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Data File
Documentation
2007 Cohort Linked Birth/Infant Death Data Set

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Centers for Disease Control and Prevention
National Center for Health Statistics
Division of Vital Statistics

2007 Cohort Linked Birth/Infant Death Data Set

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Introduction

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

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

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 2007 birth cohort linked file includes several data files. The first file includes linked birth and death certificate data for all US infants born in 2007 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 2007 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. In addition, NCHS accepted a small number of late-filed birth records needed to link to infant deaths. This reduced the number of unlinked records and slightly increased the number of births in the denominator file.

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 2007 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 2007 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 <u>must be invoked</u> to generate accurate numbers by residence for items which are not reported by all states. Where applicable, reporting flags are shown in the column "Reporting Flag Position" in the file layout. Reporting flag codes are "0" (item not reported), and "1" (item reported). When using these data, select reporting flag=1 to get valid and complete data for an item (see SAS code examples below).

Translating "blanks" - In the 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 2007 cohort data for the month prenatal care began for the states that implemented the revised birth certificate by January 1st 2007.

Sample SAS program

```
01    DATA work;
02            INFILE 'C:VS07LKBC.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:VS07LKBC.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 2007 and Deaths: Final Data for 2007.

Weighting

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

number of linked infant deaths + number of unlinked infant deaths
                number of linked infant deaths

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

Birthweight

Beginning with the 1995 linked file, an imputation for not-stated birthweight was added to the data set, to reduce potential bias in the computation of birthweight-specific infant mortality rates. Basically, if birthweight is not stated and the period of gestation is known, birthweight is assigned the value from the previous record with the same period of gestation, race, sex, and plurality. Imputed values are flagged. The addition of this imputation has reduced the percent of not-stated responses for birthweight from 3.11 to

0.37 in the numerator file, and from 0.11 to 0.01 in the denominator file, thus greatly reducing the potential for underestimation when computing birthweight-specific infant mortality rates.

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 2007 cohort linked file 1.6% of all infant death records could not be linked to their corresponding birth certificates. Unlinked records are included in a separate data file in this data set. The unlinked record file uses the same record layout as the numerator file of

linked birth and infant death records. However, except as noted below, locations reserved for information from the matching birth certificate are blank since no matching birth certificate could be found for these records. The sex field contains the sex of infant as reported on the death certificate, rather than the sex of infant from the birth certificate, which is not available. The race field contains the race of the decedent as reported on the death certificate rather than the race of mother as reported on the birth certificate as is the case with the linked record file. The race of mother on the birth certificate is generally considered to be more accurate than the race information from the death certificate (see section on Race and Hispanic origin in Deaths: Final Data for 2007). Also, date of birth as reported on the death certificate is used to generate age at death. This information is used in place of date of birth from the birth certificate, which is not available. Documentation table 6 shows counts of unlinked records by race and age at death for each state of residence. The user is cautioned in using table 6 that the race and residence items are based on information reported on the death certificate, whereas tables 1-5 present data from the linked file in which the race and residence items are based on information reported on the birth certificate.

Percent of Records Linked

The 2007 cohort linked file for the 50 States and D.C. includes 28,756 linked infant death records and 457 unlinked infant death records. The linked file is weighted to the sum of linked plus unlinked records, thus the total number of weighted infant deaths by place of occurrence is 29,213.

Table 1 below shows the percent of infant deaths linked by state of occurrence of death. While many states link all of their infant deaths, linkage rates for some states are below the national average. Note in particular the percent linked for California (95.9), Louisiana (93.8), Nevada (96.4) and Texas (93.7). When a high percentage of deaths remain unlinked, unweighted infant mortality rates computed for these states are underestimated. It is for this reason that weights were added to the file to correct for biases in the data due to poor data linkage for particular states.

Table 1. Percent of infant deaths linked by state of occurrence of death: United States, 2007 cohort linked file

United States	98.4	Nebraska	100.0
Alabama	100.0	Nevada	96.4
Alaska	97.0	New Hampshire	100.0
Arizona	97.5	New Jersey	99.3
Arkansas	100.0	New Mexico	98.2
California	95.9	New York State	98.2
Colorado	100.0	New York City	99.1
Connecticut	100.0	North Carolina	99.7
Delaware	100.0	North Dakota	100.0
District of Columbia	99.6	Ohio	98.3
Florida	99.9	Oklahoma	99.3

Georgia	99.3		Oregon	99.7
Hawaii	100.0		Pennsylvania	99.6
Idaho	100.0		Rhode Island	100.0
Illinois	98.6		South Carolina	100.0
Indiana	99.5		South Dakota	100.0
Iowa	100.0		Tennessee	100.0
Kansas	100.0		Texas	93.7
Kentucky	99.4		Utah	99.4
Louisiana	93.8		Vermont	100.0
Maine	100.0		Virginia	99.8
Maryland	99.8		Washington	100.0
Massachusetts	99.3		West Virginia	100.0
Michigan	99.7		Wisconsin	99.8
Minnesota	100.0		Wyoming	100.0
Mississippi	99.8		Puerto Rico	99.5
Missouri	99.6		Virgin Islands	100.0
Montana	100.0		Guam	97.1

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 2007 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, 2007. NCHS Instruction Manual, Part 2a. Hyattsville, Maryland: Public Health Service.

B.   National Center for Health Statistics. Vital statistics, Instructions for Classifying Multiple Cause-of-Death, 2007. NCHS Instruction Manual, Part 2b. Hyattsville, Maryland: Public Health Service.

C.   National Center for Health Statistics. Vital statistics, ICD-10 ACME Decision Tables for Classifying Underlying Causes-of-Death, 2007. NCHS Instruction Manual, Part 2c. Hyattsville, Maryland: Public Health Service.

D.   National Center for Health Statistics. Specifications for U.S. Standard Certificate of Birth – 2003 Revision.

E.   National Center for Health Statistics. Specifications for U.S. Standard Certificate of Death – 2003 Revision.

F.   National Center for Health Statistics. Vital statistics, Computer Edits for Natality Data, Effective 1993. NCHS Instruction Manual Part 12. Hyattsville, Maryland: Public Health Service.

G.   National Center for Health Statistics. Vital statistics, Computer Edits for Mortality Data, Effective 2007. NCHS Instruction Manual Part 11. Hyattsville, Maryland: Public Health Service.

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.

Numerator Files:

    United States
    A. Record count: 28,756
    B. Record length: 1,259
    C. Data counts: a. By occurrence: 28,756
                                               b. By residence: 28,725
                                               c. To foreign residents: 31

    Territories
    A. Record count: 436
    B. Record length: 1,259

Denominator Files:

    United States
    A. Record count: 4,324,008
    B. Record length: 900
    C. Data counts: a. By occurrence: 4,324,008
                                           b. By residence: 4,316,233
                                             c. To foreign residents: 7,775

    Territories
    A. Record count: 51,998
    B. Record length: 900

Unlinked Files:

    United States
    A. Record count: 457
    B. Record length: 1,259

    Territories
    A. Record count: 3
    B. Record length: 1,259

2007 Cohort Linked Selected Data Elements and Locations

Data Items	Denominator Plus File	Numerator File — Birth	Numerator File — Death	Unlinked File
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

2007 COHORT LINKED FILE PUBLIC-USE RECORD LAYOUT

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

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
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		
			Outlying Areas of the U.S.			GU PR VI	Guam Puerto Rico Virgin Islands
32-36	5	FILLER	**Filler**				
37-39	3	OCNTYFIPS	**Occurrence County** (This item is available in the territory file only, geographic codes are not available in the U.S.file)		U,R		
			Puerto Rico			127 999	San Juan County less than 250,000
			Other Outlying Areas of the U.S.			000 999	No county level geography County less than 250,000
40	1	OCNTYPOP	**Occurrence County Pop** (This item is available in the 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

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						41	41 years
						42	42 years
						43	43 years
						44	44 years
						45	45 years
						46	46 years
						47	47 years
						48	48 years
						49	49 years
						50	50 -54 years
91-92	2	MAGER14	**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.

Position	Len	Field	Description
96-108	13	FILLER	**Filler**

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
109-110	2	MRTERR	**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	Guam
						PR	Puerto Rico
						VI	Virgin Islands
						CC	Canada
						CU	Cuba
						MX	Mexico
						US	United States
						XX	Not Applicable
						ZZ	Not Classifiable
111-113	3	FILLER	**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		U,R	1	RESIDENT: State and county of occurrence and residence are the same.

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			only, geographic codes are not available in the U.S.file)			2	NONRESIDENT: State and county of occurrence and residence are different.
138	1	RESTATUS	**Residence Status** United States		U,R	1	RESIDENT: State and county of occurrence and residence are the same.
						2	INTRASTATE NONRESIDENT: State of occurrence and residence are the same but county is different.
						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.
			Outlying areas of the US			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
			** Also includes unrevised states that report multiple race.			24	Asian / Pacific Islander – bridged multiple race
						Blank	Not on certificate

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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		

United States

						Values	Definition
						01	White
						02	Black
						03	American Indian / Alaskan Native
						04	Chinese
						05	Japanese
						06	Hawaiian (includes part Hawaiian)
						07	Filipino
						18	Asian Indian
						28	Korean
						38	Samoan
						48	Vietnamese
						58	Guamanian
						68	Other Asian or Pacific Islander in areas reporting codes 18-58.
						78	Combined other Asian or Pacific Islander, includes 18-68 for areas that do not report them separately.
						Blank	Not on certificate

Puerto Rico

	Values	Definition
	01	White
	02	Black
	00	Other races
	Blank	Not on certificate

Guam

	Values	Definition
	01	White
	02	Black
	03	American Indian / Alaska Native
	04	Chinese
	05	Japanese
	06	Hawaiian (includes part Hawaiian)
	07	Filipino
	08	Other Asian or Pacific Islander
	58	Guamanian
	Blank	Not on certificate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			All other Outlying Areas of the US			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
						Blank	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		
			United States and all Outlying Areas of the United States except Puerto Rico			1	White
						2	Black
						3	American Indian / Alaskan Native
						4	Asian / Pacific Islander
			Puerto Rico			1	White
						2	Black
						0	Other (not classified as White or Black)
144	1	MRACEIMP	**Mother's Race Imputed Flag**		U,R	Blank	Mother's race not imputed
						1	Unknown race imputed
						2	All other races, formerly coded 09, imputed.
145-147	3	FILLER	**Filler**				
148	1	UMHISP	**Mother's Hispanic Origin**	569	U,R	0	Non-Hispanic
						1	Mexican
						2	Puerto Rican
						3	Cuban
						4	Central American
						5	Other and Unknown Hispanic
						9	Origin unknown or not stated
149	1	MRACEHISP	**Mother's Race/Hispanic Origin**	569	U,R	1	Mexican
						2	Puerto Rican

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						15	3 years of college
						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	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** 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		R**	01	White – single race
						02	Black – single race
						03	American Indian/Alaska Native – single race
						04	Asian Indian – single race

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			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."			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
						99	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	White
						2	Black
						3	American Indian / Alaskan Native
						4	Asian / Pacific Islander
						9	Unknown or not stated
			<u>Puerto Rico</u>			1	White
						2	Black
						9	Unknown or not stated
						0	Other (not classified as White or Black)
192-194	3	FILLER	**Filler**				
195	1	UFHISP	**Father's Hispanic Origin**	570	U,R	0	Non-Hispanic
						1	Mexican
						2	Puerto Rican
						3	Cuban

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

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

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

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

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

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

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						09	September
						10	October
						11	November
						12	December
						88	Not applicable
						99	Unknown or not stated
222-225	4	DLLB_YY	**Date of Last Live Birth Year**		R	nnnn	Year of last live birth
						8888	Not applicable
						9999	Unknown or not stated
226-244	19	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	1st to 3rd month
						2	4th to 6th month
						3	7th 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 ceritificate
258	1	MPCB_REC6	**Month Prenatal Care Began Recode 6 (Unrevised)**	669	U	1	1st to 2nd month
						2	3rd month
						3	4th to 6th month
						4	7th to final month
						5	No prenatal care
						6	Unknown or not stated
						Blank	Not on certificate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
259	1	MPCB_REC5	**Month Prenatal Care Began Recode 5 (Unrevised)**				
				669	U	1	1st trimester (1st to 3rd month)
						2	2nd trimester (4th to 6th month)
						3	3rd trimester (7th 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
						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**				

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
280	1	DFPC_IMP	**Day of Date First Prenatal Care Imputed**		R	Blank 1	Day of date first prenatal care not imputed Day of date first prenatal care imputed
281-283	3	FILLER	**Filler**				
284-285	2	CIG_1	**Cigarettes 1st Trimester**	575	R	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
286-287	2	CIG_2	**Cigarettes 2nd Trimester**	575	R	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
288-289	2	CIG_3	**Cigarettes 3rd Trimester**	575	R	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
290	1	TOBUSE	**Tobacco Use**	667	U	1 2 9 Blank	Yes No Unknown or not stated Not on certificate
291-292	2	CIGS	**Cigarettes per Day**	667	U	00-97 98 99 Blank	Number of cigarettes daily 98 or more cigarettes daily Unknown or not stated Not on certificate
293	1	UCIG_REC6	**Cigarette Recode**	667	U	0 1 2 3 4 5 6 Blank	Non-smoker 1 to 5 cigarettes daily 6 to 10 cigarettes daily 11 to 20 cigarettes daily 21 to 40 cigarettes daily 41 or more cigarettes daily Unknown or not stated Not on certificate
294	1	CIG_REC	**Cigarette Recode**	575	R	Y N U Blank	Yes No Unknown or not stated Not on certificate

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
295-312	18	FILLER	**Filler**				
313-319	9	**Risk Factors (Revised)**				Y	Yes
		The checkbox items below follow this code structure:				N	No
						U	Unknown or not stated
						Blank	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	Yes
						N	No
						U	Unknown or not stated
						Blank	Not on certificate
325-326	2	RF_CESARN	**Number of Previous Cesarean Deliveries**				
				594	R	00	None
						01-30	Number of previous cesareans
						99	Unknown or not stated
						Blank	Not on certificate
327	1	FILLER	**Filler**				
328-337	10	**Risk Factors in this Pregnancy**			U		
		The checkbox items indented below follow this structure:				1	Yes
		The version is all 1989 Standard unless otherwise noted.				2	No
						9	Unknown
						Blank	Not on certificate
	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**				

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
351-354	4	**Obstetric Procedures (Revised)**				Y	Yes
		The checkbox items indented below follow this structure:				N	No
						U	Unknown or not stated
						Blank	Not on certificate
351	1	OP_CERV	**Cervical Cerclage**	601	R		
352	1	OP_TOCOL	**Tocolysis**	602	R		
353	1	OP_ECVS	**Successful External Cephalic Version**	603	R		
354	1	OP_ECVF	**Failed External Cephalic Version**	604	R		
355-361	7	**Obstetric Procedures (Unrevised)**				1	Yes
		The checkbox items indented below follow this structure:				2	No
		The version is all 1989 Standard unless otherwise noted.				9	Unknown or not stated
						Blank	Not on certificate
355-356	2	FILLER	**Filler**				
357	1	UOP_INDUC	**Induction of Labor**	703	U,R		
358	1	FILLER	**Filler**				
359	1	UOP_TOCOL	**Tocolysis**	705	U,R		
360-361	2	FILLER	**Filler**				
362-364	3	**Onset of Labor**				Y	Yes
		The checkbox items below follow this structure:				N	No
						U	Unknown or not stated
						Blank	Not on certificate
362	1	ON_RUPTR	**Premature Rupture of Membrane**	605	R		
363	1	ON_PRECIP	**Precipitous Labor**	606	R		
364	1	ON_PROL	**Prolonged Labor**	607	R		
365-373	9	**Characteristics of Labor and Delivery (Revised)**				Y	Yes
		The checkbox items below follow this structure:				N	No
						U	Unknown or not stated
						Blank	Not on certificate
365	1	LD_INDL	**Induction of Labor**	608	R		
366	1	LD_AUGM	**Augmentation of Labor**	609	R		
367	1	LD_NVPR	**Non-Vertex Presentation**	610	R		
368	1	LD_STER	**Steriods**	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		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
373	1	LD_ANES	**Anesthesia**	616	R		
374-389	16		<u>**Complications of Labor and Delivery**</u>			1	Yes
			The checkbox items indented below follow this structure:			2	No
						9	Unknown or not stated
						Blank	Not on certificate
374	1	FILLER	**Filler**				
375	1	ULD_MECO	**Meconium**	712	U,R		
376-380	5	FILLER	**Filler**				
381	1	ULD_PRECIP	**Precipitous Labor**	718	U,R		
382-383	2	FILLER	**Filler**				
384	1	ULD_BREECH	**Breech**	721	U,R		
385-389	5	FILLER	**Filler**				
390-394	5		<u>**Method of Delivery (Revised)**</u>				
390	1	ME_ATTF	**Attempted Forceps**	617	R	Y	Yes
						N	No
						U	Unknown
						Blank	Not on certificate
391	1	ME_ATTV	**Attempted Vacuum**	618	R	Y	Yes
						N	No
						U	Unknown
						Blank	Not on certificate
392	1	ME_PRES	**Fetal Presentation**	619	R	1	Cephalic
						2	Breech
						3	Other
						9	Unknown
						Blank	Not on certificate
393	1	ME_ROUT	**Route & Method of Delivery**	620	R	1	Spontaneous
						2	Forceps
						3	Vacuum
						4	Cesarean
						9	Unknown
						Blank	Not on certificate
394	1	ME_TRIAL	**Trial of Labor Attempted**	621	R	Y	Yes
						N	No
						X	Not applicable

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						U	Unknown
						Blank	Not on certificate
395-400	6	**Method of Delivery (Unrevised)**					
		The checkbox items indented below follow this structure:				1	Yes
						2	No
						9	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	Vaginal (excludes vaginal after previous C-section)
						2	Vaginal after previous c-section
						3	Primary C-section
						4	Repeat C-section
						5	Vaginal (unknown if previous c-section) (2003 Standard only)
						6	C-section (unknown if previous c-section) (2003 Standard only)
						9	Not stated
402	1	UDMETH_REC	**Delivery Method Recode (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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						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
424	1	FILLER	**Filler**				
425	1	IMP_PLUR	**Plurality Imputed**		U,R	Blank	Plurality is imputed
						1	Plurality is not imputed
426-435	10	FILLER	**Filler**				
436	1	SEX	**Sex of Infant**		U,R	M	Male
						F	Female
437	1	IMP_SEX	**Imputed Sex**		U,R	Blank	Infant Sex not Imputed
						1	Infant Sex is Imputed
438-439	2	DLMP_MM	**Last Normal Menses Month**		U,R	01	January
						02	February
						03	March
						04	April
						05	May
						06	June
						07	July
						08	August

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						09	September
						10	October
						11	November
						12	December
						99	Unknown or not stated
440-441	2	DLMP_DD	**Last Normal Menses Day**		U,R	01-31	As applicable to month of LMP
						99	Unknown or not stated
442-445	4	DLMP_YY	**Last Normal Menses Year**		U,R	nnnn	Year of last normal menses
						9999	Unknown or not stated
446-447	2	ESTGEST	**Obstetric/Clinical Gestation Est.**	573	U,R	0-98	0 through 98th week of gestation
						99	Unknown or not stated
448-450	3	FILLER	**Filler**				
451-452	2	COMBGEST	**Gestation – Detail in Weeks**		U,R	17-47	17th through 47th week of gestation
						99	Unknown
453-454	2	GESTREC10	**Gestation Recode 10**		U,R	01	Under 20 weeks
						02	20-27 weeks
						03	28-31 weeks
						04	32-35 weeks
						05	36 weeks
						06	37-39 weeks
						07	40 weeks
						08	41 weeks
						09	42 weeks and over
						10	Unknown
455	1	GESTREC3	**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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
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
474	1	FILLER	**Filler**				
475	1	BWTIMP	**Imputed Birth Weight Flag**		U,R	Blank	Birth Weight is not imputed
						1	Birth Weight is imputed
476-482	7		**Abnormal Conditions of the Newborn (Revised)**				
			The checkbox items below follow this structure:			Y	Yes, Complication reported
						N	No Complication reported
						U	Unknown or not stated
						Blank	Not on certificate
	476	1	AB_AVEN1	**Assisted Ventilation**	628	R	
	477	1	AB_AVEN6	**Assisted Ventilation >6 hrs**	629	R	
	478	1	AB_NICU	**Admission to NICU**	630	R	
	479	1	AB_SURF	**Surfactant**	631	R	
	480	1	AB_ANTI	**Antibiotics**	632	R	
	481	1	AB_SEIZ	**Seizures**	633	R	
	482	1	AB_BINJ	**Birth Injury**	634	R	
483-491	9	FILLER	**Filler**				
492-503	12		**Congenital Anomalies of the Newborn (Revised)**				
			The checkbox items below follow this structure:			Y	Yes, anomaly reported

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						N	No, anomaly not reported
						U	Unknown
						Blank	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_OMPH	**Omphalocele**	639	R		
497	1	CA_GAST	**Gastroschisis**	640	R		
498	1	CA_LIMB	**Limb Reduction Defect**	641	R		
499	1	CA_CLEFT	**Cleft Lip w/ or w/o Cleft Palate**	642	R		
500	1	CA_CLPAL	**Cleft Palate alone**	643	R		
501	1	CA_DOWN	**Downs Syndrome**	644	R	C	Confirmed
						P	Pending
						N	No
						U	Unknown
						Blank	Not on certificate
502	1	CA_DISOR	**Suspected Chromosomal Disorder**	645	R	C	Confirmed
						P	Pending
						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		**Congenital Anomalies of the Newborn**				
			The checkbox items indented below follow this structure:			1	Anomaly reported
			The version is all 1989 Standard unless otherwise noted.			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		

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524-568	45	FILLER	**Filler**				
569-771	203	**Flag File for Reporting Flags**					
		The reporting flags indented below follow this coding structure:				0	Not reporting
						1	Reporting
569	1	F_MORIGIN	**Origin of Mother**		U,R		
570	1	F_FORIGIN	**Origin of Father**		U,R		
571	1	F_MEDUC	**Education of Mother**		R		
572	1	FILLER	**Filler**				
573	1	F_CLINEST	**Clinical Estimate of Gestation**		U,R		
574	1	F_APGAR5	**Five minute APGAR**		U,R		
575	1	F_TOBACO	**Tobacco use**		R		
576-581	6	FILLER	**Filler**				
582	1	F_RF_PDIAB	**Prepregnancy Diabetes**		R		
583	1	F_RF_GDIAB	**Gestational Diabetes**		R		
584	1	F_RF_PHYPER	**Prepregnancy Hypertension**		R		
585	1	F_RF_GHYPER	**Gestational Hypertension**		R		
586	1	F_RF_ECLAMP	**Eclampsia**		R		
587	1	F_RF_PPB	**Previous Preterm Birth**		R		
588	1	F_RF_PPO	**Poor Pregnancy Outcome**		R		
589-592	4	FILLER	**Filler**				
593	1	F_RF_CESAR	**Previous Cesarean**		R		
594	1	F_RF_NCESAR	**Number of Previous Cesareans**		R		
595-600	6	FILLER	**Filler**				
601	1	F_OB_CERVIC	**Cervical Cerclage**		R		
602	1	F_OB_TOCO	**Tocolysis**		R		
603	1	F_OB_SUCC	**Successful External Cephalic Version**		R		
604	1	F_OB_FAIL	**Failed External Cephalic Version**		R		
605	1	F_OL_RUPTURE	**Premature Rupture of Membranes**		R		
606	1	F_OL_PRECIP	**Precipitous Labor**		R		
607	1	F_OL_PROLONG	**Prolonged Labor**		R		
608	1	F_LD_INDUCT	**Induction of Labor**		R		
609	1	F_LD_AUGMENT	**Augmentation of Labor**		R		
610	1	F_LD_NVRTX	**Non-Vertex Presentation**		R		
611	1	F_LD_STEROIDS	**Steriods**		R		
612	1	F_LD_ANTIBIO	**Antibiotics**		R		
613	1	F_LD_CHORIO	**Chorioamnionitis**		R		
614	1	F_LD_MECON	**Meconium Staining**		R		
615	1	F_LD_FINTOL	**Fetal Intolerance**		R		
616	1	F_LD_ANESTH	**Anesthesia**		R		
617	1	F_MD_ATTFOR	**Attempted Forceps**		R		
618	1	F_MD_ATTVAC	**Attempted Vacuum**		R		
619	1	F_MD_PRESENT	**Fetal Presentation**		R		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
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		
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		

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
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	Matched birth/infant death record
						2	Surviving infant record
						3	Unmatched infant death record (code used only in unlinked file)
869-871	3	FILLER	**Filler**				
872-874	3	AGED	**Age at Death in Days**			000-365	Number of days
875	1	AGER5	**Infant age recode 5**			1	Under 1 hour
						2	1 – 23 hours
						3	1 – 6 days
						4	7 – 27 days (late neonatal)
						5	28 days and over (postneonatal)
876-877	2	AGER22	**Infant age recode 22**			Blank	Age 1 year and over or not stated
						01	Under 1 hour (includes not stated hours and minutes)
						02	1 – 23 hours
						03	1 day (includes not stated days)
						04	2 days
						05	3 days
						06	4 days
						07	5 days
						08	6 days

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						9	Unspecified place
						Blank	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.XXXXXX				

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

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
901-902	2	FILLER	**Filler**				
903-904	2	EANUM	**Number of Entity-Axis Conditions**			00-20	Code range
905-1044	140	ENTITY	**Entity-Axis Conditions** Space has been provided for a maximum of 20 conditions. Each condition takes 7 positions in the record. The 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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			See Table 1 for a complete list of codes				
905-911	7		1st Condition				
912-918	7		2nd Condition				
919-925	7		3rd Condition				
926-932	7		4th Condition				
933-939	7		5th Condition				
940-946	7		6th Condition				
947-953	7		7th Condition				
954-960	7		8th Condition				
961-967	7		9th Condition				
968-974	7		10th Condition				
975-981	7		11th Condition				
982-988	7		12th Condition				
989-995	7		13th Condition				
996-1002	7		14th Condition				
1003-1009	7		15th Condition				
1010-1016	7		16th Condition				
1017-1023	7		17th Condition				
1024-1030	7		18th Condition				
1031-1037	7		19th Condition				
1038-1044	7		20th Condition				
1045-1046	2	FILLER	**Filler**				
1047-1048	2	RANUM	**Number of Record-Axis Conditions**			00-20	Code range
1049-1148	100	RECORD	**Record-Axis Conditions**				

Record-Axis Conditions
Space has been provided for a maximum of 20 conditions. Each condition takes 5 positions in the record. The 5th 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

Position	Len	Field	Description
1049-1053	5		1st Condition
1054-1058	5		2nd Condition
1059-1063	5		3rd Condition
1064-1068	5		4th Condition
1069-1073	5		5th Condition
1074-1078	5		6th Condition
1079-1083	5		7th Condition
1084-1088	5		8th Condition

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
1089-1093	5		9th Condition				
1094-1098	5		10th Condition				
1099-1103	5		11th Condition				
1104-1108	5		12th Condition				
1109-1113	5		13th Condition				
1114-1118	5		14th Condition				
1119-1123	5		15th Condition				
1124-1128	5		16th Condition				
1129-1133	5		17th Condition				
1134-1138	5		18th Condition				
1139-1143	5		19th Condition				
1144-1148	5		20th Condition				
1149-1150	2	FILLER	**Filler**				
1151	1	D_RESTATUS	**Death Resident Status**				
			United States Occurrence			1	RESIDENTS State and County of Occurrence and Residence are the same.
						2	INTRASTATE NONRESIDENTS State of Occurrence and Residence are the same, but County is different.
						3	INTERSTATE NONRESIDENTS State of Occurrence and Residence are different, but both are in the U.S.
						4	FOREIGN RESIDENTS State of Occurrence is one of the 50 States or the District of Columbia, but Place of Residence is outside of the U.S.
			Puerto Rico Occurrence			1	RESIDENTS Territory and County-equivalent of Occurrence and Residence are the same.
						2	INTRASTATE NONRESIDENTS Territory of Occurrence and Residence are the same, but County-equivalent is different.
						3	INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but both are a Territory.
						4	FOREIGN RESIDENTS Occurred in Puerto Rico to a resident of any other place.
			Virgin Islands Occurrence			1	RESIDENTS

Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
							Territory and County-equivalent of Occurrence and Residence are the same.
						2	INTRASTATE NONRESIDENTS Territory of Occurrence and Residence are the same, but County-equivalent is different.
						3	INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but both are a Territory.
						4	FOREIGN RESIDENTS Occurred in Virgin Islands to a resident of any other place.
			Guam Occurrence			1	RESIDENTS Occurred in Guam to a resident of Guam or to a resident of the U.S.
						3	INTERTERRITORY NONRESIDENTS Territory of occurrence and residence are different, but both are a Territory.
						4	FOREIGN RESIDENTS Occurred in Guam to a resident of any place other than Guam or the U.S.
1152-1153	2	STOCCFIPD	**State of Occurrence (FIPS) of Death** (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
						PR	Puerto Rico
						VI	Virgin Islands
						GU	Guam
1154-1156	3	CNTOCFIPD	**County of Occurrence (FIPS) of Death** Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document. (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
						001-nnn	Code range
						999	County of less than 250,000

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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
			Guam Occurrence			GU	Guam
						US	U.S. resident. Also considered a resident of Guam
						ZZ	Foreign residents
1166-1167	3	CNTYRFPD	**County of Residence (FIPS) of Death** Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State and identify each county. (Note: To uniquely identify a county, both the state and county codes must be used.) A complete list of counties is shown in the Geographic Code Outline further back in this document. (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
						000	Foreign residents
						001-nnn	Code range
						999	County of less than 250,000
1169-1181	13	FILLER	**Filler**				
1182	1	CNTRSPPD	**Population Size of County of Residence of Death** Based on the results of the 2000 Census (This item is available in the territory file only, geographic codes are not available in the U.S.file)				
						0	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

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Position	Len	Field	Description	Reporting Flag Position	Rev*	Values	Definition
						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**			2007	2007
1192-1257	66	FILLER	**Filler**				
1258-1259	2	DOD_MM	**Month of Death**			01	January
						02	February
						03	March
						04	April
						05	May
						06	June
						07	July
						08	August
						09	September
						10	October
						11	November
						12	December

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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, 2007 Link Birth Cohort Data.

(Residence of birth is of the mother)

| | Live births | | Infant deaths | | | |
| | | | Unweighted | | Weighted 1/ | |
State	Occurrence	Residence	Occurrence	Residence	Occurrence	Residence
United States /2	4324008	4316233	28756	28725	29213	29181
Alabama	63995	64804	658	653	659	654
Alaska	10955	11052	71	73	73	75
Arizona	103797	102981	709	704	726	721
Arkansas	40168	41378	305	314	307	316
California	567527	566414	2830	2821	2939	2930
Colorado	71225	70809	452	437	455	440
Connecticut	42265	41660	278	281	278	281
Delaware	12527	12170	95	98	95	98
Dist of Columbia	14824	8864	176	118	177	119
Florida	239389	239165	1711	1704	1712	1705
Georgia	152068	151137	1196	1193	1206	1203
Hawaii	19151	19134	119	121	121	123
Idaho	24436	25019	137	158	137	158
Illinois	177450	180836	1176	1245	1192	1261
Indiana	90572	89864	664	667	668	671
Iowa	40988	40886	197	224	199	226
Kansas	42938	42004	327	330	327	330
Kentucky	57424	59368	352	396	354	398
Louisiana	66336	66301	566	564	607	604
Maine	13974	14120	85	83	85	83
Maryland	74940	78095	572	617	573	618
Massachusetts	78723	77967	382	376	385	379
Michigan	124124	125261	991	1005	993	1007
Minnesota	73595	73735	414	409	414	409
Mississippi	45509	46491	439	465	441	467
Missouri	82823	81930	675	609	679	613
Montana	12400	12439	79	84	79	84
Nebraska	27117	26934	194	181	194	181
Nevada	40766	41181	236	238	248	250
New Hampshire	13937	14168	59	69	59	69
New Jersey	112883	116063	582	606	587	611
New Mexico	29905	30616	163	170	177	184
New York	126468	130125	732	771	751	789
New York City	128961	123326	677	625	677	626
North Carolina	132188	131037	1113	1116	1117	1120
North Dakota	10152	8840	65	59	65	59
Ohio	151342	150879	1166	1130	1187	1150
Oklahoma	54154	55065	423	434	432	444
Oregon	49873	49378	304	279	304	279
Pennsylvania	149999	150713	1149	1128	1156	1135
Rhode Island	13192	12376	99	89	100	90
South Carolina	60204	62875	512	539	513	540
South Dakota	12815	12261	98	80	98	80
Tennessee	92049	86711	790	725	792	727
Texas	414170	407625	2460	2450	2590	2580
Utah	56319	55130	307	281	309	283
Vermont	6210	6513	29	30	29	30
Virginia	107262	108884	836	853	838	855
Washington	88944	88978	433	435	434	436
West Virginia	21917	21994	170	161	171	162
Wisconsin	71741	72784	464	473	465	474
Wyoming	7317	7893	39	54	39	54
Foreign Residents	–	7775	–	31	–	32
Puerto Rico	46727	46642	394	393	394	393
Virgin Islands	1780	1697	9	10	9	10
Guam	3491	3480	33	33	33	33

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, 2007
birth cohort data

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

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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...............	4,316,233	7,446	12,063	12,818	14,936	17,986	69,067	221,429	3,959,945	543
Infant deaths..............	29,181	6,420	5,460	1,967	1,115	795	1,876	2,398	9,043	107
Infant mortality rate......	6.76	862.21	452.62	153.46	74.65	44.20	27.16	10.83	2.28	197.05

Male

Live births...............	2,208,071	3,747	6,083	6,627	7,583	9,026	33,625	101,772	2,039,320	288
Infant deaths..............	16,304	3,287	3,169	1,206	661	444	993	1,250	5,223	71
Infant mortality rate......	7.38	877.24	520.96	181.98	87.17	49.19	29.53	12.28	2.56	246.53

Female

Live births...............	2,108,162	3,699	5,980	6,191	7,353	8,960	35,442	119,657	1,920,625	255
Infant deaths..............	12,877	3,133	2,292	761	454	351	883	1,149	3,820	36
Infant mortality rate......	6.11	846.99	383.28	122.92	61.74	39.17	24.91	9.60	1.99	141.18

White

Both sexes

Live births...............	3,336,626	4,194	6,939	7,968	9,448	11,772	46,845	152,283	3,096,785	392
Infant deaths..............	18,762	3,600	3,219	1,264	723	506	1,311	1,683	6,404	52
Infant mortality rate......	5.62	858.37	463.90	158.63	76.52	42.98	27.99	11.05	2.07	132.65

Male

Live births...............	1,708,315	2,104	3,527	4,176	4,871	6,066	23,031	70,679	1,593,658	203
Infant deaths..............	10,528	1,842	1,852	784	437	278	703	884	3,714	33
Infant mortality rate......	6.16	875.48	525.09	187.74	89.71	45.83	30.52	12.51	2.33	162.56

Female

Live births...............	1,628,311	2,090	3,412	3,792	4,577	5,706	23,814	81,604	1,503,127	189
Infant deaths..............	8,234	1,758	1,367	480	285	227	608	799	2,690	19
Infant mortality rate......	5.06	841.15	400.64	126.58	62.27	39.78	25.53	9.79	1.79	*

Black

Both sexes

Live births...............	675,676	2,872	4,549	4,224	4,619	5,080	17,703	52,869	583,639	121
Infant deaths..............	8,729	2,487	1,950	615	327	221	458	588	2,036	48
Infant mortality rate......	12.92	865.95	428.67	145.60	70.79	43.50	25.87	11.12	3.49	396.69

Male

Live births...............	343,279	1,441	2,275	2,125	2,268	2,398	8,320	23,537	300,842	73
Infant deaths..............	4,821	1,259	1,158	365	189	121	237	303	1,154	35
Infant mortality rate......	14.04	873.70	509.01	171.76	83.33	50.46	28.49	12.87	3.84	479.45

Female

Live births...............	332,397	1,431	2,274	2,099	2,351	2,682	9,383	29,332	282,797	48
Infant deaths..............	3,908	1,227	792	250	138	100	221	285	881	14
Infant mortality rate......	11.76	857.44	348.28	119.10	58.70	37.29	23.55	9.72	3.12	*

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[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, 2007 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	4,316,233	33,391	54,661	68,914	389,636	2,346,479	816,262	357,809	242,235	6,846
Infant deaths	29,181	13,338	2,414	1,125	2,881	6,212	1,631	721	632	227
Infant mortality rate	6.76	399.45	44.16	16.32	7.39	2.65	2.00	2.02	2.61	33.16
Less then 2,500 grams										
Live births	355,745	32,067	41,117	45,109	119,180	93,943	11,760	5,422	6,343	804
Infant deaths	20,031	13,326	2,282	944	1,638	1,307	207	121	119	88
Infant mortality rate	56.31	415.57	55.50	20.93	13.74	13.91	17.60	22.32	18.76	109.45
Less then 500 grams										
Live births	7,446	7,125	208	19	18	13	2	3	–	58
Infant deaths	6,420	6,202	138	15	12	7	2	3	–	41
Infant mortality rate	862.21	870.46	663.46	*	*	*	*	*	–	706.90
500-749 grams										
Live births	12,063	10,514	1,351	54	44	37	8	4	11	40
Infant deaths	5,460	5,034	356	16	13	11	5	3	4	17
Infant mortality rate	452.62	478.79	263.51	*	*	*	*	*	*	*
750-999 grams										
Live births	12,818	7,947	4,216	294	117	149	26	13	20	36
Infant deaths	1,967	1,474	405	41	15	14	3	–	3	11
Infant mortality rate	153.46	185.48	96.06	139.46	*	*	*	*	*	*
1,000-1,249 grams										
Live births	14,936	3,539	8,265	1,602	779	433	127	68	94	29
Infant deaths	1,115	387	503	97	82	28	6	4	7	–
Infant mortality rate	74.65	109.35	60.86	60.55	105.26	64.67	*	*	*	–
1,250-1,499 grams										
Live births	17,986	1,022	9,511	3,756	2,382	815	211	96	150	43
Infant deaths	795	107	345	130	130	52	9	10	9	2
Infant mortality rate	44.20	104.70	36.27	34.61	54.58	63.80	*	*	*	*
1,500-1,999 grams										
Live births	69,067	1,074	12,979	20,077	24,190	8,164	1,031	573	838	141
Infant deaths	1,876	91	404	385	547	342	42	22	34	9
Infant mortality rate	27.16	84.73	31.13	19.18	22.61	41.89	40.74	38.39	40.57	*
2,000-2,499 grams										
Live births	221,429	846	4,587	19,307	91,650	84,332	10,355	4,665	5,230	457
Infant deaths	2,398	31	131	259	837	852	140	78	62	7
Infant mortality rate	10.83	36.64	28.56	13.41	9.13	10.10	13.52	16.72	11.85	*
2,500-2,999 grams										
Live births	797,926	1,324	4,682	10,022	131,545	482,797	94,729	37,454	33,996	1,377
Infant deaths	3,344	12	72	102	723	1,760	354	153	160	8
Infant mortality rate	4.19	*	15.38	10.18	5.50	3.65	3.74	4.09	4.71	*
3,000-3,499 grams										
Live births	1,687,045	–	5,878	8,890	95,349	1,012,837	330,077	134,750	97,026	2,238
Infant deaths	3,510	–	39	50	369	2,017	581	234	207	13
Infant mortality rate	2.08	–	6.63	5.62	3.87	1.99	1.76	1.74	2.13	*

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, 2007 birth cohort data

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

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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]										
3,500-3,999 grams										
Live births	1,144,002	–	2,984	3,979	35,160	603,726	287,655	130,810	78,267	1,421
Infant deaths	1,700	–	21	14	110	882	384	164	117	6
Infant mortality rate	1.49	–	7.04	*	3.13	1.46	1.33	1.25	1.49	*
4,000-4,499 grams										
Live births	286,218	–	–	791	7,146	132,937	80,123	42,180	22,657	384
Infant deaths	393	–	–	13	29	199	94	40	15	1
Infant mortality rate	1.37	–	–	*	4.06	1.50	1.17	0.95	*	*
4,500-4,999 grams										
Live births	40,218	–	–	109	1,067	17,959	10,914	6,556	3,550	63
Infant deaths	73	–	–	–	10	35	9	6	11	1
Infant mortality rate	1.82	–	–	–	*	1.95	*	*	*	*
5,000 grams or more										
Live births	4,536	–	–	14	189	2,280	1,004	637	396	16
Infant deaths	23	–	–	1	2	10	2	3	2	3
Infant mortality rate	5.07	–	–	*	*	*	*	*	*	*
Not stated										
Live births	543	–	–	–	–	–	–	–	–	543
Infant deaths	107	–	–	–	–	–	–	–	–	107
Infant mortality rate	197.05	–	–	–	–	–	–	–	–	197.05
White										
Total										
Live births	3,336,626	19,621	36,734	48,356	286,001	1,818,792	644,754	285,852	191,464	5,052
Infant deaths	18,762	7,778	1,555	774	2,007	4,390	1,158	519	451	132
Infant mortality rate	5.62	396.41	42.33	16.01	7.02	2.41	1.80	1.82	2.36	26.13
Less then 2,500 grams										
Live births	239,449	18,807	27,198	31,516	82,918	62,736	7,836	3,623	4,296	519
Infant deaths	12,306	7,771	1,461	645	1,140	921	146	89	77	55
Infant mortality rate	51.39	413.20	53.72	20.47	13.75	14.68	18.63	24.57	17.92	105.97
Less then 500 grams										
Live births	4,194	3,999	121	14	12	5	2	3	–	38
Infant deaths	3,600	3,475	75	11	7	1	2	3	–	27
Infant mortality rate	858.37	868.97	619.83	*	*	*	*	*	–	710.53
500-749 grams										
Live births	6,939	5,984	825	33	29	25	4	3	9	27
Infant deaths	3,219	2,958	209	13	7	10	2	3	4	12
Infant mortality rate	463.90	494.32	253.33	*	*	*	*	*	*	*
750-999 grams										
Live births	7,968	4,826	2,687	202	83	112	16	12	12	18
Infant deaths	1,264	934	269	32	11	10	2	–	1	5
Infant mortality rate	158.63	193.54	100.11	158.42	*	*	*	*	*	*
1,000-1,249 grams										
Live births	9,448	2,216	5,196	1,030	519	280	79	45	61	22
Infant deaths	723	256	314	62	59	19	4	3	5	–
Infant mortality rate	76.52	115.52	60.43	60.19	113.68	*	*	*	*	–

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, 2007 birth cohort data

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

Birthweight	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
White										
1,250-1,499 grams										
Live births	11,772	625	6,263	2,446	1,565	537	151	59	98	28
Infant deaths	506	69	223	75	83	41	4	5	5	1
Infant mortality rate	42.98	110.40	35.61	30.66	53.04	76.35	*	*	*	*
1,500-1,999 grams										
Live births	46,845	630	9,034	13,766	16,241	5,431	714	371	572	86
Infant deaths	1,311	60	282	260	384	245	34	14	26	7
Infant mortality rate	27.99	95.24	31.22	18.89	23.64	45.11	47.62	*	45.45	*
2,000-2,499 grams										
Live births	152,283	527	3,072	14,025	64,469	56,346	6,870	3,130	3,544	300
Infant deaths	1,683	19	90	192	589	594	98	60	36	3
Infant mortality rate	11.05	*	29.30	13.69	9.14	10.54	14.26	19.17	10.16	*
2,500-2,999 grams										
Live births	563,026	814	3,073	6,820	96,236	339,336	65,529	26,292	23,972	954
Infant deaths	2,294	7	52	77	500	1,203	238	102	109	6
Infant mortality rate	4.07	*	16.92	11.29	5.20	3.55	3.63	3.88	4.55	*
3,000-3,499 grams										
Live births	1,300,414	–	4,168	6,274	72,569	782,936	253,274	104,279	75,270	1,644
Infant deaths	2,479	–	27	34	258	1,412	409	173	155	10
Infant mortality rate	1.91	–	6.48	5.42	3.56	1.80	1.61	1.66	2.06	*
3,500-3,999 grams										
Live births	948,391	–	2,295	3,029	27,542	502,144	238,458	108,849	64,927	1,147
Infant deaths	1,261	–	14	7	78	670	281	117	89	4
Infant mortality rate	1.33	–	*	*	2.83	1.33	1.18	1.07	1.37	*
4,000-4,499 grams										
Live births	246,400	–	–	618	5,742	114,347	69,302	36,476	19,588	327
Infant deaths	297	–	–	10	21	149	73	31	11	1
Infant mortality rate	1.21	–	–	*	3.66	1.30	1.05	0.85	*	*
4,500-4,999 grams										
Live births	34,786	–	–	89	855	15,430	9,506	5,772	3,079	55
Infant deaths	56	–	–	–	7	25	9	4	9	1
Infant mortality rate	1.61	–	–	–	*	1.62	*	*	*	*
5,000 grams or more										
Live births	3,768	–	–	10	139	1,863	849	561	332	14
Infant deaths	18	–	–	1	2	9	1	2	1	2
Infant mortality rate	*	–	–	*	*	*	*	*	*	*
Not stated										
Live births	392	–	–	–	–	–	–	–	–	392
Infant deaths	52	–	–	–	–	–	–	–	–	52
Infant mortality rate	132.65	–	–	–	–	–	–	–	–	132.65
Black										
Total										
Live births	675,676	12,152	14,674	16,276	78,168	357,019	112,551	48,198	35,417	1,221
Infant deaths	8,729	4,870	724	271	693	1,412	372	153	154	81
Infant mortality rate	12.92	400.76	49.34	16.65	8.87	3.95	3.31	3.17	4.35	66.34

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, 2007 birth cohort data

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

Birthweight		Gestation								
	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Black										
Less then 2,500 grams										
Live births	91,916	11,714	11,518	10,795	27,945	23,620	3,056	1,403	1,648	217
Infant deaths	6,645	4,866	690	236	398	314	50	26	38	27
Infant mortality rate	72.29	415.40	59.91	21.86	14.24	13.29	16.36	18.53	23.06	124.42
Less then 500 grams										
Live births	2,872	2,760	78	4	5	8	–	–	–	17
Infant deaths	2,487	2,403	57	4	4	6	–	–	–	12
Infant mortality rate	865.95	870.65	730.77	*	*	*	–	–	–	*
500-749 grams										
Live births	4,549	4,032	457	18	13	10	4	1	2	12
Infant deaths	1,950	1,808	127	3	4	1	3	–	–	4
Infant mortality rate	428.67	448.41	277.90	*	*	*	*	*	*	*
750-999 grams										
Live births	4,224	2,756	1,309	72	31	27	7	1	7	14
Infant deaths	615	475	118	9	3	3	1	–	2	4
Infant mortality rate	145.60	172.35	90.15	*	*	*	*	*	*	*
1,000-1,249 grams										
Live births	4,619	1,162	2,563	458	214	125	40	23	30	4
Infant deaths	327	112	155	28	19	7	2	1	2	–
Infant mortality rate	70.79	96.39	60.48	61.14	*	*	*	*	*	*
1,250-1,499 grams										
Live births	5,080	340	2,666	1,071	640	222	48	33	49	11
Infant deaths	221	33	95	41	31	7	4	4	4	1
Infant mortality rate	43.50	97.06	35.63	38.28	48.44	*	*	*	*	*
1,500-1,999 grams										
Live births	17,703	392	3,161	5,077	6,247	2,149	249	164	225	39
Infant deaths	458	27	103	99	131	76	7	5	7	2
Infant mortality rate	25.87	68.88	32.58	19.50	20.97	35.37	*	*	*	*
2,000-2,499 grams										
Live births	52,869	272	1,284	4,095	20,795	21,079	2,708	1,181	1,335	120
Infant deaths	588	7	34	52	205	213	33	16	23	4
Infant mortality rate	11.12	*	26.48	12.70	9.86	10.10	12.19	*	17.23	*
2,500-2,999 grams										
Live births	167,917	438	1,312	2,575	26,478	100,869	20,415	8,026	7,495	309
Infant deaths	854	4	17	18	183	446	99	38	45	2
Infant mortality rate	5.09	*	*	*	6.91	4.42	4.85	4.73	6.00	*
3,000-3,499 grams										
Live births	260,166	–	1,318	2,054	17,029	153,141	50,495	20,526	15,231	372
Infant deaths	786	–	9	11	82	450	141	45	44	3
Infant mortality rate	3.02	–	*	*	4.82	2.94	2.79	2.19	2.89	*
3,500-3,999 grams										
Live births	126,195	–	526	710	5,532	65,420	30,969	14,072	8,804	162
Infant deaths	319	–	7	5	22	158	69	34	23	–
Infant mortality rate	2.53	–	*	*	3.98	2.42	2.23	2.42	2.61	–

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, 2007 birth cohort data

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

Birthweight	Total	<28 Weeks	28-31 Weeks	32-35 Weeks	36 Weeks	37-39 Weeks	40 Weeks	41 Weeks	42 Weeks or more	Not Stated
Black										
4,000-4,499 grams										
Live births	25,402	–	–	125	1,005	12,025	6,638	3,628	1,948	33
Infant deaths	62	–	–	1	5	35	11	6	3	–
Infant mortality rate	2.44	–	–	*	*	2.91	*	*	*	–
4,500-4,999 grams										
Live births	3,475	–	–	15	139	1,669	886	503	258	5
Infant deaths	12	–	–	–	3	8	–	1	–	–
Infant mortality rate	*	–	–	*	*	*	–	*	–	*
5,000 grams or more										
Live births	484	–	–	2	40	275	92	40	33	2
Infant deaths	3	–	–	–	–	1	–	1	–	1
Infant mortality rate	*	–	–	*	–	*	–	*	–	*
Not stated										
Live births	121	–	–	–	–	–	–	–	–	121
Infant deaths	48	–	–	–	–	–	–	–	–	48
Infant mortality rate	396.69	–	–	–	–	–	–	–	–	396.69

-/ Quality zero.
*/Figure does not meet standard of reliability or precision; see Technical notes.
¹/ Includes races other then 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, 2007 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]

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Birthweight and race of mother	Live Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal

All races[1]

Total (all birthweights).................	4,316,233	29,181	19,067	15,127	3,941	10,114
Rate.................		6.76	4.42	3.50	0.91	2.34
Less than 2,500 grams...................	355,745	20,031	15,993	13,279	2,714	4,039
Rate.................		56.31	44.96	37.33	7.63	11.35
Less than 500 grams....................	7,446	6,420	6,219	6,021	198	201
Rate.................		862.21	835.21	808.62	26.59	26.99
500-749 grams..........................	12,063	5,460	4,577	3,656	921	883
Rate.................		452.62	379.42	303.08	76.35	73.20
750-999 grams..........................	12,818	1,967	1,433	954	479	534
Rate.................		153.46	111.80	74.43	37.37	41.66
1,000-1,249 grams......................	14,936	1,115	771	553	218	343
Rate.................		74.65	51.62	37.02	14.60	22.96
1,250-1,499 grams......................	17,986	795	529	383	146	266
Rate.................		44.20	29.41	21.29	8.12	14.79
1,500-1,999 grams......................	69,067	1,876	1,210	900	310	666
Rate.................		27.16	17.52	13.03	4.49	9.64
2,000-2,499 grams......................	221,429	2,398	1,253	812	442	1,145
Rate.................		10.83	5.66	3.67	2.00	5.17
2,500-2,999 grams......................	797,926	3,344	1,235	743	492	2,110
Rate.................		4.19	1.55	0.93	0.62	2.64
3,000-3,499 grams......................	1,687,045	3,510	1,065	579	486	2,445
Rate.................		2.08	0.63	0.34	0.29	1.45
3,500-3,999 grams......................	1,144,002	1,700	483	294	189	1,216
Rate.................		1.49	0.42	0.26	0.17	1.06
4,000-4,499 grams......................	286,218	393	138	89	48	255
Rate.................		1.37	0.48	0.31	0.17	0.89
4,500-4,999 grams......................	40,218	73	29	23	6	43
Rate.................		1.82	0.72	0.57	*	1.07
5,000 grams or more....................	4,536	23	17	13	4	6
Rate.................		5.07	*	*	*	*
Not stated............................	543	107	107	105	2	–
Rate.................		197.05	197.05	193.37	*	–

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, 2007 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 Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal
White						
Total (all birthweights)................	3,336,626	18,762	12,242	9,667	2,575	6,521
Rate................		5.62	3.67	2.90	0.77	1.95
Less than 2,500 grams..................	239,449	12,306	9,972	8,268	1,704	2,334
Rate................		51.39	41.65	34.53	7.12	9.75
Less than 500 grams....................	4,194	3,600	3,516	3,411	106	84
Rate................		858.37	838.34	813.30	25.27	20.03
500-749 grams..........................	6,939	3,219	2,787	2,255	532	432
Rate................		463.90	401.64	324.97	76.67	62.26
750-999 grams..........................	7,968	1,264	957	640	317	307
Rate................		158.63	120.11	80.32	39.78	38.53
1,000-1,249 grams......................	9,448	723	534	396	137	189
Rate................		76.52	56.52	41.91	14.50	20.00
1,250-1,499 grams......................	11,772	506	360	275	85	146
Rate................		42.98	30.58	23.36	7.22	12.40
1,500-1,999 grams......................	46,845	1,311	884	668	216	427
Rate................		27.99	18.87	14.26	4.61	9.12
2,000-2,499 grams......................	152,283	1,683	933	622	311	749
Rate................		11.05	6.13	4.08	2.04	4.92
2,500-2,999 grams......................	563,026	2,294	891	562	330	1,403
Rate................		4.07	1.58	1.00	0.59	2.49
3,000-3,499 grams......................	1,300,414	2,479	798	445	353	1,681
Rate................		1.91	0.61	0.34	0.27	1.29
3,500-3,999 grams......................	948,391	1,261	382	238	144	879
Rate................		1.33	0.40	0.25	0.15	0.93
4,000-4,499 grams......................	246,400	297	111	74	37	186
Rate................		1.21	0.45	0.30	0.15	0.75
4,500-4,999 grams......................	34,786	56	23	19	4	32
Rate................		1.61	0.66	*	*	0.92
5,000 grams or more....................	3,768	18	12	10	2	6
Rate................		*	*	*	*	*
Not stated.............................	392	52	52	51	1	–
Rate................		132.65	132.65	130.10	*	–

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, 2007 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 Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal
Black						
Total (all birthweights).................	675,676	8,729	5,742	4,591	1,151	2,987
Rate.................		12.92	8.50	6.79	1.70	4.42
Less than 2,500 grams...................	91,916	6,645	5,151	4,274	876	1,495
Rate.................		72.29	56.04	46.50	9.53	16.26
Less than 500 grams....................	2,872	2,487	2,381	2,300	80	106
Rate.................		865.95	829.04	800.84	27.86	36.91
500-749 grams..........................	4,549	1,950	1,544	1,198	347	406
Rate.................		428.67	339.42	263.35	76.28	89.25
750-999 grams..........................	4,224	615	406	259	147	210
Rate.................		145.60	96.12	61.32	34.80	49.72
1,000-1,249 grams......................	4,619	327	196	128	68	130
Rate.................		70.79	42.43	27.71	14.72	28.14
1,250-1,499 grams......................	5,080	221	123	72	51	98
Rate.................		43.50	24.21	14.17	10.04	19.29
1,500-1,999 grams......................	17,703	458	253	177	76	205
Rate.................		25.87	14.29	10.00	4.29	11.58
2,000-2,499 grams......................	52,869	588	247	141	106	341
Rate.................		11.12	4.67	2.67	2.00	6.45
2,500-2,999 grams......................	167,917	854	258	131	127	595
Rate.................		5.09	1.54	0.78	0.76	3.54
3,000-3,499 grams......................	260,166	786	188	84	104	598
Rate.................		3.02	0.72	0.32	0.40	2.30
3,500-3,999 grams......................	126,195	319	73	40	33	246
Rate.................		2.53	0.58	0.32	0.26	1.95
4,000-4,499 grams......................	25,402	62	16	8	8	45
Rate.................		2.44	*	*	*	1.77
4,500-4,999 grams......................	3,475	12	5	3	2	7
Rate.................		*	*	*	*	*
5,000 grams or more....................	484	3	3	2	1	–
Rate.................		*	*	*	*	–
Not stated.............................	121	48	48	48	–	–
Rate.................		396.69	396.69	396.69	–	–

See footnotes at end of table.

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-/ Quantity zero.
*/Figure does not meet standard of reliability or precision; see Technical notes.
¹/ Includes races other then 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, 2007 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 Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post-Neonatal
All races[1]						
All birthweights						
All causes 4,316,233		29,181 676.08	19,067 441.75	15,127 350.47	3,941 91.31	10,114 234.32
Congenital malformations (Q00-Q99)......................		5,825 134.96	4,087 94.69	3,128 72.47	959 22.22	1,738 40.27
Short gestation and low birthweight nec (P07)...........		4,875 112.95	4,750 110.05	4,616 106.95	133 3.08	125 2.90
Sudden infant death syndrome (R95)......................		2,459 56.97	213 4.93	31 0.72	182 4.22	2,247 52.06
Maternal complications of pregnancy (P01)...............		1,774 41.10	1,753 40.61	1,733 40.15	20 0.46	21 0.49
Complications of placenta, cord, membranes (P02)........		1,120 25.95	1,108 25.67	1,066 24.70	41 0.95	12 *
Respiratory distress of newborn (P22)...................		799 18.51	777 18.00	603 13.97	174 4.03	22 0.51
Accidents (unintentional injures) (V01-X59).............		1,282 29.70	124 2.87	28 0.65	96 2.22	1,158 26.83
Bacterial sepsis of newborn (P36)......................		838 19.42	790 18.30	325 7.53	465 10.77	48 1.11
Deseases of the circulatory system (I00-I99)...........		620 14.36	131 3.04	70 1.62	61 1.41	489 11.33
Intrauterine hypoxia, birth asphyxia (P20-P21).........		353 8.18	334 7.74	278 6.44	55 1.27	19 *
All other causes.......................................		9,236 213.98	5,002 115.89	3,248 75.25	1,754 40.64	4,234 98.09
Less then 2,500 grams						
All causes 355,745		20,031 5,630.72	15,993 4,495.64	13,279 3,732.73	2,714 762.91	4,039 1,135.36
Congenital malformations (Q00-Q99)......................		3,605 1,013.37	2,802 787.64	2,283 641.75	519 145.89	803 225.72
Short gestation and low birthweight nec (P07)...........		4,786 1,345.35	4,664 1,311.05	4,532 1,273.95	131 36.82	122 34.29
Sudden infant death syndrome (R95)......................		523 147.02	42 11.81	4 *	38 10.68	481 135.21
Maternal complications of pregnancy (P01)...............		1,723 484.34	1,702 478.43	1,682 472.81	20 5.62	21 5.90
Complications of placenta, cord, membranes (P02)........		1,036 291.22	1,026 288.41	995 279.69	31 8.71	10 *
Respiratory distress of newborn (P22)...................		780 219.26	759 213.36	590 165.85	169 47.51	21 5.90
Accidents (unintentional injures) (V01-X59).............		236 66.34	25 7.03	8 *	17 *	211 59.31
Bacterial sepsis of newborn (P36)......................		716 201.27	672 188.90	267 75.05	404 113.56	44 12.37
Deseases of the circulatory system (I00-I99)...........		286 80.39	68 19.11	42 11.81	26 7.31	218 61.28

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, 2007 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 Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post-Neonatal
All races[1]						
Intrauterine hypoxia, birth asphyxia (P20-P21)...........		235 66.06	228 64.09	198 55.66	29 8.15	7 *
All other causes..		6,105 1,716.12	4,006 1,126.09	2,678 752.79	1,328 373.30	2,099 590.03
2,500 grams or more						
All causes 3,959,945		9,043 228.36	2,968 74.95	1,742 43.99	1,225 30.93	6,075 153.41
Congenital malformations (Q00-Q99)......................		2,216 55.96	1,281 32.35	843 21.29	439 11.09	935 23.61
Short gestation and low birthweight nec (P07)...........		37 0.93	34 0.86	32 0.81	2 *	3 *
Sudden infant death syndrome (R95).....................		1,936 48.89	170 4.29	27 0.68	144 3.64	1,766 44.60
Maternal complications of pregnancy (P01)...............		33 0.83	33 0.83	33 0.83	– –	– –
Complications of placenta, cord, membranes (P02)........		80 2.02	78 1.97	68 1.72	10 *	2 *
Respiratory distress of newborn (P22)...................		19 *	18 *	13 *	5 *	1 *
Accidents (unintentional injures) (V01-X59).............		1,046 26.41	99 2.50	19 *	79 1.99	947 23.91
Bacterial sepsis of newborn (P36)......................		120 3.03	116 2.93	57 1.44	59 1.49	4 *
Deseases of the circulatory system (I00-I99)...........		334 8.43	63 1.59	28 0.71	35 0.88	271 6.84
Intrauterine hypoxia, birth asphyxia (P20-P21)..........		118 2.98	106 2.68	80 2.02	26 0.66	12 *
All other causes..		3,103 78.36	969 24.47	543 13.71	426 10.76	2,135 53.91
Not stated birthweight						
All causes	543	107 19,705.34	107 19,705.34	105 19,337.02	2 *	– –
Congenital malformations (Q00-Q99)......................		4 *	4 *	3 *	1 *	– –
Short gestation and low birthweight nec (P07)...........		52 9,576.43	52 9,576.43	52 9,576.43	– –	– –
Sudden infant death syndrome (R95).....................		– –	– –	– –	– –	– –
Maternal complications of pregnancy (P01)...............		18 *	18 *	18 *	– –	– –
Complications of placenta, cord, membranes (P02)........		3 *	3 *	3 *	– –	– –
Respiratory distress of newborn (P22)...................		– –	– –	– –	– –	– –
Accidents (unintentional injures) (V01-X59).............		– –	– –	– –	– –	– –

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, 2007 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 Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal
All races[1]						
Bacterial sepsis of newborn (P36).......................		2	2	1	1	-
		*	*	*	*	-
Deseases of the circulatory system (I00-I99)............		-	-	-	-	-
		-	-	-	-	-
Intrauterine hypoxia, birth asphyxia (P20-P21)...........		-	-	-	-	-
		-	-	-	-	-
All other causes..		27	27	27	-	-
		4,972.38	4,972.38	4,972.38	-	-
White						
All birthweights						
All causes	3,160,289	17,630	11,474	9,050	2,424	6,156
		557.86	363.07	286.37	76.70	194.79
Congenital malformations (Q00-Q99)......................		4,084	2,927	2,275	651	1,157
		129.23	92.62	71.99	20.60	36.61
Short gestation and low birthweight nec (P07)...........		2,515	2,460	2,386	74	55
		79.58	77.84	75.50	2.34	1.74
Sudden infant death syndrome (R95)......................		1,562	130	18	112	1,432
		49.43	4.11	*	3.54	45.31
Maternal complications of pregnancy (P01)...............		978	966	953	12	12
		30.95	30.57	30.16	*	*
Complications of placenta, cord, membranes (P02)........		661	654	630	23	7
		20.92	20.69	19.93	0.73	*
Respiratory distress of newborn (P22)...................		465	452	350	103	13
		14.71	14.30	11.07	3.26	*
Accidents (unintentional injures) (V01-X59).............		819	79	20	59	741
		25.92	2.50	0.63	1.87	23.45
Bacterial sepsis of newborn (P36)......................		484	458	171	287	26
		15.32	14.49	5.41	9.08	0.82
Deseases of the circulatory system (I00-I99)............		368	86	44	42	282
		11.64	2.72	1.39	1.33	8.92
Intrauterine hypoxia, birth asphyxia (P20-P21)...........		218	203	174	28	15
		6.90	6.42	5.51	0.89	*
All other causes..		5,476	3,061	2,028	1,033	2,416
		173.28	96.86	64.17	32.69	76.45
Less then 2,500 grams						
All causes	226,701	11,506	9,309	7,717	1,592	2,197
		5,075.41	4,106.29	3,404.04	702.25	969.12
Congenital malformations (Q00-Q99)......................		2,483	1,970	1,632	338	513
		1,095.28	868.99	719.89	149.10	226.29
Short gestation and low birthweight nec (P07)...........		2,468	2,417	2,345	72	52
		1,088.66	1,066.16	1,034.40	31.76	22.94
Sudden infant death syndrome (R95)......................		287	25	2	23	262
		126.60	11.03	*	10.15	115.57
Maternal complications of pregnancy (P01)...............		945	933	921	12	12
		416.85	411.56	406.26	*	*

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, 2007 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 Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal
White						
Complications of placenta, cord, membranes (P02).........	602 265.55	595 262.46	580 255.84	15 *	6 *
Respiratory distress of newborn (P22)....................	450 198.50	438 193.21	340 149.98	99 43.67	12 *
Accidents (unintentional injures) (V01-X59)..............	129 56.90	16 *	5 *	11 *	113 49.85
Bacterial sepsis of newborn (P36)........................	404 178.21	380 167.62	131 57.79	249 109.84	24 10.59
Deseases of the circulatory system (I00-I99).............	162 71.46	43 18.97	27 11.91	16 *	119 52.49
Intrauterine hypoxia, birth asphyxia (P20-P21)...........	135 59.55	130 57.34	121 53.37	9 *	5 *
All other causes...	3,441 1,517.86	2,362 1,041.90	1,614 711.95	748 329.95	1,079 475.96
2,500 grams or more						
All causes 2,933,387	6,080 207.27	2,121 72.31	1,290 43.98	831 28.33	3,959 134.96
Congenital malformations (Q00-Q99).......................	1,598 54.48	954 32.52	642 21.89	312 10.64	644 21.95
Short gestation and low birthweight nec (P07)............	26 0.89	23 0.78	21 0.72	2 *	3 *
Sudden infant death syndrome (R95).......................	1,275 43.47	105 3.58	16 *	88 3.00	1,170 39.89
Maternal complications of pregnancy (P01)................	23 0.78	23 0.78	23 0.78	– –	– –
Complications of placenta, cord, membranes (P02).........	58 1.98	57 1.94	49 1.67	8 *	1 *
Respiratory distress of newborn (P22)....................	15 *	14 *	10 *	4 *	1 *
Accidents (unintentional injures) (V01-X59)..............	690 23.52	62 2.11	14 *	48 1.64	628 21.41
Bacterial sepsis of newborn (P36)........................	80 2.73	78 2.66	40 1.36	38 1.30	2 *
Deseases of the circulatory system (I00-I99).............	206 7.02	43 1.47	17 *	26 0.89	163 5.56
Intrauterine hypoxia, birth asphyxia (P20-P21)...........	82 2.80	72 2.45	53 1.81	19 *	10 *
All other causes...	2,025 69.03	689 23.49	404 13.77	285 9.72	1,337 45.58
Not stated birthweight						
All causes 201	44 21,890.55	44 21,890.55	43 21,393.03	1 *	– –
Congenital malformations (Q00-Q99).......................	3 *	3 *	2 *	1 *	– –
Short gestation and low birthweight nec (P07)............	20 9,950.25	20 9,950.25	20 9,950.25	– –	– –

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, 2007 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 Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal
White						
Sudden infant death syndrome (R95).......................		- -	- -	- -	- -	- -
Maternal complications of pregnancy (P01)...............		9 *	9 *	9 *	- -	- -
Complications of placenta, cord, membranes (P02).........		1 *	1 *	1 *	- -	- -
Respiratory distress of newborn (P22)....................		- -	- -	- -	- -	- -
Accidents (unintentional injures) (V01-X59).............		- -	- -	- -	- -	- -
Bacterial sepsis of newborn (P36).......................		- -	- -	- -	- -	- -
Deseases of the circulatory system (I00-I99)............		- -	- -	- -	- -	- -
Intrauterine hypoxia, birth asphyxia (P20-P21)..........		- -	- -	- -	- -	- -
All other causes..		10 *	10 *	10 *	- -	- -
Black						
All birthweights						
All causes	653,536	8,531 1,305.36	5,607 857.95	4,480 685.50	1,126 172.29	2,924 447.41
Congenital malformations (Q00-Q99)......................		1,068 163.42	682 104.36	490 74.98	193 29.53	386 59.06
Short gestation and low birthweight nec (P07)...........		1,894 289.81	1,835 280.78	1,784 272.98	50 7.65	59 9.03
Sudden infant death syndrome (R95)......................		698 106.80	71 10.86	11 *	59 9.03	627 95.94
Maternal complications of pregnancy (P01)...............		610 93.34	602 92.11	594 90.89	8 *	8 *
Complications of placenta, cord, membranes (P02).........		345 52.79	341 52.18	327 50.04	14 *	4 *
Respiratory distress of newborn (P22)....................		270 41.31	261 39.94	209 31.98	52 7.96	9 *
Accidents (unintentional injures) (V01-X59).............		370 56.62	34 5.20	6 *	28 4.28	336 51.41
Bacterial sepsis of newborn (P36).......................		267 40.85	249 38.10	111 16.98	138 21.12	18 *
Deseases of the circulatory system (I00-I99)............		167 25.55	30 4.59	14 *	16 *	136 20.81
Intrauterine hypoxia, birth asphyxia (P20-P21)..........		91 13.92	87 13.31	70 10.71	17 *	4 *
All other causes..		2,750 420.79	1,414 216.36	863 132.05	550 84.16	1,336 204.43
Less then 2,500 grams						
All causes	90,024	6,507 7,228.07	5,034 5,591.84	4,176 4,638.76	858 953.08	1,473 1,636.23

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, 2007 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]

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Cause of death, birthweight, and race of mother	Live Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal

_____

Black

Cause of death, birthweight, and race of mother	Live Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal
Congenital malformations (Q00-Q99)......................		707 785.35	495 549.85	377 418.78	118 131.08	212 235.49
Short gestation and low birthweight nec (P07)...........		1,857 2,062.78	1,798 1,997.25	1,748 1,941.70	50 55.54	59 65.54
Sudden infant death syndrome (R95).....................		208 231.05	16 *	2 *	14 *	192 213.28
Maternal complications of pregnancy (P01)..............		600 666.49	592 657.60	584 648.72	8 *	8 *
Complications of placenta, cord, membranes (P02)........		329 365.46	326 362.13	313 347.69	13 *	3 *
Respiratory distress of newborn (P22)....................		267 296.59	258 286.59	206 228.83	52 57.76	9 *
Accidents (unintentional injures) (V01-X59).............		96 106.64	7 *	3 *	4 *	89 98.86
Bacterial sepsis of newborn (P36).......................		239 265.48	223 247.71	100 111.08	123 136.63	16 *
Deseases of the circulatory system (I00-I99)............		90 99.97	19 *	10 *	9 *	71 78.87
Intrauterine hypoxia, birth asphyxia (P20-P21)...........		73 81.09	71 78.87	58 64.43	13 *	2 *
All other causes..		2,041 2,267.17	1,229 1,365.19	775 860.88	454 504.31	812 901.98
2,500 grams or more						
All causes	563,421	1,978 351.07	526 93.36	259 45.97	268 47.57	1,452 257.71
Congenital malformations (Q00-Q99)......................		362 64.25	187 33.19	112 19.88	75 13.31	174 30.88
Short gestation and low birthweight nec (P07)...........		9 *	9 *	9 *	– –	– –
Sudden infant death syndrome (R95).....................		490 86.97	55 9.76	9 *	45 7.99	435 77.21
Maternal complications of pregnancy (P01)..............		4 *	4 *	4 *	– –	– –
Complications of placenta, cord, membranes (P02)........		14 *	13 *	12 *	1 *	1 *
Respiratory distress of newborn (P22)....................		3 *	3 *	3 *	– –	– –
Accidents (unintentional injures) (V01-X59).............		274 48.63	27 4.79	3 *	24 4.26	247 43.84
Bacterial sepsis of newborn (P36).......................		27 4.79	25 4.44	10 *	15 *	2 *
Deseases of the circulatory system (I00-I99)............		77 13.67	11 *	4 *	7 *	66 11.71
Intrauterine hypoxia, birth asphyxia (P20-P21)...........		18 *	16 *	12 *	4 *	2 *
All other causes..		700 124.24	175 31.06	80 14.20	96 17.04	524 93.00

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, 2007 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]

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Cause of death, birthweight, and race of mother	Live		Total	Early	Late	Post-
	Births	Infant	Neonatal	Neonatal	Neonatal	Neonatal

_____

Black

Not stated birthweight

Cause of death, birthweight, and race of mother	Live Births	Infant	Total Neonatal	Early Neonatal	Late Neonatal	Post- Neonatal
All causes	91	46	46	46	–	–
		50,549.45	50,549.45	50,549.45	–	–
Congenital malformations (Q00-Q99).......................		–	–	–	–	–
		–	–	–	–	–
Short gestation and low birthweight nec (P07)............		28	28	28	–	–
		30,769.23	30,769.23	30,769.23	–	–
Sudden infant death syndrome (R95).......................		–	–	–	–	–
		–	–	–	–	–
Maternal complications of pregnancy (P01)................		6	6	6	–	–
		*	*	*	–	–
Complications of placenta, cord, membranes (P02).........		2	2	2	–	–
		*	*	*	–	–
Respiratory distress of newborn (P22)....................		–	–	–	–	–
		–	–	–	–	–
Accidents (unintentional injures) (V01-X59)..............		–	–	–	–	–
		–	–	–	–	–
Bacterial sepsis of newborn (P36)........................		1	1	1	–	–
		*	*	*	–	–
Deseases of the circulatory system (I00-I99)............		–	–	–	–	–
		–	–	–	–	–
Intrauterine hypoxia, birth asphyxia (P20-P21)...........		–	–	–	–	–
		–	–	–	–	–
All other causes...		9	9	9	–	–
		*	*	*	–	–

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-/ Quality zero.
*/Figure does not meet standard of reliability or precision; see Technical notes.
¹/ Includes races other then white and black.

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence:
United States and each state, 2007 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 2007 that are not included in the linked
file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant
decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
United States /2					
Total	453	358	334	24	95
White	296	226	211	15	70
Black	126	106	99	7	20
Alabama					
Total	1	–	–	–	1
White	1	–	–	–	1
Black	–	–	–	–	–
Alaska					
Total	2	1	1	–	1
White	–	–	–	–	–
Black	–	–	–	–	–
Arizona					
Total	19	10	10	–	9
White	14	8	8	–	6
Black	–	–	–	–	–
Arkansas					
Total	1	–	–	–	1
White	1	–	–	–	1
Black	–	–	–	–	–
California					
Total	108	102	101	1	6
White	78	72	72	–	6
Black	18	18	17	1	–
Colorado					
Total	1	–	–	–	1
White	1	–	–	–	1
Black	–	–	–	–	–
Connecticut					
Total	–	–	–	–	–
White	–	–	–	–	–
Black	–	–	–	–	–
Delaware					
Total	–	–	–	–	–
White	–	–	–	–	–
Black	–	–	–	–	–
Dist of Columbia					
Total	1	1	1	–	–
White	1	1	1	–	–
Black	–	–	–	–	–
Florida					
Total	–	–	–	–	–
White	–	–	–	–	–
Black	–	–	–	–	–
Georgia					
Total	10	8	4	4	2
White	6	6	3	3	–
Black	4	2	1	1	2
Hawaii					
Total	2	–	–	–	2
White	1	–	–	–	1
Black	–	–	–	–	–

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence:
United States and each state, 2007 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 2007 that are not included in the linked
file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant
decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Idaho					
Total	–	–	–	–	–
White	–	–	–	–	–
Black	–	–	–	–	–
Illinois					
Total	16	13	12	1	3
White	9	7	6	1	2
Black	7	6	6	–	1
Indiana					
Total	5	3	3	–	2
White	2	2	2	–	–
Black	3	1	1	–	2
Iowa					
Total	1	1	–	1	–
White	1	1	–	1	–
Black	–	–	–	–	–
Kansas					
Total	–	–	–	–	–
White	–	–	–	–	–
Black	–	–	–	–	–
Kentucky					
Total	3	3	3	–	–
White	2	2	2	–	–
Black	1	1	1	–	–
Louisiana					
Total	39	30	28	2	9
White	14	11	11	–	3
Black	24	18	16	2	6
Maine					
Total	–	–	–	–	–
White	–	–	–	–	–
Black	–	–	–	–	–
Maryland					
Total	1	–	–	–	1
White	1	–	–	–	1
Black	–	–	–	–	–
Massachusetts					
Total	2	2	2	–	–
White	–	–	–	–	–
Black	2	2	2	–	–
Michigan					
Total	2	2	2	–	–
White	2	2	2	–	–
Black	–	–	–	–	–
Minnesota					
Total	–	–	–	–	–
White	–	–	–	–	–
Black	–	–	–	–	–
Mississippi					
Total	2	–	–	–	2
White	2	–	–	–	2
Black	–	–	–	–	–

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence:
United States and each state, 2007 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 2007 that are not included in the linked
file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant
decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Missouri					
Total	3	2	2	-	1
White	2	1	1	-	1
Black	1	1	1	-	-
Montana					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Nebraska					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Nevada					
Total	12	11	9	2	1
White	7	6	4	2	1
Black	2	2	2	-	-
New Hampshire					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
New Jersey					
Total	6	5	4	1	1
White	3	2	1	1	1
Black	2	2	2	-	-
New Mexico					
Total	17	12	6	6	5
White	15	10	6	4	5
Black	-	-	-	-	-
New York					
Total	15	13	12	1	2
White	11	9	8	1	2
Black	4	4	4	-	-
New York City					
Total	7	5	4	1	2
White	4	3	2	1	1
Black	3	2	2	-	1
North Carolina					
Total	3	1	1	-	2
White	2	1	1	-	1
Black	1	-	-	-	1
North Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Ohio					
Total	18	14	13	1	4
White	6	4	4	-	2
Black	12	10	9	1	2
Oklahoma					
Total	8	6	4	2	2
White	6	4	3	1	2
Black	2	2	1	1	-

Documentation Table 6. Unlinked infant deaths by race, age at death, and state of residence:
United States and each state, 2007 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 2007 that are not included in the linked
file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant
decedent; race is from death certificate]

State and race of child 1/	Infant	Total neonatal	Early neonatal	Late neonatal	Postneonatal
Oregon					
Total	1	-	-	-	1
White	-	-	-	-	-
Black	1	-	-	-	1
Pennsylvania					
Total	6	3	3	-	3
White	3	1	1	-	2
Black	3	2	2	-	1
Rhode Island					
Total	1	-	-	-	1
White	-	-	-	-	-
Black	1	-	-	-	1
South Carolina					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
South Dakota					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Tennessee					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Texas					
Total	134	107	105	2	27
White	98	74	72	2	24
Black	32	29	29	-	3
Utah					
Total	4	2	1	1	2
White	4	2	1	1	2
Black	-	-	-	-	-
Vermont					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
Virginia					
Total	2	2	2	-	-
White	-	-	-	-	-
Black	2	2	2	-	-
Washington					
Total	-	-	-	-	-
White	-	-	-	-	-
Black	-	-	-	-	-
West Virginia					
Total	1	1	1	-	-
White	-	-	-	-	-
Black	1	1	1	-	-
Wisconsin					
Total	1	-	-	-	1
White	1	-	-	-	1
Black	-	-	-	-	-

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[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 2007 that are not included in the linked
file because they were not linked with their corresponding birth certificates. See methodology section. Residence is of infant
decedent; race is from death certificate]

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

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