health Organization (WHO) Publication Center USA, see <http://www.cdc.gov/nchs/icd/icd10.htm> . Many of the instruction manuals listed below are available electronically on the NCHS website. The User Guide for natality and the mortality final report for 2010 linked in this document also provide information on the source of data, coding procedures, quality of the data, etc.

- A. National Center for Health Statistics. Vital statistics, Instructions for Classifying the Underlying Cause-of-Death, 2010. 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, 2010. 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, 2010. NCHS Instruction Manual, Part 2c. Hyattsville, Maryland: Public Health Service.

- D. National Center for Health Statistics. Specifications for U.S. Standard Certificate of Birth – 2003 Revision.
- E. National Center for Health Statistics. Specifications for U.S. Standard Certificate of Death – 2003 Revision.
- F. National Center for Health Statistics. Vital statistics, Computer Edits for Natality Data, Effective 1993. NCHS Instruction Manual Part 12. Hyattsville, Maryland: Public Health Service.
- G. National Center for Health Statistics. Vital statistics, Computer Edits for Mortality Data, Effective 2010. NCHS Instruction Manual Part 11. Hyattsville, Maryland: Public Health Service.

Instruction manuals are available at:

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

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

Underlying Cause of Death Data

Mortality statistics by cause of death are compiled from entries on the medical certification portion of the death certificate. Causes of death include “all those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced these injuries”. The medical certification of death is divided into two sections. In Part I, the physician is asked to provide the causal chain of morbid conditions that led to death, beginning with the condition most proximate to death on line (a) and working backwards to the initiating condition. Part I of the medical certification is designed to facilitate the selection of the underlying cause of death when two or more causes are recorded on the certificate. The underlying cause of death is defined by the WHO in the ICD-10 as “(a) the disease or injury which initiated the chain of morbid events leading directly to death, or (b) the circumstances of the accident or violence that produced the fatal injury” and is generally considered the most useful cause from a public health standpoint. Part II of the cause-of-death section of the death certificate solicits other conditions that the certifier believed contributed to death, but were not in the causal chain. While some details of the death certificate vary by state, all states use the same general format for medical certification outlined in the U.S. Standard Certificate. The U.S. Standard Certificate, in turn, closely follows the format recommended by the WHO.

For a given death, the underlying cause is selected from the condition or conditions recorded by the certifier in the cause-of-death section of the death certificate. NCHS is bound by international agreement to make the selection of the underlying cause through the use of the ICD-10 classification structure, and the selection and modification rules

contained in this revision of the ICD. Additional information on the underlying cause of death can be found at <http://www.cdc.gov/nchs/data/dvs/mort99doc.pdf> .

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

Multiple Cause of Death Data

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

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

Entity Axis Codes

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

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

1. Line indicator: The first byte represents the line of the death certificate on which the code appears. Six lines (1-6) are allowable with the fourth and fifth denoting one or two written in “due to”s beyond the three lines

provided in Part I of the U.S. standard death certificate. Line "6" represents Part II of the death certificate.

2. Position indicator: The next byte indicates the position of the code on the line, i.e., it is the first (1), second (2), third (3) eighth (8) code on the line.
3. Cause category: The next four bytes represent the ICD-10 cause code.
4. The last byte is blank.

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

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

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

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

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

The user should study the rules for entity coding as they relate to his/her research prior to use of entity data. The user is further cautioned that the inclusion notes in ICD-10 that relate to modifying and combining categories are seldom applicable to entity coding (except where provided in NCHS Instruction Manual Part 2b).

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

Record Axis Codes

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

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

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

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

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

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

of ICD-10 the most meaningful code has been assigned. The translation process creates for the user a data file that is edited for contradictions, duplicate codes, and imprecisions. In contrast to entity axis data, record axis data are classified in a manner comparable to underlying cause of death classification thereby facilitating joint analysis of these variables. A potential disadvantage of record axis data is that some detail is sacrificed in a number of the linkages.

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

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

Additional Information

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

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

2010 Cohort Linked Birth/Infant Death Data Set

Numerator Files:

United States

A. Record count: 24,174
B. Record length: 1,259
C. Data counts: a. By occurrence: 24,174
b. By residence: 24,156
c. To foreign residents: 18

Territories

A. Record count: 382
B. Record length: 1,259

Denominator Files:

United States

A. Record count: 4,007,105
B. Record length: 900
C. Data counts: a. By occurrence: 4,007,105
b. By residence: 3,999,386
c. To foreign residents: 7,719

Territories

A. Record count: 47,320
B. Record length: 900

Unlinked Files:

United States

A. Record count: 285
B. Record length: 1,259

Territories

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

2010 Cohort Linked Selected Data Elements and Locations

Data Items	Denominator Plus File	Numerator File		Unlinked File
		Birth	Death	
General				
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	--	--
Infant				
Age at death	--	--	872-77	872-77+
Race	--	--	--	139-44*
Sex	436	436	--	436*
Gestation	451-57	451-57	--	--
Birthweight	467-73	467-73	--	--
Plurality	423	423	--	--
Apgar score	415-17	415-17	--	--
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
Mother				
Age	89-93	89-93	--	--
Race	139-44	139-44	--	--
Education	155-58	155-58	--	--
Marital status	153	153	--	--
Hispanic origin	148-49	148-49	--	--
Father				
Age	182-87	182-87	--	--
Race	188-91, 199-200	188-91, 199-200	--	--
Hispanic origin	195-96	195-96	--	--
Pregnancy items				
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	--	--
Medical and health data				
Method of delivery	390-401	390-401	--	--
Medical risk factors	313-19	313-19	--	--
	328-37	328-37	--	--
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	476-82	476-82	--	--
Congenital anomalies	492-523	492-523	--	--
Underlying cause of death	--	--	884-87	884-87
130 infant cause recode	--	--	889-91	889-91
Multiple conditions	--	--	903-1148	903-1148
Other items				
Residence reporting				
Flags	569-771	569-771	--	--
Late record flag	9	9	--	--
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
2010 COHORT LINKED FILE PUBLIC-USE RECORD LAYOUT							
1-6	6	FILLER	Filler				
7	1	REVISION	Revision		U,R	A S	State used the 2003 version of the US Standard Birth Certificate (Revised) State used the 1989 version of the US Standard Birth Certificate (Unrevised)
8	1	FILLER	Filler				
9	1	LATEREC	Late Record Flag		U,R	0 1	Not late record Late record
10-14	5	SEQNUM	Infant Death Number This number uniquely identifies the same infant In the numerator and denominator-plus files.			00001-nnnnn	
15-18	4	DOB_YY	Birth Year		U,R	2010	2010
19-20	2	DOB_MM	Birth Month		U,R	01 02 03 04 05 06 07 08 09 10 11 12	January February March April May June July August September October November December
21-28	8	FILLER	Filler				
29	1	DOB_WK	Weekday		U,R	1 2 3 4 5 6 7	Sunday Monday Tuesday Wednesday Thursday Friday Saturday

* U,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	Occurrence Territory (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	Filler				
37-39	3	OCNTYFIPS	Occurrence County (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R		
			<u>Puerto Rico</u>			127 999	San Juan County less than 250,000
			<u>Other Outlying Areas of the U.S.</u>			000 999	No county level geography County less than 250,000
40	1	OCNTYPOP	Occurrence County Pop (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R	0 1 2 9	County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County less than 250,000
41	1	BFACIL	Birth Place (Revised)	676	R	1 2 3 4 5 6 7 9 Blank	Hospital Freestanding Birthing Center Home (intended) Home (not intended) Home (unknown if intended) Clinic / Doctor's Office Other Unknown Not on certificate
42	1	UBFACIL	Birth Place		U,R	1 2 3 4 5 9	Hospital Freestanding Birthing Center Clinic / Doctor's Office Residence Other Unknown

* 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
43-58	16	FILLER	Filler				
59	1	BFACIL3	Birth Place Recode		U,R	1 2 3	In Hospital Not in Hospital Unknown or Not Stated
60-86	27	FILLER	Filler				
87	1	MAGE_IMPFLG	Mother's Age Imputed		U,R	Blank 1	Age not imputed Age imputed
88	1	MAGE_REPFLG	Reported Age of Mother Flag		U,R	Blank 1	Reported age not used Reported age used
89-90	2	MAGER	Mother's Age Recode 41		U,R	12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	10 – 12 years 13 years 14 years 15 years 16 years 17 years 18 years 19 years 20 years 21 years 22 years 23 years 24 years 25 years 26 years 27 years 28 years 29 years 30 years 31 years 32 years 33 years 34 years 35 years 36 years 37 years 38 years 39 years 40 years 41 years

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

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

96-108	13	FILLER	Filler				
		* 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
109-110	2	MR TERR	Mother's Residence (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R	GU PR VI CC CU MX US XX ZZ	Guam Puerto Rico Virgin Islands Canada Cuba Mexico United States Not Applicable Not Classifiable
111-113	3	FILLER	Filler				
114-116	3	MRCNTY	Mother's County of residence (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			<u>Puerto Rico</u>			127 999	San Juan County of less than 250,000 or foreign resident
			<u>Other Outlying Areas of the US</u>			000 999	No county level geography County of less than 250,000 or foreign resident
117-131	15	FILLER	Filler				
132	1	RCNTY_POP	Population of Residence County (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R	0 1 2 9 Z	County of 1,000,000 or more County of 500,000 to 1,000,000 County of 250,000 to 500,000 County less than 250,000 Foreign resident
133-136	4	FILLER	Filler				
137	1	RECTYPE	Record Type (This item is available in the territory file only, geographic codes are not 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 the same.
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
		U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
		R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

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

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

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

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

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

* 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
						16	4 years of college
						17	5 or more years of college
						99	Not stated
						Blank	Not on certificate
158	1	MEDUC_REC	Mother's Education Recode 647		U	1	0 – 8 years
						2	9 – 11 years
						3	12 years
						4	13 – 15 years
						5	16 years and over
						6	Not stated
						Blank	Not on certificate
159-174	16	FILLER	Filler				
175	1	FAGERPT_FLG	Father's Reported Age Used		U,R	Blank	Father's reported age not used
						1	Father's reported age used
176-181	6	FILLER	Filler				
182-183	2	FAGECOMB	Father's Combined Age (Revised)		R	09-98	Father's combined age in years
						99	Unknown or not stated
						Blank	Not on certificate
184-185	2	UFAGECOMB	Father's Combined Age (Unrevised)		U,R	10-98	Father's combined age in years
						99	Unknown or not stated
186-187	2	FAGEREC11	Father's Age Recode 11		U,R	01	Under 15 years
						02	15-19 years
						03	20-24 years
						04	25-29 years
						05	30-34 years
						06	35-39 years
						07	40-44 years
						08	45-49 years
						09	50-54 years
						10	55-98 years
						11	Not stated
188-189	2	FBRACE	Father's Bridged Race		R**	01	White – single race
			Includes only states reporting multiple race. Codes			02	Black – single race
			01-14 used for individuals reporting only one race.			03	American Indian/Alaska Native – single race
			Codes 21-24 used for individuals reporting more than			04	Asian Indian – single race
			one race that have been bridged to a single race.			05	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 99	Filipino – single race Japanese – single race Korean – single race Vietnamese – single race Other Asian – single race Hawaiian – single race Guamanian – single race Samoan – single race Other Pacific Islander – single race White – bridged multiple race Black – bridged multiple race American Indian / Alaska Native – bridged multiple race Asian / Pacific Islander – bridged multiple race Unknown or not stated, also includes states not reporting multiple race.
			** Also includes unrevised states that report multiple race.			Blank	Not on certificate
190	1	FILLER	Filler				
191	1	FRACEREC	Father's Race Recode Includes individuals reporting only one race and individuals reporting more than one race bridged to a single race.		U,R		
			<u>United States and all Outlying Areas of the US except Puerto Rico</u>			1 2 3 4 9	White Black American Indian / Alaskan Native Asian / Pacific Islander Unknown or not stated
			<u>Puerto Rico</u>			1 2 9 0	White Black Unknown or not stated Other (not classified as White or Black)
192-194	3	FILLER	Filler				
195	1	UFHISP	Father's Hispanic Origin				
				570	U,R	0 1 2 3 4	Non-Hispanic Mexican Puerto Rican Cuban Central American
			* 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 and Unknown Hispanic Origin unknown or not stated
196	1	FRACEHISP	Father's Race/Hispanic Origin	570	U,R	1 2 3 4 5 6 7 8 9	Mexican Puerto Rican Cuban Central or South American Other and Unknown Hispanic Non-Hispanic White Non-Hispanic Black Non-Hispanic Other Races Origin unknown or not stated
197-198	2	FILLER	Filler				
199-200	2	UFRACE	Father's Race (Unrevised) <u>United States</u>		U	01 02 03 04 05 06 07 18 28 38 48 58 68 78 99 Blank	White Black American Indian / Alaska Native Chinese Japanese Hawaiian (includes part Hawaiian) Filipino Asian Indian Korean Samoan Vietnamese Guamanian Other Asian or Pacific Islander in areas reporting codes 18-58. Combined other Asian or Pacific Islander, includes 18-68 for areas that do not report them separately. Unknown or not stated Not on certificate
			<u>Puerto Rico</u>			01 03 00 99 Blank	White Black Other races not classified white or black Unknown or not stated Not on certificate
			<u>Guam</u>			01 02	White 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
						03	American Indian / Alaska Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						08	Other Asian or Pacific Islander
						58	Guamanian
						99	Unknown or not stated
						Blank	Not on certificate
			<u>All other Outlying Areas of the US</u>			01	White
						02	Black
						03	American Indian / Alaska Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						08	Other Asian or Pacific Islander
						99	Unknown or not stated
						Blank	Not on certificate
201-211	11	FILLER	Filler				
212	1	LBO	Live Birth Order		U,R	1-7	Number of live birth order.
						8	8 or more live births
						9	Unknown or not stated
213-216	4	FILLER	Filler				
217	1	TBO	Total Birth Order		U,R	1-7	Number of total birth order.
						8	Total birth order of 8 or more
						9	Unknown or not stated
218-244	27	FILLER	Filler				
245-246	2	PRECARE	Month Prenatal Care Began (Revised)				
			668		R	00	No prenatal care
						01-10	Month prenatal care began
						99	Unknown or not stated
						Blank	Not on certificate
247	1	PRECARE_REC	Month Prenatal Care Began Recode (Revised)				
			668		R	1	1 st to 3 rd month
						2	4 th to 6 th month

* 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
						3	7 th to final month
						4	No prenatal care
						5	Unknown or not stated
						Blank	Not on certificate
248-255	8	FILLER	Filler				
256-257	2	MPCB	Month Prenatal Care Began (Unrevised)	669	U	00	No prenatal care
						01-10	Month prenatal care began
						99	Unknown or not stated
						Blank	Not on certificate
258	1	MPCB_REC6	Month Prenatal Care Began Recode 6 (Unrevised)	669	U	1	1 st to 2 nd month
						2	3 rd month
						3	4 th to 6 th month
						4	7 th to final month
						5	No prenatal care
						6	Unknown or not stated
						Blank	Not on certificate
259	1	MPCB_REC5	Month Prenatal Care Began Recode 5 (Unrevised)	669	U	1	1 st trimester (1 st to 3 rd month)
						2	2 nd trimester (4 th to 6 th month)
						3	3 rd trimester (7 th to final month)
						4	No prenatal care
						5	Unknown or not stated
						Blank	Not on certificate
260-269	10	FILLER	Filler				
270-271	2	UPREVIS	Number of Prenatal Visits		U,R	00-49	Number of prenatal visits
						99	Unknown or not stated
272-273	2	PREVIS_REC	Number of Prenatal Visits Recode		U,R	01	No visits
						02	1 to 2 visits
						03	3 to 4 visits
						04	5 to 6 visits
						05	7 to 8 visits
						06	9 to 10 visits
						07	11 to 12 visits
						08	13 to 14 visits
						09	15 to 16 visits

* 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
						10	17 to 18 visits
						11	19 or more visits
						12	Unknown or not stated
274-275	2	FILLER	Filler				
276-277	2	WTGAIN	Weight Gain	648	U,R	00-97	Weight gain in pounds
						98	98 pounds and over
						99	Unknown or not stated
278	1	WTGAIN_REC	Weight Gain Recode	648	U,R	1	Less than 16 pounds
						2	16 to 20 pounds
						3	21 to 25 pounds
						4	26 to 30 pounds
						5	31 to 35 pounds
						6	36 to 40 pounds
						7	41 to 45 pounds
						8	46 or more pounds
						9	Unknown or not stated
279	1	FILLER	Filler				
280	1	DFPC_IMP	Day of Date First Prenatal Care Imputed		R	Blank	Day of date first prenatal care not imputed
						1	Day of date first prenatal care imputed
281-283	3	FILLER	Filler				
284-285	2	CIG_1	Cigarettes 1st Trimester	575	R	00-97	Number of cigarettes daily
						98	98 or more cigarettes daily
						99	Unknown or not stated
						Blank	Not on certificate
286-287	2	CIG_2	Cigarettes 2nd Trimester	575	R	00-97	Number of cigarettes daily
						98	98 or more cigarettes daily
						99	Unknown or not stated
						Blank	Not on certificate
288-289	2	CIG_3	Cigarettes 3rd Trimester	575	R	00-97	Number of cigarettes daily
						98	98 or more cigarettes daily
						99	Unknown or not stated
						Blank	Not on certificate
290	1	TOBUSE	Tobacco Use	667	U	1	Yes
						2	No

* 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
						9 Blank	Unknown or not stated Not on certificate
291-292	2	CIGS	Cigarettes per Day	667	U	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
293	1	UCIG_REC6	Cigarette Recode	667	U	0 1 2 3 4 5 6 Blank	Non-smoker 1 to 5 cigarettes daily 6 to 10 cigarettes daily 11 to 20 cigarettes daily 21 to 40 cigarettes daily 41 or more cigarettes daily Unknown or not stated Not on certificate
294	1	CIG_REC	Cigarette Recode	575	R	Y N U Blank	Yes No Unknown or not stated Not on certificate
295-312	18	FILLER	Filler				
313-319	9	<u>Risk Factors (Revised)</u> The checkbox items below follow this code structure:				Y N U Blank	Yes No Unknown or not stated Not on certificate
313	1	RF_DIAB	Prepregnancy Diabetes	582	R		
314	1	RF_GEST	Gestational Diabetes	583	R		
315	1	RF_PHYP	Prepregnancy Hypertesion	584	R		
316	1	RF_GHYP	Gestational Hypertension	585	R		
317	1	RF_ECLAM	Eclampsia	586	R		
318	1	RF_PPTERM	Previous Preterm Birth	587	R		
319	1	RF_PPOUTC	Poor Pregnancy Outcome	588	R		
320-323	4	FILLER	Filler				
324	1	RF_CESAR	Previous Cesarean Deliveries	593	R	Y N U Blank	Yes No Unknown or not stated Not on certificate

* 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
325-326	2	RF_CESARN	Number of Previous Cesarean Deliveries	594	R	00 01-30 99 Blank	None Number of previous cesareans Unknown or not stated Not on certificate
327	1	FILLER	Filler				
328-337	10	<u>Risk Factors in this Pregnancy</u> The checkbox items indented below follow this structure: The version is all 1989 Standard unless otherwise noted.			U,R	1 2 9 Blank	Yes No Unknown Not on certificate
328-330	3	FILLER	Filler				
331	1	URF_DIAB	Diabetes	684	U,R		
332-334	3	FILLER	Filler				
335	1	URF_CHYPER	Chronic Hypertension	688	U,R		
336	1	URF_PHYPER	Pregnancy-Associated Hypertension	689	U,R		
337	1	URF_ECLAM	Eclampsia	690	U,R		
338-350	13	FILLER	Filler				
351-354	4	<u>Obstetric Procedures (Revised)</u> The checkbox items indented below follow this structure:				Y N U Blank	Yes No Unknown or not stated Not on certificate
351	1	OP_CERV	Cervical Cerclage	601	R		
352	1	OP_TOCOL	Tocolysis	602	R		
353	1	OP_ECVS	Successful External Cephalic Version	603	R		
354	1	OP_ECVF	Failed External Cephalic Version	604	R		
355-361	7	<u>Obstetric Procedures</u>				1 2 9 Blank	Yes No Unknown or not stated Not on certificate
355-356	2	FILLER	Filler				
357	1	UOP_INDUC	Induction of Labor	703	U,R		
358	1	FILLER	Filler				
359	1	UOP_TOCOL	Tocolysis	705	U,R		
360-361	2	FILLER	Filler				

* 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
362-364	3	<u>Onset of Labor</u> The checkbox items below follow this structure:				Y N U Blank	Yes No Unknown or not stated Not on certificate
362	1	ON_RUPTR	Premature Rupture of Membrane	605	R		
363	1	ON_PRECIP	Precipitous Labor	606	R		
364	1	ON_PROL	Prolonged Labor	607	R		
365-373	9	<u>Characteristics of Labor and Delivery (Revised)</u> The checkbox items below follow this structure:				Y N U Blank	Yes No Unknown or not stated Not on certificate
365	1	LD_INDL	Induction of Labor	608	R		
366	1	LD_AUGM	Augmentation of Labor	609	R		
367	1	LD_NVPR	Non-Vertex Presentation	610	R		
368	1	LD_STER	Steroids	611	R		
369	1	LD_ANTI	Antibiotics	612	R		
370	1	LD_CHOR	Chorioamnionitis	613	R		
371	1	LD_MECS	Meconium Staining	614	R		
372	1	LD_FINT	Fetal Intolerance	615	R		
373	1	LD_ANES	Anesthesia	616	R		
374-389	16	<u>Complications of Labor and Delivery</u> The checkbox items indented below follow this structure:				1 2 9 Blank	Yes No Unknown or not stated Not on certificate
374	1	FILLER	Filler				
375	1	ULD_MECO	Meconium	712	U,R		
376-380	5	FILLER	Filler				
381	1	ULD_PRECIP	Precipitous Labor	718	U,R		
382-383	2	FILLER	Filler				
384	1	ULD_BREECH	Breech	721	U,R		
385-389	5	FILLER	Filler				
390-394	5	<u>Method of Delivery (Revised)</u>					
390	1	ME_ATTFF	Attempted Forceps	617	R	Y N U Blank	Yes No Unknown 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
391	1	ME_ATT	Attempted Vacuum	618	R	Y N U Blank	Yes No Unknown Not on certificate
392	1	ME_PRES	Fetal Presentation	619	R	1 2 3 9 Blank	Cephalic Breech Other Unknown Not on certificate
393	1	ME_ROUT	Route & Method of Delivery	620	R	1 2 3 4 9 Blank	Spontaneous Forceps Vacuum Cesarean Unknown Not on certificate
394	1	ME_TRIAL	Trial of Labor Attempted	621	R	Y N X U Blank	Yes No Not applicable Unknown Not on certificate
395-400	6	<u>Method of Delivery</u> The checkbox items indented below follow this structure:				1 2 9	Yes No Unknown or not stated
395	1	UME_VAG	Vaginal	730	U		
396	1	UME_VBAC	Vaginal after C-Section	731	U		
397	1	UME_PRIMC	Primary C-Section	732	U		
398	1	UME_REPEC	Repeat C-Section	733	U		
399	1	UME_FORCP	Forceps	734	U,R		
400	1	UME_VAC	Vacuum	735	U,R		
401	1	RDMETH_REC	Delivery Method Recode (Revised)	679	R	1 2 3 4 5	Vaginal (excludes vaginal after previous C-section) Vaginal after previous c-section Primary C-section Repeat C-section Vaginal (unknown if previous c-section) (2003 Standard)
* 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
						6	only) C-section (unknown if previous c-section) (2003 Standard only)
						9	Not stated
402	1	UDMETH_REC	Delivery Method Recode (Unrevised)	680	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	Filler				
410	1	ATTEND	Attendant		U,R	1	Doctor of Medicine (MD)
						2	Doctor of Osteopathy (DO)
						3	Certified Nurse Midwife (CNM)
						4	Other Midwife
						5	Other
						9	Unknown or not stated
411-414	4	FILLER	Filler				
415-416	2	APGAR5	Five Minute APGAR Score	574	U,R	00-10	A score of 0-10
						99	Unknown or not stated
417	1	APGAR5R	Five Minute APGAR Recode	574	U,R	1	A score of 0-3
						2	A score of 4-6
						3	A score of 7-8
						4	A score of 9-10
						5	Unknown or not stated
418-422	5	FILLER	Filler				
423	1	DPLURAL	Plurality Recode		U,R	1	Single
						2	Twin
						3	Triplet
						4	Quadruplet
						5	Quintuplet or higher

* 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
424	1	FILLER	Filler				
425	1	IMP_PLUR	Plurality Imputed		U,R	Blank 1	Plurality is imputed Plurality is not imputed
426-435	10	FILLER	Filler				
436	1	SEX	Sex of Infant		U,R	M F	Male Female
437	1	IMP_SEX	Imputed Sex		U,R	Blank 1	Infant Sex not Imputed Infant Sex is Imputed
438-439	2	DLMP_MM	Last Normal Menses Month		U,R	01 02 03 04 05 06 07 08 09 10 11 12 99	January February March April May June July August September October November December Unknown or not stated
440-441	2	FILLER	Filler				
442-445	4	DLMP_YY	Last Normal Menses Year		U,R	nnnn 9999	Year of last normal menses Unknown or not stated
446-447	2	ESTGEST	Obstetric/Clinical Gestation Est.	573	U,R	0-98 99	0 through 98 th week of gestation Unknown or not stated
448-450	3	FILLER	Filler				
451-452	2	COMBGEST	Gestation – Detail in Weeks		U,R	17-47 99	17 th through 47 th week of gestation Unknown
453-454	2	GESTREC10	Gestation Recode 10		U,R	01 02 03	Under 20 weeks 20-27 weeks 28-31 weeks
* 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
						04	32-33 weeks
						05	34-36 weeks
						06	37-38 weeks
						07	39 weeks
						08	40 weeks
						09	41 weeks
						10	42 weeks and over
						99	Unknown
455	1	GESTREC3	Gestation Recode 3		U,R	1	Under 37 weeks
						2	37 weeks and over
						3	Not stated
456	1	OBGEST_FLG	Clinical Estimate of Gestation Used Flag		U,R	Blank	Clinical Estimate is not used
						1	Clinical Estimate is used
457	1	GEST_IMP	Gestation Imputed Flag		U,R	Blank	Gestation is not imputed
						1	Gestation is imputed
458-466	9	FILLER	Filler				
467-470	4	BRTHWGT	Imputed Birthweight		U,R	0227-8165	Number of grams
						9999	Not stated birthweight
471-472	2	BWTR14	Birthweight Recode 14		U,R	01	499 grams or less
						02	500 – 749 grams
						03	750 - 999 grams
						04	1000 - 1249 grams
						05	1250 – 1499 grams
						06	1500 – 1999 grams
						07	2000 – 2499 grams
						08	2500 – 2999 grams
						09	3000 – 3400 grams
						10	3500 – 3999 grams
						11	4000 – 4499 grams
						12	4500 – 4999 grams
						13	5000 – 8165 grams
						14	Not Stated
473	1	BWTR4	Birthweight Recode 4		U,R	1	1499 grams or less
						2	1500 – 2499 grams
						3	2500 grams or more
						4	Unknown or not stated

* 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
474	1	FILLER	Filler				
475	1	BWTIMP	Imputed Birth Weight Flag		U,R	Blank 1	Birth Weight is not imputed Birth Weight is imputed
476-482	7	<u>Abnormal Conditions of the Newborn (Revised)</u> 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	Assisted Ventilation	628	R		
477	1	AB_AVEN6	Assisted Ventilation >6 hrs	629	R		
478	1	AB_NICU	Admission to NICU	630	R		
479	1	AB_SURF	Surfactant	631	R		
480	1	AB_ANTI	Antibiotics	632	R		
481	1	AB_SEIZ	Seizures	633	R		
482	1	AB_BINJ	Birth Injury	634	R		
483-491	9	FILLER	Filler				
492-503	12	<u>Congenital Anomalies of the Newborn (Revised)</u> The checkbox items below follow this structure:				Y N U Blank	Yes, anomaly reported No, anomaly not reported Unknown Not on certificate
492	1	CA_ANEN	Anencephaly	635	R		
493	1	CA_MNSB	Meningomyelocele/Spina Bifida	636	R		
494	1	CA_CCHD	Cyanotic Congenital Heart Disease	637	R		
495	1	CA_CDH	Congenital Diaphragmatic Hernia	638	R		
496	1	CA_OMP	Omphalocele	639	R		
497	1	CA_GAST	Gastroschisis	640	R		
498	1	CA_LIMB	Limb Reduction Defect	641	R		
499	1	CA_CLEFT	Cleft Lip w/ or w/o Cleft Palate	642	R		
500	1	CA_CLPAL	Cleft Palate alone	643	R		
501	1	CA_DOWN	Downs Syndrome	644	R	C P N U Blank	Confirmed Pending No Unknown Not on certificate
502	1	CA_DISOR	Suspected Chromosomal Disorder	645	R	C P	Confirmed Pending
* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).						
U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.						
R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.						

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						N	No
						U	Unknown
						Blank	Not on certificate
503	1	CA_HYPO	Hypospadias	646	R	Y	Yes, Anomaly reported
						N	No, Anomaly not reported
						U	Unknown
						Blank	Not on certificate
504-523	20	<u>Congenital Anomalies of the Newborn</u> The checkbox items indented below follow this structure:				1	Anomaly reported
						2	Anomaly not reported
						9	Anomaly not classifiable
						Blank	Not on certificate
504	1	UCA_ANEN	Anencephalus	752	U,R		
505	1	UCA_SPINA	Spina Bifida / Meningocele	753	U,R		
506-512	7	FILLER	Filler				
513	1	UCA_OMPHA	Omphalocele / Gastroschisis	761	U,R		
514-517	4	FILLER	Filler				
518	1	UCA_CELFTLP	Cleft Lip / Palate	766	U,R		
519-522	4	FILLER	Filler				
523	1	UCA_DOWNS	Downs Syndrome	771	U,R		
524-568	45	FILLER	Filler				
569-771	203	<u>Flag File for Reporting Flags</u> The reporting flags indented below follow this coding structure:				0	Not reporting
						1	Reporting
569	1	F_MORIGIN	Origin of Mother		U,R		
570	1	F_FORIGIN	Origin of Father		U,R		
571	1	F_MEDUC	Education of Mother		R		
572	1	FILLER	Filler				
573	1	F_CLINEST	Clinical Estimate of Gestation		U,R		
574	1	F_APGAR5	Five minute APGAR		U,R		
575	1	F_TOBACO	Tobacco use		R		
576-581	6	FILLER	Filler				
582	1	F_RF_PDIAB	Prepregnancy Diabetes		R		
583	1	F_RF_GDIAB	Gestational Diabetes		R		
584	1	F_RF_PHYPER	Prepregnancy Hypertension		R		
585	1	F_RF_GHYPER	Gestational Hypertension		R		
586	1	F_RF_ECLAMP	Eclampsia		R		
587	1	F_RF_PPB	Previous Preterm Birth		R		
588	1	F_RF_PPO	Poor Pregnancy Outcome		R		
* 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
589-592	4	FILLER	Filler				
593	1	F_RF_CESAR	Previous Cesarean		R		
594	1	F_RF_NCESAR	Number of Previous Cesareans		R		
595-600	6	FILLER	Filler				
601	1	F_OB_CERVIC	Cervical Cerclage		R		
602	1	F_OB_TOCO	Tocolysis		R		
603	1	F_OB_SUCC	Successful External Cephalic Version		R		
604	1	F_OB_FAIL	Failed External Cephalic Version		R		
605	1	F_OL_RUPTURE	Premature Rupture of Membranes		R		
606	1	F_OL_PRECIP	Precipitous Labor		R		
607	1	F_OL_PROLONG	Prolonged Labor		R		
608	1	F_LD_INDUCT	Induction of Labor		R		
609	1	F_LD_AUGMENT	Augmentation of Labor		R		
610	1	F_LD_NVRTX	Non-Vertex Presentation		R		
611	1	F_LD_STEROIDS	Sterioids		R		
612	1	F_LD_ANTIBIO	Antibiotics		R		
613	1	F_LD_CHORIO	Chorioamnionitis		R		
614	1	F_LD_MECON	Meconium Staining		R		
615	1	F_LD_FINTOL	Fetal Intolerance		R		
616	1	F_LD_ANESTH	Anesthesia		R		
617	1	F_MD_ATTFOR	Attempted Forceps		R		
618	1	F_MD_ATTVAC	Attempted Vacuum		R		
619	1	F_MD_PRESENT	Fetal Presentation		R		
620	1	F_MD_ROUTE	Final Route and Method of Delivery		R		
621	1	F_MD_TRIAL	Trial of Labor Attempted		R		
622-627	6	FILLER	Filler				
628	1	F_AB_VENT	Assisted Ventilation		R		
629	1	F_AB_VENT6	Assisted Ventilation >6 hrs		R		
630	1	F_AB_NICU	Admission to NICU		R		
631	1	F_AB_SURFAC	Surfactant		R		
632	1	F_AB_ANTIBIO	Antibiotics		R		
633	1	F_AB_SEIZ	Seizures		R		
634	1	F_AB_INJ	Birth Injury		R		
635	1	F_CA_ANEN	Anencephaly		R		
636	1	F_CA_MENIN	Meningomyelocele/Spina Bifida		R		
637	1	F_CA_HEART	Cyanotic Congenital Heart Disease		R		
638	1	F_CA_HERNIA	Congenital Diaphragmatic Hernia		R		
639	1	F_CA_OMPHA	Omphalocele		R		
640	1	F_CA_GASTRO	Gastroschisis		R		
641	1	F_CA_LIMB	Limb Reduction Defect		R		
642	1	F_CA_CLEFTLP	Cleft Lip w/ or w/o Cleft Palate		R		
643	1	F_CA_CLEFT	Cleft Palate Alone		R		
644	1	F_CA_DOWNS	Downs Syndrome		R		
645	1	F_CA_CHROM	Suspected Chromosomal Disorder		R		

* 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
646	1	F_CA_HYPOS	Hypospadias		R		
647	1	F_MED	Mother's Education		U		
648	1	F_WTGAIN	Weight Gain		U,R		
649-666	18	FILLER	Filler				
667	1	F_TOBAC	Tobacco Use		U		
668	1	F_MPCB	Month Prenatal Care Began		R		
669	1	F_MPCB_U	Month Prenatal Care Began		U		
670-683	14	FILLER	Filler				
684	1	F_URF_DIABETES	Diabetes		U		
685-687	3	FILLER	Filler				
688	1	F_URF_CHYPER	Chronic Hypertension		U		
689	1	F_URF_PHYPER	Pregnancy Associated Hypertension		U		
690	1	F_URF_ECLAMP	Eclampsia		U		
691-702	12	FILLER	Filler				
703	1	F_UOB_INDUCT	Induction of Labor		U		
704	1	FILLER	Filler				
705	1	F_UOB_TOCOL	Tocolysis		U		
706-711	6	FILLER	Filler				
712	1	F_ULD_MECONIUM	Meconium		U		
713-717	5	FILLER	Filler				
718	1	F_ULD_PRECIP	Precipitous Labor		U		
719-720	2	FILLER	Filler				
721	1	F_ULD_BREECH	Breech		U		
722-729	8	FILLER	Filler				
730	1	F_U_VAGINAL	Vaginal		U		
731	1	F_U_VBAC	Vaginal after C-Section		U		
732	1	F_U_PRIMAC	Primary C-Section		U		
733	1	F_U_REPEAC	Repeat C-Section		U		
734	1	F_U_FORCEP	Forceps		U		
735	1	F_U_VACUUM	Vacuum		U		
736-751	16	FILLER	Filler				
752	1	F_UCA_ANEN	Anencephalus		U		
753	1	F_UCA_SPINA	Spina Bifida / Meningocele		U		
754-760	7	FILLER	Filler				
761	1	F_UCA_OMPHALO	Omphalocele / Gastroschisis		U		
762-765	4	FILLER	Filler				
766	1	F_UCA_CLEFTLP	Cleft Lip / Palate		U		
767-770	4	FILLER	Filler				
771	1	F_UCA_DOWNS	Downs Syndrome		U		

772-867

96 FILLER Filler

868

1 FLGND Match Status

1 Record in both files
2 Record not in both files

* 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
869-871	3	FILLER	Filler				
872-874	3	AGED	Age at Death in Days			000-365	Number of days
875	1	AGER5	Infant age recode 5			1 2 3 4 5	Under 1 hour 1 – 23 hours 1 – 6 days 7 – 27 days (late neonatal) 28 days and over (postneonatal)
876-877	2	AGER22	Infant age recode 22			Blank 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22	Age 1 year and over or not stated Under 1 hour (includes not stated hours and minutes) 1 – 23 hours 1 day (includes not stated days) 2 days 3 days 4 days 5 days 6 days 7-13 days 14 – 20 days 21 – 27 days 1 month (includes not stated months) 2 months 3 months 4 months 5 months 6 months 7 months 8 months 9 months 10 months 11 months
878	1	MANNER	Manner of Death			1 2 3 4 5 6 7 Blank	Accident Suicide Homicide Pending investigation Could not determine Self-inflicted Natural Not specified

* 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
879	1	DISPO	Method of Disposition			B C O U	Burial Cremation Other Unknown
880	1	AUTOPSY	Autopsy			Y N U	Yes No Unknown
881	1	FILLER	Filler				
882	1	PLACE	Place of injury for causes W00-Y34, except Y06.- and Y07.-			0 1 2 3 4 5 6 7 8 9 Blank	Home Residential institution School, other institution and public administrative area Sports and athletics area Street and highway Trade and service area Industrial and construction area Farm Other Specified Places Unspecified place Cause other than W00-Y34, except Y06.- and Y07.-
883	1	FILLER	Filler				
884-887	4	UC0D	ICD Code (10th Revision) See the <u>International Classification of Diseases</u> , 1992 Revision, Volume 1.				
888	1	FILLER	Filler				
889-891	3	UCODR130	130 Infant Cause Recode			001-158	Code Range
892	1	FILLER	Filler				
893-900	8	RECWT	Record Weight (no weights computed for possessions file) 1.XXXXXXX				

Here ends the cohort denominator-plus file. The numerator (linked) file continues below.

901-902	2	FILLER	Filler
---------	---	--------	---------------

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

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
903-904	2	EANUM	Number of Entity-Axis Conditions			00-20	Code range

905-1044 140 ENTITY **Entity-Axis Conditions**
Space has been provided for a maximum of 20 conditions.
Each condition takes 7 positions in the record. The 7th
position will be blank. Records that do not have 20 conditions
are blank in the unused area.

Position 1: Part/line number on certificate
1 ... Part I, line 1 (a)
2 ... Part I, line 2 (b)
3 ... Part I, line 3 (c)
4 ... Part I, line 4 (d)
5 ... Part I, line 5 (e)
6 ... Part II

Position 2: Sequence of condition within part/line
1-7 ... Code range

Position 3 – 6: Condition code
See Table 1 for a complete list of codes

905-911	7	1 st Condition
912-918	7	2 nd Condition
919-925	7	3 rd Condition
926-932	7	4 th Condition
933-939	7	5 th Condition
940-946	7	6 th Condition
947-953	7	7 th Condition
954-960	7	8 th Condition
961-967	7	9 th Condition
968-974	7	10 th Condition
975-981	7	11 th Condition
982-988	7	12 th Condition
989-995	7	13 th Condition
996-1002	7	14 th Condition
1003-1009	7	15 th Condition
1010-1016	7	16 th Condition
1017-1023	7	17 th Condition
1024-1030	7	18 th Condition
1031-1037	7	19 th Condition
1038-1044	7	20 th Condition

1045-1046 2 FILLER **Filler**

* 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
1047-1048	2	RANUM	Number of Record-Axis Conditions			00-20	Code range
1049-1148	100	RECORD	Record-Axis Conditions Space has been provided for a maximum of 20 conditions. Each condition takes 5 positions in the record. The 5 th position will be blank. Records that do not have 20 conditions are blank in the unused area. Positions 1 – 4: Condition Code See Table 1 for a complete list of codes				
1049-1053	5		1 st Condition				
1054-1058	5		2 nd Condition				
1059-1063	5		3 rd Condition				
1064-1068	5		4 th Condition				
1069-1073	5		5 th Condition				
1074-1078	5		6 th Condition				
1079-1083	5		7 th Condition				
1084-1088	5		8 th Condition				
1089-1093	5		9 th Condition				
1094-1098	5		10 th Condition				
1099-1103	5		11 th Condition				
1104-1108	5		12 th Condition				
1109-1113	5		13 th Condition				
1114-1118	5		14 th Condition				
1119-1123	5		15 th Condition				
1124-1128	5		16 th Condition				
1129-1133	5		17 th Condition				
1134-1138	5		18 th Condition				
1139-1143	5		19 th Condition				
1144-1148	5		20 th Condition				
1149-1150	2	FILLER	Filler				
1151	1	D_RESTATUS	Death Resident Status				
			United States Occurrence			1	RESIDENTS State and County of Occurrence and Residence are the same.
						2	INTRASTATE NONRESIDENTS State of Occurrence and Residence are the same, but County is different.
						3	INTERSTATE NONRESIDENTS
* 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
							State of Occurrence and Residence are different, but both are in the U.S.
					4	FOREIGN RESIDENTS	State of Occurrence is one of the 50 States or the District of Columbia, but Place of Residence is outside of the U.S.
			Puerto Rico Occurrence		1	RESIDENTS	Territory and County-equivalent of Occurrence and Residence are the same.
					2	INTRASTATE NONRESIDENTS	Territory of Occurrence and Residence are the same, but County-equivalent is different.
					3	INTERTERRITORY NONRESIDENTS	Territory of occurrence and residence are different, but both are a Territory.
					4	FOREIGN RESIDENTS	Occurred in Puerto Rico to a resident of any other place.
			Virgin Islands Occurrence		1	RESIDENTS	Territory and County-equivalent of Occurrence and Residence are the same.
					2	INTRASTATE NONRESIDENTS	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 STOCFFIPD **State of Occurrence (FIPS) of Death**
 (This item is available in the territory file only, geographic codes are not available in the U.S.file)

- * 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
						PR VI GU	Puerto Rico Virgin Islands Guam
1154-1156	3	CNTOCFIPD	County of Occurrence (FIPS) of Death Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document. (This item is available in the territory file only, geographic codes are not available in the U.S.file)			001-999	Code range County of less than 250,000
1157-1159	3	FILLER	Filler				
1160-1161	2	STRESFIPD	State of Residence (FIPS) (This item is available in the territory file only, geographic codes are not available in the U.S.file) Territories Puerto Rico Occurrence Virgin Islands Occurrence Guam Occurrence			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	Filler				

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

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
1164-1165	2	DRCNTY	State/Country of Residence of Death Recode (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
			Territorial residents			PR VI GU	Puerto Rico Virgin Islands Guam
			Foreign residents			CC MX CU YY	Canada Mexico Cuba Remainder of the world
			Puerto Rico Occurrence			PR US,ZZ	Puerto Rico Foreign residents
			Virgin Islands Occurrence			VI US, ZZ	Virgin Islands Foreign residents
			Guam Occurrence			GU US ZZ	Guam U.S. resident. Also considered a resident of Guam Foreign residents
1166-1168	3	CNTYRFPD	County of Residence (FIPS) of Death Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document. (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
						000 001-999 999	Foreign residents Code range County of less than 250,000
1169-1181	13	FILLER	Filler				
1182	1	CNTRSPPD	Population Size of County of Residence of Death Based on the results of the 2000 Census				
		* U,R	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth (unrevised), and the 2003 Revision of the U.S. Certificate of Live Birth (revised).				
		U	Includes data based on both the 1989 Revision of the U.S. Certificate of Live Birth; excludes data based on the 2003 Revision.				
		R	Includes data based on both the 2003 Revision of the U.S. Certificate of Live Birth; excludes data based on the 1989 Revision.				

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			(This item is available in the territory file only, geographic codes are not available in the U.S.file)			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	Filler				
1186	1	HOSPD	Place of Death and Decedent's Status			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	Day of Week of Death			1	Sunday
						2	Monday
						3	Tuesday
						4	Wednesday
						5	Thursday
						6	Friday
						7	Saturday
						9	Unknown
1188-1191	4	DTHYR	Death Year			2010	2010
						2011	2011
1192-1257	66	FILLER	Filler				
1258-1259	2	DOD_MM	Month of Death			01	January
						02	February
						03	March
						04	April
						05	May
						06	June
						07	July
						08	August
						09	September

* 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
						10	October
						11	November
						12	December

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

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

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

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)

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

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)

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

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, 2010 Link Birth Cohort Data.

(Residence of birth is of the mother)

State	Live births		Infant deaths			
	Occurrence	Residence	Unweighted Occurrence	Unweighted Residence	Weighted 1/ Occurrence	Weighted 1/ Residence
United States /2	4007105	3999386	24174	24156	24459	24441
Alabama	58783	60050	508	516	509	517
Alaska	11366	11471	34	39	36	41
Arizona	88090	87477	496	495	503	502
Arkansas	37536	38540	261	275	263	277
California	510980	510198	2368	2360	2421	2413
Colorado	66822	66355	394	376	396	378
Connecticut	38539	37708	195	200	195	200
Delaware	11682	11364	82	84	83	85
Dist of Columbia	13790	9165	107	67	107	67
Florida	214962	214590	1411	1394	1414	1397
Georgia	135411	133947	821	828	834	841
Hawaii	18948	18988	113	118	115	120
Idaho	22799	23198	100	112	101	113
Illinois	161758	165200	1036	1091	1048	1104
Indiana	84794	83940	611	618	618	625
Iowa	38574	38719	161	178	161	178
Kansas	41598	40649	241	245	243	247
Kentucky	53565	55784	319	352	325	358
Louisiana	62531	62379	487	478	494	485
Maine	12814	12970	73	68	73	68
Maryland	71739	73801	469	499	469	499
Massachusetts	73275	72865	334	330	338	334
Michigan	113509	114531	787	799	792	804
Minnesota	68269	68610	324	313	325	314
Mississippi	39177	40036	365	380	365	380
Missouri	77588	76759	527	474	538	484
Montana	12066	12060	65	68	65	68
Nebraska	26242	25918	146	144	146	144
Nevada	35671	35934	191	193	197	199
New Hampshire	13032	12874	46	52	46	52
New Jersey	103932	106922	496	519	503	526
New Mexico	27021	27850	128	143	136	151
New York	121290	123678	667	711	669	713
New York City	124791	120697	605	558	605	558
North Carolina	123468	122350	898	895	899	896
North Dakota	10470	9104	60	60	60	60
Ohio	139858	139128	1101	1068	1115	1082
Oklahoma	52347	53238	391	400	399	408
Oregon	45904	45540	235	222	237	224
Pennsylvania	142724	143321	1068	1031	1072	1035
Rhode Island	11843	11177	86	78	86	78
South Carolina	55599	58342	399	418	400	419
South Dakota	12382	11811	88	83	88	83
Tennessee	84533	79495	682	615	686	619
Texas	392764	386118	2240	2221	2323	2303
Utah	53395	52258	270	256	270	256
Vermont	5775	6223	22	23	22	23
Virginia	101202	103002	686	706	689	709
Washington	86507	86539	394	396	394	396
West Virginia	20757	20470	161	145	161	145
Wisconsin	67719	68487	392	408	392	408
Wyoming	6914	7556	33	54	33	54
Foreign Residents	-	7719	-	18	-	18
Puerto Rico	42247	42153	321	317	321	317
Virgin Islands	1651	1600	12	14	12	14
Guam	3422	3414	49	48	49	48

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, 2010
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 ¹										
Both sexes										
Live births.....	3,999,386	6,557	10,636	11,672	13,443	16,498	63,512	204,483	3,671,997	588
Infant deaths.....	24,441	5,488	4,516	1,500	848	690	1,555	2,032	7,720	91
Infant mortality rate.....	6.11	836.97	424.60	128.51	63.08	41.82	24.48	9.94	2.10	154.76
Male										
Live births.....	2,046,935	3,275	5,398	6,004	6,909	8,294	31,026	93,711	1,892,003	315
Infant deaths.....	13,676	2,814	2,659	934	488	384	798	1,068	4,464	66
Infant mortality rate.....	6.68	859.24	492.59	155.56	70.63	46.30	25.72	11.40	2.36	209.52
Female										
Live births.....	1,952,451	3,282	5,238	5,668	6,534	8,204	32,486	110,772	1,779,994	273
Infant deaths.....	10,765	2,674	1,857	567	360	306	757	964	3,255	25
Infant mortality rate.....	5.51	814.75	354.52	100.04	55.10	37.30	23.30	8.70	1.83	91.58
White										
Both sexes										
Live births.....	3,069,315	3,656	6,199	7,178	8,663	10,760	43,061	138,335	2,851,023	440
Infant deaths.....	15,867	3,086	2,731	959	579	461	1,114	1,398	5,479	60
Infant mortality rate.....	5.17	844.09	440.55	133.60	66.84	42.84	25.87	10.11	1.92	136.36
Male										
Live births.....	1,571,470	1,808	3,196	3,718	4,516	5,511	21,124	63,692	1,467,670	235
Infant deaths.....	8,846	1,569	1,599	597	337	260	560	735	3,148	42
Infant mortality rate.....	5.63	867.81	500.31	160.57	74.62	47.18	26.51	11.54	2.14	178.72
Female										
Live births.....	1,497,845	1,848	3,003	3,460	4,147	5,249	21,937	74,643	1,383,353	205
Infant deaths.....	7,020	1,517	1,132	363	242	201	554	663	2,331	18
Infant mortality rate.....	4.69	820.89	376.96	104.91	58.36	38.29	25.25	8.88	1.69	*
Black										
Both sexes										
Live births.....	636,425	2,524	3,877	3,809	3,969	4,622	15,967	49,591	551,955	111
Infant deaths.....	7,164	2,069	1,538	466	221	194	356	515	1,781	24
Infant mortality rate.....	11.26	819.73	396.70	122.34	55.68	41.97	22.30	10.38	3.23	216.22
Male										
Live births.....	323,956	1,262	1,913	1,933	1,974	2,214	7,599	22,170	284,829	62
Infant deaths.....	4,004	1,061	910	292	122	102	190	271	1,037	18
Infant mortality rate.....	12.36	840.73	475.69	151.06	61.80	46.07	25.00	12.22	3.64	*
Female										
Live births.....	312,469	1,262	1,964	1,876	1,995	2,408	8,368	27,421	267,126	49
Infant deaths.....	3,159	1,008	628	173	99	92	165	244	744	6
Infant mortality rate.....	10.11	798.73	319.76	92.22	49.62	38.21	19.72	8.90	2.79	*

¹/ 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, 2010 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 ¹										
Total										
Live births	3,999,386	29,581	48,861	223,192	177,156	2,204,378	763,191	328,954	218,794	5,279
Infant deaths	24,441	11,061	1,921	2,328	1,011	5,370	1,332	656	576	185
Infant mortality rate	6.11	373.92	39.32	10.43	5.71	2.44	1.75	1.99	2.63	35.04
Less than 2,500 grams										
Live births	326,801	28,438	37,164	110,335	39,154	89,948	10,675	4,807	5,712	568
Infant deaths	16,630	11,049	1,841	1,733	448	1,138	170	75	106	70
Infant mortality rate	50.89	388.53	49.54	15.71	11.44	12.65	15.93	15.60	18.56	123.24
Less than 500 grams										
Live births	6,557	6,285	193	15	4	15	7	2	-	36
Infant deaths	5,488	5,300	133	11	4	10	2	2	-	25
Infant mortality rate	836.97	843.28	689.12	*	*	*	*	*	-	694.44
500-749 grams										
Live births	10,636	9,324	1,141	96	9	26	3	1	5	31
Infant deaths	4,516	4,184	270	29	3	7	-	-	3	20
Infant mortality rate	424.60	448.73	236.63	302.08	*	*	*	*	*	645.16
750-999 grams										
Live births	11,672	7,274	3,810	397	24	97	25	10	14	21
Infant deaths	1,500	1,121	312	42	3	16	-	-	2	4
Infant mortality rate	128.51	154.11	81.89	105.79	*	*	-	*	*	*
1,000-1,249 grams										
Live births	13,443	3,105	7,423	2,058	148	414	130	62	85	18
Infant deaths	848	272	387	130	10	30	10	3	4	2
Infant mortality rate	63.08	87.60	52.14	63.17	*	72.46	*	*	*	*
1,250-1,499 grams										
Live births	16,498	900	8,768	5,240	411	736	126	114	170	33
Infant deaths	690	87	306	201	30	49	4	2	7	4
Infant mortality rate	41.82	96.67	34.90	38.36	72.99	66.58	*	*	*	*
1,500-1,999 grams										
Live births	63,512	867	11,871	35,655	5,360	7,455	956	436	795	117
Infant deaths	1,555	64	331	665	133	270	43	19	21	9
Infant mortality rate	24.48	73.82	27.88	18.65	24.81	36.22	44.98	*	26.42	*
2,000-2,499 grams										
Live births	204,483	683	3,958	66,874	33,198	81,205	9,428	4,182	4,643	312
Infant deaths	2,032	21	101	656	265	756	111	49	69	5
Infant mortality rate	9.94	30.75	25.52	9.81	7.98	9.31	11.77	11.72	14.86	*
2,500-2,999 grams										
Live births	744,711	1,143	4,151	56,311	67,010	458,858	90,350	35,046	30,852	990
Infant deaths	2,799	12	48	369	326	1,489	295	120	132	7
Infant mortality rate	3.76	*	11.56	6.55	4.86	3.25	3.27	3.42	4.28	*

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, 2010 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 ¹										
3,000-3,499 grams										
Live births	1,567,643	-	4,939	37,272	49,962	949,668	312,092	124,352	87,539	1,819
Infant deaths	3,048	-	25	154	162	1,777	481	235	201	13
Infant mortality rate	1.94	-	5.06	4.13	3.24	1.87	1.54	1.89	2.30	*
3,500-3,999 grams										
Live births	1,055,553	-	2,607	15,781	16,911	561,333	266,970	120,158	70,800	993
Infant deaths	1,444	-	7	50	56	766	309	154	102	-
Infant mortality rate	1.37	-	*	3.17	3.31	1.36	1.16	1.28	1.44	-
4,000-4,499 grams										
Live births	263,145	-	-	3,005	3,456	125,153	72,634	38,258	20,373	266
Infant deaths	337	-	-	14	14	159	66	54	29	1
Infant mortality rate	1.28	-	-	*	*	1.27	0.91	1.41	1.42	*
4,500-4,999 grams										
Live births	36,729	-	-	418	570	17,168	9,611	5,735	3,187	40
Infant deaths	73	-	-	5	5	32	10	14	4	2
Infant mortality rate	1.99	-	-	*	*	1.86	*	*	*	*
5,000 grams or more										
Live births	4,216	-	-	70	93	2,250	859	598	331	15
Infant deaths	19	-	-	3	-	9	1	4	1	1
Infant mortality rate	*	-	-	*	-	*	*	*	*	*
Not stated										
Live births	588	-	-	-	-	-	-	-	-	588
Infant deaths	91	-	-	-	-	-	-	-	-	91
Infant mortality rate	154.76	-	-	-	-	-	-	-	-	154.76
White										
Total										
Live births	3,069,315	17,508	32,662	158,783	130,073	1,690,578	600,646	262,243	172,995	3,827
Infant deaths	15,867	6,536	1,237	1,605	739	3,772	953	488	419	117
Infant mortality rate	5.17	373.32	37.87	10.11	5.68	2.23	1.59	1.86	2.42	30.57
Less than 2,500 grams										
Live births	217,852	16,808	24,575	76,634	26,599	58,797	7,110	3,124	3,876	329
Infant deaths	10,328	6,529	1,187	1,197	335	787	126	57	74	36
Infant mortality rate	47.41	388.45	48.30	15.62	12.59	13.39	17.72	18.25	19.09	109.42
Less than 500 grams										
Live births	3,656	3,503	100	11	3	7	6	2	-	24
Infant deaths	3,086	2,987	65	9	3	2	2	2	-	15
Infant mortality rate	844.09	852.70	650.00	*	*	*	*	*	-	*
500-749 grams										
Live births	6,199	5,356	734	64	8	17	3	1	4	12
Infant deaths	2,731	2,524	167	21	3	5	-	-	2	8
Infant mortality rate	440.55	471.25	227.52	328.13	*	*	*	*	*	*

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, 2010 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										
750-999 grams										
Live births	7,178	4,413	2,361	282	14	63	20	8	8	9
Infant deaths	959	722	193	30	1	11	-	-	-	2
Infant mortality rate	133.60	163.61	81.75	106.38	*	*	-	*	*	*
1,000-1,249 grams										
Live births	8,663	1,996	4,747	1,366	98	266	90	37	56	7
Infant deaths	579	182	271	86	8	20	6	2	3	-
Infant mortality rate	66.84	91.18	57.09	62.96	*	75.19	*	*	*	*
1,250-1,499 grams										
Live births	10,760	572	5,766	3,373	275	495	71	76	113	19
Infant deaths	461	61	189	145	23	35	2	-	4	2
Infant mortality rate	42.84	106.64	32.78	42.99	83.64	70.71	*	-	*	*
1,500-1,999 grams										
Live births	43,061	531	8,282	24,130	3,611	4,949	650	291	547	70
Infant deaths	1,114	38	228	478	101	194	36	19	14	5
Infant mortality rate	25.87	71.56	27.53	19.81	27.97	39.20	55.38	*	*	*
2,000-2,499 grams										
Live births	138,335	437	2,585	47,408	22,590	53,000	6,270	2,709	3,148	188
Infant deaths	1,398	14	74	428	196	520	79	33	51	3
Infant mortality rate	10.11	*	28.63	9.03	8.68	9.81	12.60	12.18	16.20	*
2,500-2,999 grams										
Live births	519,143	700	2,626	40,499	48,633	317,715	62,244	24,389	21,699	638
Infant deaths	1,866	7	29	248	229	988	192	76	89	6
Infant mortality rate	3.59	*	11.04	6.12	4.71	3.11	3.08	3.12	4.10	*
3,000-3,499 grams										
Live births	1,199,243	-	3,462	26,775	38,247	726,798	238,604	96,141	67,860	1,356
Infant deaths	2,198	-	16	106	127	1,264	345	177	151	12
Infant mortality rate	1.83	-	*	3.96	3.32	1.74	1.45	1.84	2.23	*
3,500-3,999 grams										
Live births	871,364	-	1,999	12,105	13,292	463,618	220,867	99,947	58,738	798
Infant deaths	1,085	-	4	35	33	581	229	121	81	-
Infant mortality rate	1.25	-	*	2.89	2.48	1.25	1.04	1.21	1.38	-
4,000-4,499 grams										
Live births	226,023	-	-	2,377	2,786	107,166	62,680	33,071	17,722	221
Infant deaths	257	-	-	12	10	119	51	43	20	1
Infant mortality rate	1.14	-	-	*	*	1.11	0.81	1.30	1.13	*
4,500-4,999 grams										
Live births	31,772	-	-	339	447	14,658	8,417	5,062	2,814	35
Infant deaths	56	-	-	3	3	24	10	10	4	1
Infant mortality rate	1.76	-	-	*	*	1.64	*	*	*	*

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, 2010 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										
5,000 grams or more										
Live births	3,478	-	-	54	69	1,826	724	509	286	10
Infant deaths	17	-	-	3	-	7	1	4	1	1
Infant mortality rate	*	-	-	*	-	*	*	*	*	*
Not stated										
Live births	440	-	-	-	-	-	-	-	-	440
Infant deaths	60	-	-	-	-	-	-	-	-	60
Infant mortality rate	136.36	-	-	-	-	-	-	-	-	136.36
Black										
Total										
Live births	636,425	10,434	13,021	49,109	34,492	347,160	105,610	43,871	31,621	1,107
Infant deaths	7,164	3,891	576	583	221	1,280	298	133	124	58
Infant mortality rate	11.26	372.92	44.24	11.87	6.41	3.69	2.82	3.03	3.92	52.39
Less than 2,500 grams										
Live births	84,359	10,056	10,212	25,917	9,385	23,122	2,683	1,307	1,478	199
Infant deaths	5,359	3,887	549	444	101	271	35	14	26	31
Infant mortality rate	63.53	386.54	53.76	17.13	10.76	11.72	13.05	*	17.59	155.78
Less than 500 grams										
Live births	2,524	2,418	83	4	1	6	1	-	-	11
Infant deaths	2,069	1,992	59	2	1	6	-	-	-	9
Infant mortality rate	819.73	823.82	710.84	*	*	*	*	-	-	*
500-749 grams										
Live births	3,877	3,485	340	23	1	8	-	-	1	19
Infant deaths	1,538	1,427	91	6	-	2	-	-	1	12
Infant mortality rate	396.70	409.47	267.65	*	*	*	-	-	*	*
750-999 grams										
Live births	3,809	2,460	1,203	88	9	28	3	-	6	12
Infant deaths	466	347	100	9	2	4	-	-	2	2
Infant mortality rate	122.34	141.06	83.13	*	*	*	*	-	*	*
1,000-1,249 grams										
Live births	3,969	931	2,236	546	43	121	34	23	28	7
Infant deaths	221	74	98	35	2	6	4	1	1	-
Infant mortality rate	55.68	79.48	43.83	64.10	*	*	*	*	*	*
1,250-1,499 grams										
Live births	4,622	279	2,416	1,476	108	201	47	35	47	13
Infant deaths	194	19	100	46	6	14	1	2	3	2
Infant mortality rate	41.97	*	41.39	31.17	*	*	*	*	*	*
1,500-1,999 grams										
Live births	15,967	276	2,848	8,984	1,302	1,967	226	125	200	39
Infant deaths	356	22	81	153	28	56	5	-	6	4
Infant mortality rate	22.30	79.71	28.44	17.03	21.51	28.47	*	-	*	*

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, 2010 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										
2,000-2,499 grams										
Live births	49,591	207	1,086	14,796	7,921	20,791	2,372	1,124	1,196	98
Infant deaths	515	6	21	192	61	182	25	11	13	2
Infant mortality rate	10.38	*	19.34	12.98	7.70	8.75	10.54	*	*	*
2,500-2,999 grams										
Live births	159,573	378	1,220	11,915	13,516	98,540	19,305	7,576	6,844	279
Infant deaths	770	4	16	91	75	421	89	37	36	1
Infant mortality rate	4.83	*	*	7.64	5.55	4.27	4.61	4.88	5.26	*
3,000-3,499 grams										
Live births	247,027	-	1,151	8,116	8,435	148,880	47,917	18,577	13,608	343
Infant deaths	672	-	8	33	22	412	108	48	39	1
Infant mortality rate	2.72	-	*	4.07	2.61	2.77	2.25	2.58	2.87	*
3,500-3,999 grams										
Live births	118,582	-	438	2,655	2,609	63,273	28,810	12,805	7,855	137
Infant deaths	262	-	3	11	18	134	54	26	15	-
Infant mortality rate	2.21	-	*	*	*	2.12	1.87	2.03	*	-
4,000-4,499 grams										
Live births	23,280	-	-	441	448	11,466	6,112	3,182	1,600	31
Infant deaths	62	-	-	2	3	34	12	4	7	-
Infant mortality rate	2.66	-	-	*	*	2.97	*	*	*	-
4,500-4,999 grams										
Live births	3,044	-	-	53	82	1,609	709	377	211	3
Infant deaths	13	-	-	2	2	5	-	3	-	1
Infant mortality rate	*	-	-	*	*	*	-	*	-	*
5,000 grams or more										
Live births	449	-	-	12	17	270	74	47	25	4
Infant deaths	2	-	-	-	-	2	-	-	-	-
Infant mortality rate	*	-	-	*	*	*	-	-	-	*
Not stated										
Live births	111	-	-	-	-	-	-	-	-	111
Infant deaths	24	-	-	-	-	-	-	-	-	24
Infant mortality rate	216.22	-	-	-	-	-	-	-	-	216.22

-/ Quality zero.

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

1/ 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, 2010 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 ¹						
Total (all birthweights).....	3,999,386	24,441	16,175	12,896	3,279	8,266
Rate.....		6.11	4.04	3.22	0.82	2.07
Less than 2,500 grams.....	326,801	16,630	13,416	11,234	2,182	3,214
Rate.....		50.89	41.05	34.38	6.68	9.83
Less than 500 grams.....	6,557	5,488	5,365	5,195	170	123
Rate.....		836.97	818.21	792.28	25.93	18.76
500-749 grams.....	10,636	4,516	3,795	3,004	790	722
Rate.....		424.60	356.81	282.44	74.28	67.88
750-999 grams.....	11,672	1,500	1,108	749	359	393
Rate.....		128.51	94.93	64.17	30.76	33.67
1,000-1,249 grams.....	13,443	848	626	456	170	222
Rate.....		63.08	46.57	33.92	12.65	16.51
1,250-1,499 grams.....	16,498	690	473	350	123	217
Rate.....		41.82	28.67	21.21	7.46	13.15
1,500-1,999 grams.....	63,512	1,555	1,005	767	237	550
Rate.....		24.48	15.82	12.08	3.73	8.66
2,000-2,499 grams.....	204,483	2,032	1,044	711	333	988
Rate.....		9.94	5.11	3.48	1.63	4.83
2,500-2,999 grams.....	744,711	2,799	1,102	668	434	1,696
Rate.....		3.76	1.48	0.90	0.58	2.28
3,000-3,499 grams.....	1,567,643	3,048	990	557	433	2,058
Rate.....		1.94	0.63	0.36	0.28	1.31
3,500-3,999 grams.....	1,055,553	1,444	430	252	178	1,013
Rate.....		1.37	0.41	0.24	0.17	0.96
4,000-4,499 grams.....	263,145	337	97	62	35	240
Rate.....		1.28	0.37	0.24	0.13	0.91
4,500-4,999 grams.....	36,729	73	42	32	10	31
Rate.....		1.99	1.14	0.87	*	0.84
5,000 grams or more.....	4,216	19	11	7	4	8
Rate.....		*	*	*	*	*
Not stated.....	588	91	86	84	2	5
Rate.....		154.76	146.26	142.86	*	*

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, 2010 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
White						
Total (all birthweights).....	3,069,315	15,867	10,588	8,366	2,223	5,278
Rate.....		5.17	3.45	2.73	0.72	1.72
Less than 2,500 grams.....	217,852	10,328	8,491	7,084	1,406	1,837
Rate.....		47.41	38.98	32.52	6.45	8.43
Less than 500 grams.....	3,656	3,086	3,028	2,925	103	58
Rate.....		844.09	828.23	800.05	28.17	15.86
500-749 grams.....	6,199	2,731	2,367	1,919	447	364
Rate.....		440.55	381.84	309.57	72.11	58.72
750-999 grams.....	7,178	959	752	525	228	207
Rate.....		133.60	104.76	73.14	31.76	28.84
1,000-1,249 grams.....	8,663	579	453	334	119	126
Rate.....		66.84	52.29	38.55	13.74	14.54
1,250-1,499 grams.....	10,760	461	344	256	87	117
Rate.....		42.84	31.97	23.79	8.09	10.87
1,500-1,999 grams.....	43,061	1,114	768	583	185	346
Rate.....		25.87	17.84	13.54	4.30	8.04
2,000-2,499 grams.....	138,335	1,398	779	541	237	620
Rate.....		10.11	5.63	3.91	1.71	4.48
2,500-2,999 grams.....	519,143	1,866	804	507	297	1,062
Rate.....		3.59	1.55	0.98	0.57	2.05
3,000-3,499 grams.....	1,199,243	2,198	771	437	335	1,427
Rate.....		1.83	0.64	0.36	0.28	1.19
3,500-3,999 grams.....	871,364	1,085	342	204	138	743
Rate.....		1.25	0.39	0.23	0.16	0.85
4,000-4,499 grams.....	226,023	257	83	51	32	174
Rate.....		1.14	0.37	0.23	0.14	0.77
4,500-4,999 grams.....	31,772	56	29	20	9	26
Rate.....		1.76	0.91	0.63	*	0.82
5,000 grams or more.....	3,478	17	11	7	4	6
Rate.....		*	*	*	*	*
Not stated.....	440	60	58	56	2	2
Rate.....		136.36	131.82	127.27	*	*

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, 2010 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
Black						
Total (all birthweights).....	636,425	7,164	4,643	3,753	890	2,521
Rate.....		11.26	7.30	5.90	1.40	3.96
Less than 2,500 grams.....	84,359	5,359	4,152	3,481	670	1,207
Rate.....		63.53	49.22	41.26	7.94	14.31
Less than 500 grams.....	2,524	2,069	2,011	1,949	62	57
Rate.....		819.73	796.75	772.19	24.56	22.58
500-749 grams.....	3,877	1,538	1,208	912	296	330
Rate.....		396.70	311.58	235.23	76.35	85.12
750-999 grams.....	3,809	466	299	179	119	167
Rate.....		122.34	78.50	46.99	31.24	43.84
1,000-1,249 grams.....	3,969	221	140	98	42	82
Rate.....		55.68	35.27	24.69	10.58	20.66
1,250-1,499 grams.....	4,622	194	103	72	31	91
Rate.....		41.97	22.28	15.58	6.71	19.69
1,500-1,999 grams.....	15,967	356	186	142	44	170
Rate.....		22.30	11.65	8.89	2.76	10.65
2,000-2,499 grams.....	49,591	515	205	130	75	310
Rate.....		10.38	4.13	2.62	1.51	6.25
2,500-2,999 grams.....	159,573	770	227	118	109	543
Rate.....		4.83	1.42	0.74	0.68	3.40
3,000-3,499 grams.....	247,027	672	164	82	82	507
Rate.....		2.72	0.66	0.33	0.33	2.05
3,500-3,999 grams.....	118,582	262	56	32	24	205
Rate.....		2.21	0.47	0.27	0.20	1.73
4,000-4,499 grams.....	23,280	62	12	9	3	50
Rate.....		2.66	*	*	*	2.15
4,500-4,999 grams.....	3,044	13	10	9	1	3
Rate.....		*	*	*	*	*
5,000 grams or more.....	449	2	-	-	-	2
Rate.....		*	-	-	-	*
Not stated.....	111	24	21	21	-	3
Rate.....		216.22	189.19	189.19	-	*

See footnotes at end of table.

-/ Quantity zero.

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

1/ 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, 2010 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 ¹						
All birthweights						
All causes	3,999,386	24,441 611.12	16,175 404.44	12,896 322.45	3,279 81.99	8,266 206.68
Congenital malformations (Q00-Q99).....		5,102 127.57	3,627 90.69	2,791 69.79	836 20.90	1,474 36.86
Short gestation and low birthweight nec (P07).....		4,165 104.14	4,067 101.69	3,945 98.64	123 3.08	98 2.45
Sudden infant death syndrome (R95).....		2,007 50.18	193 4.83	26 0.65	168 4.20	1,814 45.36
Maternal complications of pregnancy (P01).....		1,563 39.08	1,548 38.71	1,528 38.21	20 0.50	14 *
Complications of placenta, cord, membranes (P02).....		1,008 25.20	998 24.95	965 24.13	33 0.83	10 *
Respiratory distress of newborn (P22).....		518 12.95	500 12.50	380 9.50	120 3.00	17 *
Accidents (unintentional injuries) (V01-X59).....		1,160 29.00	135 3.38	26 0.65	109 2.73	1,025 25.63
Bacterial sepsis of newborn (P36).....		572 14.30	544 13.60	227 5.68	317 7.93	28 0.70
Diseases of the circulatory system (I00-I99).....		508 12.70	106 2.65	63 1.58	43 1.08	402 10.05
Intrauterine hypoxia, birth asphyxia (P20-P21).....		307 7.68	292 7.30	234 5.85	58 1.45	15 *
All other causes.....		7,531 188.30	4,163 104.09	2,711 67.79	1,451 36.28	3,368 84.21
Less than 2,500 grams						
All causes	326,801	16,630 5,088.72	13,416 4,105.25	11,234 3,437.57	2,182 667.68	3,214 983.47
Congenital malformations (Q00-Q99).....		3,083 943.39	2,408 736.84	1,981 606.18	428 130.97	674 206.24
Short gestation and low birthweight nec (P07).....		4,101 1,254.89	4,007 1,226.13	3,885 1,188.80	123 37.64	94 28.76
Sudden infant death syndrome (R95).....		430 131.58	25 7.65	4 *	21 6.43	404 123.62
Maternal complications of pregnancy (P01).....		1,520 465.11	1,508 461.44	1,489 455.63	19 *	12 *

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, 2010 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
All races ¹					
Complications of placenta, cord, membranes (P02).....	929 284.27	921 281.82	893 273.25	28 8.57	8 *
Respiratory distress of newborn (P22).....	507 155.14	492 150.55	372 113.83	120 36.72	15 *
Accidents (unintentional injuries) (V01-X59).....	190 58.14	19 *	5 *	14 *	170 52.02
Bacterial sepsis of newborn (P36).....	500 153.00	477 145.96	192 58.75	284 86.90	23 7.04
Diseases of the circulatory system (I00-I99).....	279 85.37	53 16.22	32 9.79	20 6.12	226 69.16
Intrauterine hypoxia, birth asphyxia (P20-P21).....	211 64.57	203 62.12	169 51.71	34 10.40	8 *
All other causes.....	4,880 1,493.26	3,302 1,010.40	2,212 676.86	1,090 333.54	1,578 482.86
2,500 grams or more					
All causes	3,671,997 7,720 210.24	2,673 72.79	1,578 42.97	1,095 29.82	5,047 137.45
Congenital malformations (Q00-Q99).....	2,017 54.93	1,217 33.14	808 22.00	408 11.11	800 21.79
Short gestation and low birthweight nec (P07).....	22 0.60	18 *	18 *	- -	4 *
Sudden infant death syndrome (R95).....	1,578 42.97	168 4.58	21 0.57	147 4.00	1,409 38.37
Maternal complications of pregnancy (P01).....	18 *	17 *	16 *	1 *	1 *
Complications of placenta, cord, membranes (P02).....	74 2.02	72 1.96	67 1.82	5 *	2 *
Respiratory distress of newborn (P22).....	10 *	8 *	8 *	- -	2 *
Accidents (unintentional injuries) (V01-X59).....	970 26.42	116 3.16	21 0.57	94 2.56	854 23.26
Bacterial sepsis of newborn (P36).....	71 1.93	66 1.80	34 0.93	32 0.87	4 *
Diseases of the circulatory system (I00-I99).....	229 6.24	53 1.44	30 0.82	23 0.63	176 4.79
Intrauterine hypoxia, birth asphyxia (P20-P21).....	96 2.61	89 2.42	65 1.77	24 0.65	7 *

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, 2010 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 races¹						
All other causes.....		2,636 71.79	848 23.09	488 13.29	360 9.80	1,787 48.67
Not stated birthweight						
All causes	588	91	86	84	2	5
	15,476.19	14,625.85	14,285.71		*	*
Congenital malformations (Q00-Q99).....		2 *	2 *	2 *	-	-
Short gestation and low birthweight nec (P07).....		43 7,312.93	43 7,312.93	43 7,312.93	-	-
Sudden infant death syndrome (R95).....		-	-	-	-	-
Maternal complications of pregnancy (P01).....		24 4,081.63	23 3,911.56	23 3,911.56	-	1 *
Complications of placenta, cord, membranes (P02).....		5 *	5 *	5 *	-	-
Respiratory distress of newborn (P22).....		-	-	-	-	-
Accidents (unintentional injuries) (V01-X59).....		-	-	-	-	-
Bacterial sepsis of newborn (P36).....		2 *	1 *	-	1 *	1 *
Diseases of the circulatory system (I00-I99).....		-	-	-	-	-
Intrauterine hypoxia, birth asphyxia (P20-P21).....		-	-	-	-	-
All other causes.....		15 *	12 *	11 *	1 *	3 *
White						
All birthweights						
All causes	2,885,232	14,771 511.95	9,780 338.97	7,722 267.64	2,058 71.33	4,991 172.98
Congenital malformations (Q00-Q99).....		3,533 122.45	2,575 89.25	2,011 69.70	564 19.55	958 33.20
Short gestation and low birthweight nec (P07).....		2,102 72.85	2,058 71.33	1,992 69.04	67 2.32	43 1.49

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, 2010 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
White						
Sudden infant death syndrome (R95).....	1,273 44.12	127 4.40	14 *	113 3.92	1,146 39.72	
Maternal complications of pregnancy (P01).....	898 31.12	888 30.78	876 30.36	12 *	10 *	
Complications of placenta, cord, membranes (P02).....	568 19.69	562 19.48	543 18.82	19 *	6 *	
Respiratory distress of newborn (P22).....	285 9.88	276 9.57	213 7.38	63 2.18	9 *	
Accidents (unintentional injuries) (V01-X59).....	728 25.23	99 3.43	19 *	79 2.74	630 21.84	
Bacterial sepsis of newborn (P36).....	350 12.13	334 11.58	147 5.09	187 6.48	16 *	
Diseases of the circulatory system (I00-I99).....	292 10.12	73 2.53	41 1.42	31 1.07	220 7.63	
Intrauterine hypoxia, birth asphyxia (P20-P21).....	195 6.76	190 6.59	156 5.41	34 1.18	5 *	
All other causes.....	4,545 157.53	2,597 90.01	1,709 59.23	889 30.81	1,948 67.52	
Less than 2,500 grams						
All causes	204,339 4,679.48	9,562 3,829.42	7,825 3,200.56	6,540 628.86	1,285 850.55	
Congenital malformations (Q00-Q99).....	2,106 1,030.64	1,691 827.55	1,420 694.92	271 132.62	415 203.09	
Short gestation and low birthweight nec (P07).....	2,068 1,012.04	2,025 991.00	1,959 958.70	67 32.79	42 20.55	
Sudden infant death syndrome (R95).....	235 115.00	15 *	1 *	14 *	220 107.66	
Maternal complications of pregnancy (P01).....	871 426.25	862 421.85	849 415.49	12 *	9 *	
Complications of placenta, cord, membranes (P02).....	519 253.99	514 251.54	497 243.22	17 *	5 *	
Respiratory distress of newborn (P22).....	278 136.05	269 131.64	206 100.81	63 30.83	9 *	
Accidents (unintentional injuries) (V01-X59).....	107 52.36	13 *	4 *	9 *	94 46.00	
Bacterial sepsis of newborn (P36).....	303 148.28	290 141.92	125 61.17	165 80.75	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, 2010 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
White						
Diseases of the circulatory system (I00-I99).....		147	32	21	11	114
		71.94	15.66	10.28	*	55.79
Intrauterine hypoxia, birth asphyxia (P20-P21).....		131	128	113	15	3
		64.11	62.64	55.30	*	*
All other causes.....		2,797	1,985	1,344	640	812
		1,368.80	971.42	657.73	313.21	397.38
2,500 grams or more						
All causes	2,680,722	5,163	1,912	1,140	773	3,251
		192.60	71.32	42.53	28.84	121.27
Congenital malformations (Q00-Q99).....		1,426	883	591	293	543
		53.19	32.94	22.05	10.93	20.26
Short gestation and low birthweight nec (P07).....		14	13	13	-	1
		*	*	*	-	*
Sudden infant death syndrome (R95).....		1,038	112	13	99	926
		38.72	4.18	*	3.69	34.54
Maternal complications of pregnancy (P01).....		12	12	12	-	-
		*	*	*	-	-
Complications of placenta, cord, membranes (P02).....		48	47	45	2	1
		1.79	1.75	1.68	*	*
Respiratory distress of newborn (P22).....		7	7	7	-	-
		*	*	*	-	-
Accidents (unintentional injuries) (V01-X59).....		621	86	15	70	536
		23.17	3.21	*	2.61	19.99
Bacterial sepsis of newborn (P36).....		45	43	22	21	2
		1.68	1.60	0.82	0.78	*
Diseases of the circulatory system (I00-I99).....		146	40	20	20	105
		5.45	1.49	0.75	0.75	3.92
Intrauterine hypoxia, birth asphyxia (P20-P21).....		64	62	42	19	2
		2.39	2.31	1.57	*	*
All other causes.....		1,742	607	358	249	1,135
		64.98	22.64	13.35	9.29	42.34
Not stated birthweight						
All causes	171	46	44	43	1	2
		26,900.58	25,730.99	25,146.20	*	*
Congenital malformations (Q00-Q99).....		1	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, 2010 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
White						
Short gestation and low birthweight nec (P07).....		19	19	19	-	-
		*	*	*	-	-
Sudden infant death syndrome (R95).....		-	-	-	-	-
		-	-	-	-	-
Maternal complications of pregnancy (P01).....		15	14	14	-	1
		*	*	*	-	*
Complications of placenta, cord, membranes (P02).....		2	2	2	-	-
		*	*	*	-	-
Respiratory distress of newborn (P22).....		-	-	-	-	-
		-	-	-	-	-
Accidents (unintentional injuries) (V01-X59).....		-	-	-	-	-
		-	-	-	-	-
Bacterial sepsis of newborn (P36).....		2	1	-	1	1
		*	*	-	*	*
Diseases of the circulatory system (I00-I99).....		-	-	-	-	-
		-	-	-	-	-
Intrauterine hypoxia, birth asphyxia (P20-P21).....		-	-	-	-	-
		-	-	-	-	-
All other causes.....		6	6	6	-	-
		*	*	*	-	-
Black						
All birthweights						
All causes	613,571	6,958	4,503	3,640	864	2,454
		1,134.02	733.90	593.25	140.81	399.95
Congenital malformations (Q00-Q99).....		936	611	452	160	325
		152.55	99.58	73.67	26.08	52.97
Short gestation and low birthweight nec (P07).....		1,590	1,546	1,503	43	43
		259.14	251.97	244.96	7.01	7.01
Sudden infant death syndrome (R95).....		578	50	7	43	527
		94.20	8.15	*	7.01	85.89
Maternal complications of pregnancy (P01).....		461	459	453	6	2
		75.13	74.81	73.83	*	*
Complications of placenta, cord, membranes (P02).....		307	303	292	11	4
		50.03	49.38	47.59	*	*
Respiratory distress of newborn (P22).....		175	170	119	51	5
		28.52	27.71	19.39	8.31	*

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, 2010 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
Black						
Accidents (unintentional injuries) (V01-X59).....		332	26	5	21	306
		54.11	4.24	*	3.42	49.87
Bacterial sepsis of newborn (P36).....		163	153	58	95	10
		26.57	24.94	9.45	15.48	*
Diseases of the circulatory system (I00-I99).....		158	22	13	9	136
		25.75	3.59	*	*	22.17
Intrauterine hypoxia, birth asphyxia (P20-P21).....		73	63	46	17	10
		11.90	10.27	7.50	*	*
All other causes.....		2,185	1,100	692	407	1,085
		356.11	179.28	112.78	66.33	176.83
Less than 2,500 grams						
All causes	82,483	5,223	4,040	3,385	654	1,184
		6,332.21	4,897.98	4,103.88	792.89	1,435.45
Congenital malformations (Q00-Q99).....		609	437	346	91	172
		738.33	529.81	419.48	110.33	208.53
Short gestation and low birthweight nec (P07).....		1,568	1,528	1,485	43	40
		1,901.00	1,852.50	1,800.37	52.13	48.49
Sudden infant death syndrome (R95).....		158	8	2	6	150
		191.55	*	*	*	181.86
Maternal complications of pregnancy (P01).....		454	452	447	5	2
		550.42	547.99	541.93	*	*
Complications of placenta, cord, membranes (P02).....		291	288	279	9	3
		352.80	349.16	338.25	*	*
Respiratory distress of newborn (P22).....		174	170	119	51	4
		210.95	206.10	144.27	61.83	*
Accidents (unintentional injuries) (V01-X59).....		70	4	1	3	66
		84.87	*	*	*	80.02
Bacterial sepsis of newborn (P36).....		142	134	48	86	8
		172.16	162.46	58.19	104.26	*
Diseases of the circulatory system (I00-I99).....		110	16	8	8	94
		133.36	*	*	*	113.96
Intrauterine hypoxia, birth asphyxia (P20-P21).....		57	52	37	14	5
		69.11	63.04	44.86	*	*
All other causes.....		1,591	951	614	337	639
		1,928.88	1,152.96	744.40	408.57	774.71
2,500 grams or more						
All causes	531,010	1,710	443	233	210	1,267
		322.03	83.43	43.88	39.55	238.60

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, 2010 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
Black						
Congenital malformations (Q00-Q99).....		327	174	106	68	153
		61.58	32.77	19.96	12.81	28.81
Short gestation and low birthweight nec (P07).....		6	3	3	-	3
		*	*	*	-	*
Sudden infant death syndrome (R95).....		420	42	5	37	377
		79.09	7.91	*	6.97	71.00
Maternal complications of pregnancy (P01).....		4	4	3	1	-
		*	*	*	*	-
Complications of placenta, cord, membranes (P02).....		14	13	11	2	1
		*	*	*	*	*
Respiratory distress of newborn (P22).....		1	-	-	-	1
		*	-	-	-	*
Accidents (unintentional injuries) (V01-X59).....		262	22	4	18	240
		49.34	4.14	*	*	45.20
Bacterial sepsis of newborn (P36).....		21	19	10	9	2
		3.95	*	*	*	*
Diseases of the circulatory system (I00-I99).....		48	6	5	1	42
		9.04	*	*	*	7.91
Intrauterine hypoxia, birth asphyxia (P20-P21).....		16	11	8	3	5
		*	*	*	*	*
All other causes.....		590	147	77	70	443
		111.11	27.68	14.50	13.18	83.43
Not stated birthweight						
All causes	78	24	21	21	-	3
	30,769.23	26,923.08	26,923.08		-	*
Congenital malformations (Q00-Q99).....		-	-	-	-	-
		-	-	-	-	-
Short gestation and low birthweight nec (P07).....		15	15	15	-	-
		*	*	*	-	-
Sudden infant death syndrome (R95).....		-	-	-	-	-
		-	-	-	-	-
Maternal complications of pregnancy (P01).....		3	3	3	-	-
		*	*	*	-	-
Complications of placenta, cord, membranes (P02).....		2	2	2	-	-
		*	*	*	-	-
Respiratory distress of newborn (P22).....		-	-	-	-	-
		-	-	-	-	-

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, 2010 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
Black						
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.....	4	1	1	-	3	
	*	*	*	-	*	

-/ 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, 2010 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 2010 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 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
United States /2					
Total	285	211	194	17	74
White	179	133	120	13	46
Black	83	66	63	3	17
Alabama					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Alaska					
Total	2	-	-	-	2
White	2	-	-	-	2
Black	-	-	-	-	-
Arizona					
Total	12	4	4	-	8
White	5	3	3	-	2
Black	2	1	1	-	1
Arkansas					
Total	3	3	2	1	-
White	1	1	-	1	-
Black	2	2	2	-	-
California					
Total	58	44	42	2	14
White	39	32	30	2	7
Black	13	8	8	-	5
Colorado					
Total	2	-	-	-	2
White	2	-	-	-	2
Black	-	-	-	-	-
Connecticut					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Delaware					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Dist of Columbia					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Florida					
Total	2	1	-	1	1
White	-	-	-	-	-
Black	2	1	-	1	1
Georgia					
Total	20	20	10	10	-
White	12	12	6	6	-
Black	8	8	4	4	-
Hawaii					
Total	2	-	-	-	2
White	-	-	-	-	-
Black	-	-	-	-	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2010 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 2010 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 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Idaho					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Illinois					
Total	11	11	10	1	-
White	8	8	8	-	-
Black	3	3	2	1	-
Indiana					
Total	7	6	5	1	1
White	4	3	2	1	1
Black	3	3	3	-	-
Iowa					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Kansas					
Total	2	1	-	1	1
White	1	-	-	-	1
Black	-	-	-	-	-
Kentucky					
Total	4	3	2	1	1
White	4	3	2	1	1
Black	-	-	-	-	-
Louisiana					
Total	6	6	6	-	-
White	-	-	-	-	-
Black	6	6	6	-	-
Maine					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Maryland					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Massachusetts					
Total	4	3	2	1	1
White	3	2	1	1	1
Black	1	1	1	-	-
Michigan					
Total	5	4	4	-	1
White	3	2	2	-	1
Black	2	2	2	-	-
Minnesota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Mississippi					
Total	1	-	-	-	1
White	-	-	-	-	-
Black	1	-	-	-	1

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2010 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 2010 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 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Missouri					
Total	11	7	4	3	4
White	5	5	2	3	-
Black	5	1	1	-	4
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	7	5	5	-	2
White	2	1	1	-	1
Black	3	2	2	-	1
New Mexico					
Total	6	3	1	2	3
White	5	2	-	2	3
Black	-	-	-	-	-
New York					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
New York City					
Total	1	1	1	-	-
White	1	1	1	-	-
Black	-	-	-	-	-
North Carolina					
Total	2	1	1	-	1
White	1	-	-	-	1
Black	1	1	1	-	-
North Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Ohio					
Total	12	10	10	-	2
White	6	5	5	-	1
Black	6	5	5	-	1
Oklahoma					
Total	7	3	2	1	4
White	5	2	1	1	3
Black	2	1	1	-	1

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence: United States and each state, 2010 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 2010 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 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Oregon					
Total	1	1	1	-	-
White	1	1	1	-	-
Black	-	-	-	-	-
Pennsylvania					
Total	4	3	3	-	1
White	3	3	3	-	-
Black	-	-	-	-	-
Rhode Island					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
South Carolina					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
South Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Tennessee					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
Texas					
Total	86	76	75	1	10
White	57	50	50	-	7
Black	25	23	22	1	2
Utah					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Vermont					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Virginia					
Total	2	2	2	-	-
White	-	-	-	-	-
Black	2	2	2	-	-
Washington					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-
West Virginia					
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, 2010 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 2010 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 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.