DSN:

CC36.NATAL.COHORT98.DENOM CC36.NATAL.COHORT98.DENOM.PS CC36.NATAL.COHORT98.LINK CC36.NATAL.COHORT98.LINK.PS CC36.NATAL.COHORT98.UNLINK CC36.NATAL.COHORT98.UNLINK.PS

Introduction

This documentation is for the 1998 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 1998 period linked file consists of all infant deaths occurring in 1998 linked to their corresponding birth certificates, whether the birth occurred in 1998 or 1997. The denominator file for this data set is the 1998 natality file, that is, all births occurring in 1998. Beginning in 1995, the period linked files form the basis for all official NCHS linked file statistics (except for special cohort studies).

Birth cohort data — The numerator of the 1998 birth cohort linked file consists of deaths to infants born in 1998 linked to their corresponding birth certificates, whether the death occurred in 1998 or 1999. The denominator file is the 1998 natality file, that is, all births occurring in 1998.

The release of linked file data in two different formats allows NCHS to meet customer demands for more timely linked file data while still meeting the needs of data users who prefer the birth cohort format. For most general 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 1998 birth cohort linked file includes several separate data files. The first file includes linked birth and death certificate data for all US infants born in 1998 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 death file. The third file is the 1998 NCHS natality file for the US with a few minor modifications - referred to as the denominator-plus file. These same three data files are also available for Puerto Rico, the Virgin Islands, and Guam.

For the denominator-plus file, selected variables from the numerator file have been added to the denominator file to facilitate processing. These variables include age at death (and recodes), underlying cause of death (and the 61-cause recode), place of accident, and record weight. These variables are the most widely used variables from the numerator file. With the previous file format it was sometimes necessary to combine the numerator and denominator files when performing certain multivariate statistical techniques. Now, 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.

Weighting

In part to correct for known biases in the data, changes were made to the linked file beginning with the 1995 data year. These changes include the addition of a record weight and an imputation for not-stated birthweight. In the 1998 birth cohort linked file, 98.3% of infant death records were linked to their corresponding birth certificates. Overall, 1.7% of infant death records could not be linked because the matching birth certificate could not be found; however this percent varied considerably by State and other characteristics (see section on *Percent of records linked* below). Beginning with 1995 data, a record weight was added to the infant death records to correct in part for biases in percent of records linked by major characteristics. 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:

<u>number of linked infant deaths + number of unlinked infant deaths</u> number of linked infant deaths.

A separate weight is computed for each State of residence of birth and each age at death category (<1 day, 1-27 days, 28 days-1 year). Thus, weights are 1.0 for states which link all of their infant deaths. These weights have been added to all linked infant death records in the numerator file, and in the denominator-plus file. In the denominator-plus file, records for surviving infants have been assigned a weight of 1.0. This causes the denominator-plus file to weight up to about 478 (by residence) or 478 (by occurrence) more than the total number of live births (about 3.9 million), thus most runs on live birth data from the denominator-plus file should be run unweighted. Weights have not been computed for the Puerto Rico, Virgin Islands, and Guam files.

The addition of weighting to the file has greatly reduced bias, but has also created challenges for data analysis. The researcher should be aware that the use of the weights is appropriate for some, but not all applications. Weights should be used when computing the total number of infant deaths, or the number of infant deaths by characteristics, either from the numerator or the denominator-plus files. Weights should not be used when computing the total number of live

births, or the number of live births by characteristics from the denominator-plus file, as the use of weights under these circumstances will yield a slight overestimate of the total number of US births. For multivariate analysis, the use of weights is generally recommended, however, a decision should be made on an individual basis, depending on the type of multivariate technique used, and the goals of the particular analysis.

Imputed birthweight

An imputation for not-stated birthweight has been 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 reduced the percent of not-stated responses for birthweight, thus reducing (but not eliminating) the potential for underestimation when computing birthweight-specific infant mortality rates.

<u>Methodology</u>

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

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

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

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

To initiate processing, NCHS obtained matching birth certificate numbers from States for all infant deaths that occurred in their jurisdiction. We used this information to extract final, edited mortality and natality data from the NCHS natality and mortality statistical files. Individual

birth and death records were selected from their respective files and linked into a single statistical record, thereby establishing a national linked record file.

After the initial linkage, NCHS returned to the States where the death occurred computer lists of unlinked infant death certificates for follow up linking. If the birth occurred in a State different from the State of death, the State of birth identified on the death certificate was contacted to obtain the linking birth certificate. State additions and corrections were incorporated, and a final, national linked file was produced. Characteristics of the natality and mortality data from which the linked file is constructed are described in detail in the Technical Appendices and Addenda included in this document.

Characteristics of Unlinked File

For the 1998 birth cohort linked file 478, or 1.7% 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, tape locations 1-210, reserved for information from the matching birth certificate, are blank since no matching birth certificate could be found for these records. The sex field (tape location 79) 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 (tape location 36-37) 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 (see section on *Comparison of race data from birth and death certificates* in the Mortality Technical Appendix included in this documentation). Also, date of birth as reported on the death certificate is used to generate age at death. This information is used in place of date of birth from the birth certificate, which is not available.

Documentation table 6 shows counts of unlinked records by race and age at death for each State of residence. The user is cautioned in using table 6 that the race and residence items are based on information reported on the death certificate; whereas, tables 1-5 present data from the linked file in which the race and residence items are based on information reported on the birth certificate. (see section on *Comparison of race data from birth and death certificates* in the Mortality Technical Appendix included in this documentation).

Percent of Records Linked

The 1998 birth cohort linked file includes 27,743 linked infant death records and 478 unlinked infant death records by place of occurrence. The linked file is weighted to the sum of linked plus unlinked records, thus the total number of weighted infant deaths by place of occurrence is 28,221. While the overall percent linked for infant deaths in the 1998 birth cohort linked file is

98.3%, there are differences in percent linked by certain variables. These differences have important implications for how the data is analyzed.

Table 1 shows the percent of infant deaths linked by State of residence. While most States link a high percentage of infant deaths, linkage rates for some States are well below the national average. When a high percentage of deaths remain unlinked, infant mortality rates computed for these States are underestimated. It is for this reason that weights were added to the linked files beginning with 1995 data, to correct for biases in the data due to poor data linkage for particular states.

Geographic classification

Geographic codes in this data set have been updated to reflect the results of the 1990 census, and differ slightly from those used in previous linked files. Because of confidentiality concerns, only those counties and cities with a population size of 250,000 or more are separately identified in this data set. Users should refer to the geographic code outline in this document for the list of available areas and codes.

For events to be included in the linked file, both the birth and death must occur inside the 50 States and D.C. in the case of the 50 States and D.C. file; or in Puerto Rico, the Virgin Islands or Guam in the case of the Puerto Rico, Virgin Islands and Guam file. In tabulations of linked data and denominator data events occurring in each of the respective areas to nonresidents are included in tabulations that are by place of occurrence, and excluded from tabulations by place of residence. These exclusions are based on the usual place of residence of the mother. This item is contained in both the denominator file and the birth section of the numerator (linked) file. Nonresidents are identified by a code 4 in location 11 of these files.

Table 1. Percent of infant deaths linked by state of residence of birth: United States, 1998 birth cohort

United States	98.3%	Nebraska	100.0%
Alabama	99.8%	Nevada	95.9%
Alaska	98.5%	New Hampshire	100.0%
Arizona	98.1%	New Jersey	98.1%
Arkansas	97.3%	New Mexico	94.9%
California	96.3%	Upstate New York	98.0%
Colorado	99.8%	New York City	97.7%
Connecticut	99.0%	North Carolina	99.7%
Delaware	100.0%	North Dakota	100.0%
District of Columbia	98.9%	Ohio	95.1%
Florida	99.9%	Oklahoma	92.8%
Georgia	100.0%	Oregon	99.6%
Hawaii	100.0%	Pennsylvania	98.5%
Idaho	97.8%	Rhode Island	100.0%
Illinois	98.6%	South Carolina	100.0%
Indiana	98.3%	South Dakota	100.0%
Iowa	100.0%	Tennessee	100.0%
Kansas	98.9%	Texas	97.8%
Kentucky	98.0%	Utah	99.6%
Louisiana	98.1%	Vermont	100.0%
Maine	97.6%	Virginia	99.0%
Maryland	98.9%	Washington	99.1%
Massachusetts	97.9%	West Virginia	98.1%
Michigan	98.8%	Wisconsin	100.0%
Minnesota	100.0%	Wyoming	100.0%
Mississippi	99.5%		
Missouri	98.6%		
Montana	97.3%		

Demographic and Medical Classification

The documents listed below describe in detail the procedures employed for demographic classification on both the birth and death records and medical classification on death records. While not absolutely essential to the proper interpretation of the data for a number of general applications, these documents should nevertheless be studied carefully prior to any detailed analysis of demographic or medical (especially multiple cause) data variables. In particular, there are a number of exceptions to the ICD rules in multiple cause-of-death coding which, if not treated properly, may result in faulty analysis of the data.

- A. Manual of the International Statistical Classification of Diseases, Injuries, and the Cause-of-Death, Ninth Revision (ICD-9) Volumes 1 and 2.
- B. NCHS Instruction Manual Data Preparation Part 2a, Vital Statistics Instructions for Classifying the Underlying Cause-of-Death. Published annually.
- C. NCHS Instruction Manual Data Preparation, Part 2b, Vital Statistics Instructions for Classifying Multiple Cause-of-Death. Published annually.
- D. NCHS Instruction Manual Data Preparation, Part 2c, Vital Statistics ICD-9 ACME Decision Tables for Classifying Underlying Causes-of-Death. Published annually.
- E. NCHS Instruction Manual Data Preparation, Part 2d, Vital Statistics NCHS Procedures for Mortality Medical Data System File Preparation and Maintenance, Effective 1985.
- F. NCHS Instruction Manual Data Tabulation, Part 2f, Vital Statistics ICD-9 TRANSAX Disease Reference Tables for Classifying Multiple Causes-of-Death, 1982-85.
- G. NCHS Instruction Manual Part 2g, Vital Statistics, Data Entry Instructions for the Mortality Medical Indexing, Classification, and Retrieval system (MICAR). Published annually.
- H. NCHS Instruction Manual Part 2h, Vital Statistics, Dictionary of Valid Terms for the Mortality Medical Indexing, Classification, and Retrieval System (MICAR). Published annually.
- I. NCHS Instruction Manual Data Preparation, Part 3a, Vital Statistics Classification and Coding Instructions for Live Birth Records. Published annually.
- J. NCHS Instruction Manual Data Preparation, Part 4, Vital Statistics Demographic Classification and Coding Instructions for Death Records. Published annually.

K. NCHS Instruction Manual Tabulation, Part 11, Vital Statistics Computer Edits for Mortality Data, Effective 1990.

Copies of NCHS Instruction Manuals may be requested from the Chief, Data Preparation Branch, Division of Data Processing, National Center for Health Statistics, P.O. Box 12214, Research Triangle Park, North Carolina 27709.

In addition, the user should refer to the Technical Appendices of the <u>Vital Statistics of the United States</u> for information on the source of data, coding procedures, quality of the data, etc. The Technical Appendices for natality and mortality are part of this documentation package.

Cause-of-Death Data

Mortality data are traditionally analyzed and published in terms of underlying cause-of-death. The underlying cause-of-death data are coded and classified as described in the Mortality Technical Appendices. NCHS has augmented underlying cause-of-death data with data on multiple causes reported on the death certificate. The linked file includes both underlying and multiple cause-of-death data.

The multiple cause of death codes were developed with two objectives in mind. First, to facilitate etiological studies of the relationships among conditions, it was necessary to reflect accurately in coded form each condition and its location on the death certificate in the exact manner given by the certifier. Secondly, coding needed to be carried out in a manner by which the underlying cause of death could be assigned through computer applications. The approach was to suspend the linkage provisions of the ICD for the purpose of condition coding and code each entity with minimum regard to other conditions present on the certification. This general approach is hereafter called entity coding.

Unfortunately, the set of multiple cause codes produced by entity coding is not conducive to a third objective -- 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 certificate and modified or linked to such conditions as provided by ICD-9. By definition, the entity data cannot meet this requirement since the linkage provisions distort the character and placement of the information originally recorded by the certifying physician.

Since the two objectives are incompatible, NCHS has chosen to create from the original set of entity codes a new code set called record axis multiple cause data. Essentially, the axis of classification has been converted from an entity basis to a record (or person) basis. The record axis codes are assigned in terms of the set of codes that best describe the overall medical certification portion of the death certificate.

This translation is accomplished by a computer system called TRANSAX (translation of axis) through selective use of traditional linkage and modification rules for mortality coding. Underlying cause linkages which simply prefer one code over another for purposes of underlying cause selection are not included. Each entity code on the record is examined and modified or deleted as necessary to create a set of codes which are free of contradictions and are the most precise within the constraints of ICD-9 and medical information on the record. Repetitive codes are deleted. The process may (1) combine two entity axis categories together to a new category thereby eliminating a contradiction or standardizing the data; or (2) eliminate one category in favor of another to promote specificity of the data or resolve contradictions. The following examples from ICD-9 illustrate the effect of this translation:

- Case 1: When reported on the same record as separate entities, cirrhosis of liver and alcoholism are coded to 5715 (cirrhosis of liver without mention of alcohol) and 303 (alcohol dependence syndrome). Tabulation of records with 5715 would on the surface falsely imply that such records had no mention of alcohol. A preferable codification would be 5712 (alcoholic cirrhosis of liver) in lieu of both 5715 and 303.
- Case 2: If "gastric ulcer" and "bleeding gastric ulcer" are reported on a record they are coded to 5319 (gastric ulcer, unspecified as acute or chronic, without mention of hemorrhage or perforation) and 5314 (gastric ulcer, chronic or unspecified, with hemorrhage). A more concise codification would be to code 5314 only since the 5314 shows both the gastric ulcer and the bleeding.

Entity Axis Codes

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

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 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 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-9 cause code.

4. Nature of injury flag: ICD-9 uses the same series of numbers (800-999) to indicate

nature of injury (N codes) and external cause codes (E codes). This flag distinguishes between the two with a one (1) representing nature of injury codes and a zero (0) representing all other cause

codes.

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.

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 Part 11 of the NCHS Vital Statistics Instruction Manual Series.

Entity axis applications — The entity axis multiple cause data is appropriate to analyses which require that each condition be coded as a stand alone entity without linkage to other conditions and/or require information on the placement of such conditions in the certificate. Within this framework, the entity data are appropriate to the examination of etiological relationships among conditions, accuracy of certification reporting, and the validity of traditional assumptions in underlying cause selection.

Additionally, the entity data provide in certain categories a more detailed code assignment which is linked out in the creation of record axis data. Where such detail is needed for a study, the user should selectively employ entity data. Finally, the researcher may not wish to be bound by the assumptions used in the axis translation process preferring rather to investigate hypotheses of his own predilection.

By definition, the main limitation of entity axis data is that an entity code 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 5750 is titled "Acute cholecystitis without

mention of calculus". Within the framework of entity codes this is interpreted to mean that the codable entity itself contained no mention of calculus rather than that calculus was not mentioned anywhere on the record. Tabulation of records with a "5750" as a count of persons having acute cholecystitis without mention of calculus would therefore be erroneous. This illustrates the fact that under entity coding the ICD-9 titles cannot be taken literally. The user must study the rules for entity coding as they relate to his/her research prior to utilization of entity data. The user is further cautioned that the inclusion notes in ICD-9 which relate to modifying and combining categories are seldom applicable to entity coding (except where provided in Part 2b of the Vital Statistics Instruction Manual Series).

In tabulating the entity axis data, one may count codes with the resultant tabulation of an individual code representing the number of times the disease(s) represented by the code appears in the file. In this kind of tabulation of morbid condition prevalence, 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 Vital Statistics Instruction Manual Series describes the TRANSAX process for creating record axis data from entity axis data.

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-9 cause code.

2. Nature of injury flag: The last byte contains a 0 or 1 with the 1 indicating that the cause is a nature of injury category.

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

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.

Record axis applications — The record axis multiple cause data set is the basis for NCHS core multiple cause tabulations. Location of codes is not relevant to this data set 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-9 category. This is in contrast to the entity code which is assigned each time such a disease is reported on two different lines of the certification. Secondly, the linkage implies that within the constraints of ICD-9 the most meaningful code has been assigned. The translation process creates for the user a data set which 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. Likewise, they are comparable to general morbidity coding where the linkage provisions of ICD-9 are usually utilized. 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-9 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-9 are utilized. (See Part 2f of the Vital Statistics Instruction Manual Series.)

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 which combine individual cause categories must take into account the possible interaction of up to 20 codes on a single certificate.

In using the NCHS multiple cause data, the user is urged to review the information in this document and its references. The instructional material does change from year to year and revision to revision. The user is cautioned that coding of specific ICD-9 categories should be checked in the appropriate instruction manual. What may appear on the surface to be the correct code by ICD-9 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 Part 2f of the Vital Statistics Instruction Manual Series 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 assumptions of axis translation. In certain situations, a combination of entity and record axis data may be the more appropriate alternative.

Linked Birth/Infant Death Data Set - 1998 Birth Cohort Data List of Data Elements and Locations

<u>Data Items</u>	Denominator- Plus File	Numerator Birth	File <u>Death</u>	Unlinked <u>File</u>
1. General				
a. Match status	1	1		1
b. Infant death number	2-6	2-6-		
c. Year of birth	7-10	7-10		
d. Year of death			524-527	524-527
e. Resident status	11	11	505	505
f. Record weight	223-230		223-230	
2. Occurrence				
a. FIPS state	14-15	14-15	508-509	508-509
b. FIPS county	16-18	16-18	510-512	510-512
3. Residence				
a. FIPS state	19-20	19-20	513-514	513-514
b. FIPS county	21-23	21-23	515-517	515-517
c. FIPS place	24-28	24-28	518-522	518-522
d. NCHS state	12-13	12-13	506-507	506-507
4. Infant				
a. Age	211-214		211-214	211-214+
b. Race				35-38*
c. Sex	78-79	78-79		78-79*
d. Gestation	70-77	70-77		
e. Birthweight	80-87	80-87		
f. Plurality	88-89	88-89		
g. Apgar score	90-91	90-91		
h. Day of week of birth/death	209	209	532	532
i. Month of birth/death	205-206	205-206	528-529	528-529
5. Mother				
a. Age	29-32	29-32		
b. Race	35-38	35-38		
c. Education	39-41	39-41		
d. Marital status	42-43	42-43		
e. Place of birth	44-46	44-46		
f. Hispanic origin	33-34	33-34		
6. Father				
a. Age	60-62	60-62		
b. Race	65-66	65-66		
c. Hispanic origin	63-64	63-64		

Linked Birth/Infant Death Data Set - 1998 Birth Cohort Data List of Data Elements and Locations

<u>Data</u>	a Items	Denominator- Plus File	Numerator Fi	le <u>Death</u>	Unlinked <u>File</u>
7.	Pregnancy items				
a.	Month prenatal care began	51-53	51-53		
b.	Number of prenatal visits	54-55	54-55		
c.	Adequacy of care recode	56	56		
d.	Total birth order	47-48	47-48		
e.	Live birth order	49-50	49-50		
8.	Medical and Health Data				
a.	Method of delivery	92-99	92-99		
b.	Medical risk factors	100-117	100-117		
c.	Other risk factors				
	Tobacco	118-121	118-121		
	Alcohol	122-125	122-125		
	Weight gain during pregnancy	126-128	126-128		
d.	Obstetric procedures	129-136	129-136		
e.	Complications of labor and/or				
	delivery	137-153	137-153		
f.	Abnormal conditions of the				
	newborn	154-163	154-163		
g.	Congenital anomalies	164-186	164-186		
h.	Underlying cause of death			216-219	216-219
i.	61 Infant cause recode			220-222	220-222
j.	Multiple conditions			261-504	261-504
9.	Other items				
a.	Place of delivery	67	67		
b.	Attendant at birth	68	68		
c.	Hospital and patient status			523	523
e.	Place of accident			215	215
f.	Residence reporting flags	187-203	187-203		

⁺ For the unlinked file, date of birth as reported on the death certificate is used to generate age at death. See section on <u>Changes Beginning with 1995 Data</u> for explanation.

^{*} For the unlinked file, these items are from the death certificate. See section on <u>Changes Beginning with 1995 Data</u> for explanation.

Item Location	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
1	1	MATCHS Match Status
		1 Matched Birth/Infant Death Record 2 Surviving infant record 3 Unmatched infant death record Note: This code is used in the unlinked file only.
2-6	5	IDNUMBER Infant Death Number

This number uniquely identifies the same infant in the numerator and denominator-plus files.

Locations 7-210 of the linked file contain data from the Birth Certificate. Locations 211-222, 261-535 of linked file contain data from the Death Certificate.

Residence items in the Denominator Record and in the natality section of the Numerator (linked) Record refer to the usual place of residence of the Mother; whereas in the mortality section of the Numerator (Linked) Record, these items refer to the residence of the Decedent.

7-10	4	BIRYR Year of Birth
		1998 Born in 1998
11	1	RESSTATB Resident Status - Birth
		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 50 States and D.C.
		FOREIGN RESIDENTS: State of occurrence is one of the 50 States or the District of Columbia, but place of residence of mother is outside of the 50 States and D.C.

Puerto	<u>o Rico O</u>	ccurrence
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.
4		FOREIGN RESIDENTS: Occurred in Puerto Rico to a
		resident of any other place.

Item <u>Location</u>	Item Length	Variable Item and	Name, Code Outlir	<u>ne</u>
11	1	Virgin Is	slands Occi	Irrence ESIDENTS: State and county of occurrence and
		1		sidence are the same.
		2		TRASTATE NONRESIDENTS: State of occurrence d residence are the same, but county is different.
		4	FC	DREIGN RESIDENTS: Occurred in the Virgin Islands a resident of any other place.
		Guam O	ccurrence	
		1		ESIDENTS: Occurred in Guam to a resident of Guam or to esident of the U.S.
		4		DREIGN RESIDENTS: Occurred in Guam to a resident of y place other than Guam or the U.S.

12-13 2 **BRSTATE**

Expanded State of Residence - NCHS Codes - Birth

This item is designed to separately identify New York City records from other New York State records.

United	States C	Occurrence
01		Alabama
02		Alaska
03		Arizona
04		Arkansas
05		California
06		Colorado
07		Connecticut
08		Delaware
09		District of Columbia
10		Florida
11		Georgia
12		Hawaii
13		Idaho
14		Illinois
15		Indiana
16		Iowa
17		Kansas
18		Kentucky
19		Louisiana
20		Maine
21		Maryland
22		Massachusetts
23		Michigan
24		Minnesota
25		Mississippi
26		Missouri

<u>Location</u>	<u>Length</u>	Item and Code Outline
12-13	2	BRSTATE Expanded State of Residence - NCHS Codes - Birth (Cond't)

Variable Name,

Item

Item

This item is designed to separately identify New York City records from other New York State records.

	d States	<u>Occurrence</u>
27	•••	Montana
28	•••	Nebraska
29	•••	Nevada
30	•••	New Hampshire
31		New Jersey
32		New Mexico
33		New York
34		New York City
35		North Carolina
36		North Dakota
37		Ohio
38		Oklahoma
39		Oregon
40		Pennsylvania
41		Rhode Island
42		South Carolina
43		South Dakota
44		Tennessee
45		Texas
46		Utah
47		Vermont
48		Virginia
49		Washington
50		West Virginia
51		Wisconsin
52		Wyoming
53-58	,60	Foreign Residents
53		Puerto Rico
54		Virgin Islands
55		Guam
56		Canada
57		Cuba
58		Mexico
60		Remainder of the World

Puerto Rico Occurrence

53	 Puerto Rico	
01-52,54-58,60	 Foreign Residents:	Refer to U.S. for specific code
	structure.	

Virgin Islands Occurrence

· ingili isimilas occurr	thet
54	Virgin Islands
01-53,55-58,60	Foreign Residents: Refer to U.S. for specific code
	structure.

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
12-13	2	BRSTATE Expanded State of Residence - NCHS Codes - Birth (Cond't) This item is designed to separately identify New York City records from other New York State records.
		Guam Occurrence 55 Guam 01-52 U.S. resident is also considered a resident of Guam. 53,54,58,60 Foreign Residents: Refer to U.S. for specific code structure.
14-18	5	FIPSOCCB Federal Information Processing Standards (FIPS) Geographic Codes (Occurrence) - Birth
		Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.
14-15	2	STOCCFIPB State of Occurrence (FIPS) - Birth United States

United States		
01		Alabama
02		Alaska
04		Arizona
05		Arkansas
06		California
08		Colorado
09		Connecticut
10		Delaware
11		District of Columbia
12		Florida
13		Georgia
15		Hawaii
16		Idaho
17	•••	Illinois
18		Indiana
19		Iowa
20		Kansas
21		Kentucky
22		Louisiana
23		Maine
24		Maryland
25		Massachusetts
26		Michigan
27		Minnesota
28		Mississippi
29		Missouri
30		Montana
31		Nebraska
32		Nevada

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code O	<u>utline</u>	
14-15	2	STOCCFIPB State of Occurre	ence (FII	PS) - Birth (Cond't)
		United States		
		33		New Hampshire
		34		New Jersey
		35		New Mexico
		36		New York
		37		North Carolina
		38	•••	North Dakota
		39		Ohio
		40		Oklahoma
		41		Oregon
		42		Pennsylvania
		44		Rhode Island
		45		South Carolina
		46		South Dakota
		47	•••	Tennessee
		48	•••	Texas
		49	•••	Utah
		50		Vermont
		51		Virginia
		53		Washington
		54		West Virginia
		55		Wisconsin
		56		Wyoming
		Puerto Rico		
		72	•••	Puerto Rico
		Virgin Islands		
		78		Virgin Islands
		Guam		
		66		Guam
16-18	3	CNTOCFIPB		
		County of Occur	rrence (I	FIPS) - Birth
		001-nnn		Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State. (Note: To uniquely identify a county, both the State and county codes must be
		000		used.)
		999	•••	County with less than 250,000 population

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
19-23	5	FIPSRESB Federal Information Processing Standards (FIPS) Geographic Codes (Residence) - Birth
		Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.
19-20	2	STRESFIPB State of Residence (FIPS) - Birth

United States Occurrence

United State	s Occurre	<u>nce</u>
00		Foreign residents
01		Alabama
02		Alaska
04		Arizona
05		Arkansas
06		California
08		Colorado
09		Connecticut
10		Delaware
11		District of Columbia
12		Florida
13		Georgia
15		Hawaii
16		Idaho
17		Illinois
18		Indiana
19		Iowa
20		Kansas
21		Kentucky
22		Louisiana
23		Maine
24		Maryland
25		Massachusetts
26		Michigan
27		Minnesota
28		Mississippi
29		Missouri
30		Montana
31		Nebraska
32		Nevada
33		New Hampshire
34		New Jersey
35		New Mexico
36		New York
37		North Carolina
38		North Dakota
39		Ohio
40	•••	Oklahoma
41	•••	Oregon
42	•••	Pennsylvania
44	•••	Rhode Island

19-20 2 STRESFIPB State of Residence (FIPS) - Birth Cond't)
45 South Carolina 46 South Dakota 47 Tennessee 48 Texas 49 Utah 50 Vermont 51 Virginia 53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 60 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 0000 Foreign residents
45 South Carolina 46 South Dakota 47 Tennessee 48 Texas 49 Utah 50 Vermont 51 Virginia 53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 60 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 0000 Foreign residents
47 Tennessee 48 Texas 49 Utah 50 Vermont 51 Virginia 53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Poreign Residents: Refer to U.S. for specific code structure 72 Foreign Residents: Refer to U.S. for specific code structure 72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 Guam CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
48 Texas 49 Utah 50 Vermont 51 Virginia 53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Virgin Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 Guam CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
49 Utah 50 Vermont 51 Virginia 53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
50 Vermont 51 Virginia 53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Virgin Islands Cummoccurrence 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 01-56 Guam CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
51 Virginia 53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Virgin Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
53 Washington 54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Visgin Islands: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
54 West Virginia 55 Wisconsin 56 Wyoming Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 V.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Visgin Islands Olympio Islands CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
Puerto Rico Occurrence 00-56,66,78 Foreign Residents: Refer to U.S. for specific code structure 72 Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
O0-56,66,78 Foreign Residents: Refer to U.S. for specific code structure Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
O0-56,66,78 Foreign Residents: Refer to U.S. for specific code structure Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
Structure Puerto Rico Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
Virgin Islands Occurrence 00-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
O0-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence
O0-56,66,72 Foreign Residents: Refer to U.S. for specific code structure 78 Virgin Islands Guam Occurrence
Guam Occurrence 00,72,78 Foreign Residents: Refer to U.S. for specific code structure 01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
21-23 3 CNTYRFPB County of Residence (FIPS) - Birth Foreign Residents: Refer to U.S. for specific code structure U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure Guam CNTYRFPB County of Residence (FIPS) - Birth Foreign Residents: Refer to U.S. for specific code structure Guam. Foreign residents
21-23 3 CNTYRFPB County of Residence (FIPS) - Birth Foreign Residents: Refer to U.S. for specific code structure U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure Guam CNTYRFPB County of Residence (FIPS) - Birth Foreign Residents: Refer to U.S. for specific code structure Guam. Foreign residents
21-23 3 CNTYRFPB County of Residence (FIPS) - Birth Structure U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure Guam CNTYRFPB County of Residence (FIPS) - Birth O00 Foreign residents
01-56 U.S. Resident is also considered a resident of Guam. Refer to U.S. for specific code structure 66 Guam 21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
21-23 3 CNTYRFPB County of Residence (FIPS) - Birth 000 Foreign residents
County of Residence (FIPS) - Birth 000 Foreign residents
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ϵ
001-nnn Counties and county equivalents (independent and
coextensive cities) are numbered alphabetically
within each State (Note: To uniquely identify a
county, both the State and county codes must be
used.)
999 County with less than 250,000 population
24-28 5 PLRES
Place (City) of Residence (FIPS)
A complete list of cities is shown in the Geographic Code Outline further back in this document.
00000 Foreign residents
UIUIUI HATAIAN TAGIAANG
00001-nnnnn Code range 99999 Balance of county; or city less than

1998

Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code O	<u>utline</u>		
29	1	MAGEFLG Age of Mother I	lag		
		is used. The rep	orted age	whenever age is imputed or the mother's reported age is used, if valid, when computed age derived from ailable or when it is outside the 10-49 code range.	
		Blank 1 2		Not imputed and reported age is not used Reported age is used Age is imputed	
30-31	2	DMAGE Age of Mother			
				l using dates of birth of mother and of delivery; ad. This is the age item used in NCHS publications.	
		10-54		Age in single years	
32	1	MAGER8 Age of Mother I	Recode 8		
		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 - 54 years	
33	1	<u>ORMOTH</u>			
		Hispanic Origin of Mother Hispanic origin is reported for all areas except Puerto Rico.			
		0		Non-Hispanic	
		1		Mexican	
		2		Puerto Rican	
		3		Cuban	
		4		Central or South American	
		5		Other and unknown Hispanic	
		9		Origin unknown or not stated	
				-	

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Outline	
34	1	ORRACEM Hispanic Origin and F	Race of Mother Recode
		Hispanic origin is repo	orted for all areas except Puerto Rico.
		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
35	1	MRACEIMP	
		Race of Mother Imput	tation Flag
		Blank	Race is not imputed
		1	Race is imputed
		2	All other races, formerly code 09, is imputed
36-37	2	MRACE Race of Mother - Birth from Death Record	h Record or for Unlinked Records Race of Decedent

Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. Codes 18-68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. For consistency with Census race code 09 (all other races) used prior to 1992 has been imputed.

United States Occurrence

01		White
02		Black
03		American Indian (includes Aleuts and Eskimos)
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 codes 18-68 for areas that do not report them separately

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code O	utline	
36-37	2	MRACE Race of Mother from Death Rec		Record or for Unlinked Records Race of Decedent nd't)
		Puerto Rico Oco	currence	
		00		Other races
		01		White
		02		Black
		Virgin Islands (Occurrer	nce
		01		White
		02		Black
		03		American Indian (includes Aleuts and Eskimos)
		04		Chinese
		05		Japanese
		06		Hawaiian (includes part-Hawaiian)
		07		Filipino
		08		Other Asian or Pacific Islander
		Guam Occurren	nce	
		01		White
		02		Black
		03		American Indian (includes Aleuts and Eskimos)
		04		Chinese
		05		Japanese
		06		Hawaiian (includes part-Hawaiian)
		07		Filipino
		08		Other Asian or Pacific Islander
		58	•••	Guamanian
38	1	MRACE3 Race of Mother	Recode	
		1		White
		2		Races other than White or Black
		3		Black
		5	•••	Diwen

Item <u>Location</u>	Item <u>Length</u>	Variable Nan Item and Cod					
39-40	2	DMEDUC Education of	f Mother I	<u>Detail</u>			
		All areas rep	port educat	ion of mother.			
		00		No formal education			
		01-08		Years of elementary school			
		09		1 year of high school			
		10		2 years of high school			
		11		3 years of high school			
		12		4 years of high school			
		13		1 year of college			
		14	•••	2 years of college			
		15		3 years of college			
		16		4 years of college			
		17	•••	5 or more years of college			
		99		Not stated			
41	1	MEDUC6					
		Education of	Education of Mother Recode				
		1		0 - 8 years			
		2		9 - 11 years			
		3		12 years			
		4		13 - 15 years			
		5		16 years and over			
		6		Not stated			
42	1	<u>DMARIMP</u> Marital Stat		her Imputation Flag			
		Dlaula		Manital status is not immeted			
		Blank 1	•••	Marital status is not imputed Marital status is imputed			
				Maritar status is imputed			
43	1	<u>DMAR</u> Marital Stat	us of Mot	<u>her</u>			
		Marital statu	ıs is not rej	ported by all areas. See reporting flags.			
		United State	United States/Virgin Islands/Guam Occurrence				
		1		Married			
		2		Unmarried			
		9	•••	Unknown or not stated			
		Puerto Rico	Occurren				
		1		Married			
		2		Unmarried parents living together			
		3	•••	Unmarried parents not living together			
		9	•••	Unknown or not stated			

Item <u>Location</u>	Item <u>Length</u>	Variable Na <u>Item and Co</u>		
44-45	2	MPLBIR Place of Bir	th of Mother	:
		01		Alabama
		02		Alaska
		03		Arizona
		04		Arkansas
		05		California
		06		Colorado
		07		Connecticut
		08		Delaware
		09		District of Columbia
		10		Florida
		11		Georgia
		12		Hawaii
		13		Idaho
		14		Illinois
		15		Indiana
		16	•••	Iowa
		17	•••	Kansas
		18	•••	Kentucky
		19	•••	Louisiana
		20	•••	Maine
		21	•••	Maryland
		22	•••	Massachusetts
		23	•••	Michigan
		24	•••	Minnesota
		25	•••	Mississippi
		26	•••	Missouri
		27	•••	Montana
		28	•••	Nebraska
		29	•••	Nevada
		30	•••	New Hampshire
		31	•••	New Jersey
		32	•••	New Mexico
		33	•••	New York
		34	•••	North Carolina
		35	•••	North Dakota
		36	•••	Ohio
		37	•••	Oklahoma
		38	•••	Oregon
		39	•••	Pennsylvania
		40	•••	Rhode Island
		41	•••	South Carolina
		42	•••	South Dakota
		43	•••	Tennessee
		44	•••	Texas
		45	•••	Utah
		46	•••	Vermont
		47	•••	Virginia Washington
		48	•••	Washington
		49	•••	West Virginia

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Nam Item and Code		
44-45	2	MPLBIR Place of Birth	ı of Mothe	r (Cond't)
		50		Wisconsin
		51		Wyoming
		52		Puerto Rico
		53		Virgin Islands
		54	•••	Guam
		55		Canada
		56		Cuba
		57		Mexico
		59		Remainder of the World
		99		Not Classifiable
46	1	MPLBIRR Place of Birth	ı of Mothe	r Recode
		United States	Occurren	nce
		1	•••	Born in the 50 States and D.C.
		2		Born outside the 50 States and DC
		3		Unknown or not stated
		Puerto Rico/V	Virgin Isla	nd/ Guam Occurrence
		Blank		This item not recorded
47-48	2		oirth order a	and other terminations of pregnancy. If either item is
		unknown, tni	is item is m	ade unknown.
		01-40		Total number of live births and other terminations of pregnancy
		99		Unknown
49-50	2	<u>DLIVORD</u> <u>Detail Live B</u>	irth Order	<u>.</u>
				living and now dead plus one. If either item is ade unknown.
		00-31 99		Number of children born alive to mother Unknown

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Outlin	<u>ne</u>
51-52	2	MONPRE Detail Month of Pr	egnancy Prenatal Care Began
		00 01 02 03 04 05 06 07 08 09	No prenatal care 1st month 2nd month 3rd month 4th month 5th month 6th month 7th month 8th month 9th month Unknown or not stated
53	1	MPRE5 Month Prenatal Ca	are Began Recode 5
		1 2 3 4 5	1st Trimester (1st-3rd month) 2nd Trimester (4th-6th month) 3rd Trimester (7th-9th month) No prenatal care Unknown or not stated
54-55	2	NPREVIST Total Number of Pr	renatal Visits
		00 01-48 49 99	No prenatal visits Stated number of visits 49 or more visits Unknown or not stated
56	1	ADEQUACY Adequacy of Care l	Recode (Kessner Index)
		Began, Number of I generate this recode 1 2 3	Adequate Intermediate Inadequate
57-59	3	4 R1 Reserved Positions	Unknown

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item Location	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
60	1	FAGERFLG Reported Age of Father Used Flag
		This position is flagged whenever the Father's reported age in years is used. The reported age is used, if valid, when age derived from date of birth is not available or when it is less than 10.
		Blank Reported age is not used 1 Reported age is used
61-62	2	DFAGE Age of Father
		This item is either computed from date of birth of father and of child or is the reported age. This is the age item used in NCHS publications.
		10-98 Age in single years 99 Unknown or not stated
63	1	ORFATH Hispanic Origin of Father
		Hispanic origin is reported for all areas except Puerto Rico.
		0 Non-Hispanic 1 Mexican 2 Puerto Rican 3 Cuban 4 Central or South American 5 Other and unknown Hispanic 9 Origin unknown or not stated
64	1	ORRACEF Hispanic Origin and Race of Father Recode
		Hispanic origin is reported for all areas except Puerto Rico.
		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 or unknown race 9 Origin unknown or not stated

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item	Item	Variable Name,
Location	<u>Length</u>	Item and Code Outline
65-66	2	FRACE
		Race of Father

Beginning with 1992 data, some areas started reporting additional Asian or Pacific Islander codes for race. See reporting flags. Codes 18 -68 replace old code 08 for these areas. Code 78 replaces old code 08 for all other areas. Code 09 (all other races) has been changed to 99.

United States Occurrence

01	•••	White
02		Black
03		American Indian (includes Aleuts
		and Eskimos)
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
		codes 18-68 for areas that do not report them
		separately
99		Unknown or not stated

Puerto Rico Occurrence

00		Other races
01	•••	White
02	•••	Black
99		Unknown or not stated

Virgin Islands Occurrence

01		White
02		Black
03		American Indian (includes Aleuts and Eskimos)
04		Chinese
05		Japanese
06	•••	Hawaiian (includes part-Hawaiian)
07		Filipino
08	•••	Other Asian or Pacific Islander
99	•••	Unknown or not stated

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Outli	<u>ine</u>
65-66	2	FRACE Race of Father (Co	ond't)
		Guam Occurrence 01 02 03 04 05 06 07 08 58 99	White Black American Indian (includes Aleuts and Eskimos) Chinese Japanese Hawaiian (includes part-Hawaiian) Filipino Other Asian or Pacific Islander Guamanian
67	1	<u>PLDEL</u> Place or Facility of	<u>Delivery</u>
		1 2 3 4 5 9	Freestanding Birthing Center Clinic or Doctor's Office A Residence Other Unknown or Not Stated
68	1	BIRATTND Attendant at Deliv	ery
		1 2 3 4 5 9	Doctor of Osteopathy (D.O.) Certified Nurse Midwife (C.N.M.) Other Midwife Other Unknown or not stated
69	1	R2 Reserved position	
70	1	This position is flagging is used when gestat	of Gestation Used Flag ged whenever the clinical estimate of gestation is used. It ion could not be computed or when the computed the 17-47 code range.
		Blank 1	Clinical Estimate is and

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Ou	<u>utline</u>	
71-72	2	CLINGEST Clinical Estimat	e of Gest	<u>tation</u>
		Clinical estimate See reporting fla		eported by all areas.
		17-47 99		Estimated gestation in weeks Unknown or not stated
73	1	GESTIMP Gestation Imput	ation Fl	<u>ag</u>
		Blank 1		Gestation is not imputed Gestation is imputed
74-75	2	GESTAT Gestation - Deta	il in We	eks
		menses; b) impu when there is ins	ited from sufficient	using dates of birth of child and last normal LMP date; c) the clinical estimate; or d) unknown data to impute or no valid clinical estimate. This is NCHS publications.
		17-47 99		17th through 47th week of gestation Unknown
76-77	2	GESTAT 10 GESTATION R	ECODE	10
		01 02 03 04 05 06 07 08 09		Under 20 weeks 20 - 27 weeks 28 - 31 weeks 32 - 35 weeks 36 weeks 37 - 39 weeks 40 weeks 41 weeks 42 weeks and over Not stated
78	1	CSEXIMP Sex Imputation	Flag	
		Blank 1		Sex is not imputed Sex is imputed
79	1	CSEX Sex		
		1 2		Male Female

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name <u>Item and Code</u> (
80-87	8	<u>BIRTHWEIG</u>	<u>HT</u>	
		reduce potenti 1995 data year imputation fla	al bias in r in the ir g can be	imputation for not-stated birthweight was added to a the data (see section on Changes beginning with the attroductory text to this documentation). The following used to delete imputed values for those researchers ported birthweight data.
80	1	<u>BWIF</u> Birth Weight l	<u>Imputat</u>	ion Flag
		Blank 1		Birthweight is not imputed Birthweight is imputed
81-84	4	DBIRWT Birth Weight l	Detail in	Grams (Imputed)
		0227-8165 9999		Number of grams Not stated birth weight
85-86	2	BIRWT12 Birth Weight l	Recode 1	12 (Imputed)
		01		499 grams or less
		02		500-999 grams
		03	•••	1000-1499 grams
		04	•••	1500-1999 grams
		05		2000-2499 grams
		06	•••	2500-2999 grams
		07	•••	3000-3499 grams
		08	•••	3500-3999 grams
		09 10	•••	4000-4499 grams 4500-4999 grams
		11	•••	5000-8165 grams
		12		Unknown or not stated
87	1	BIRWT4 Birth Weight l	Recode 4	4 (Imputed)
		1		1499 grams or less
		2		1500-2499 grams
		3		2500 grams or more
		4		Unknown or not stated
88	1	<u>PLURIMP</u> Plurality Impu	ıtation F	Clag
		Blank 1		Plurality is not imputed Plurality is imputed
		•	•••	

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
89	1	DPLURAL Plurality
		1 Single 2 Twin 3 Triplet 4 Quadruplet 5 Quintuplet or higher
90-91	2	FMAPS Five-Minute Apgar Score
		Apgar score is not reported by all areas. See reporting flags.
		00-10 A score of 0-10 99 Unknown or not stated
92-186 95		MEDINFO Medical and Health Data
		Some States do not report an entire item while other States do not report all of the categories within an item. If an item is not reported, it is indicated by code zero in the appropriate reporting flag. If a category within an item is not reported it is indicated by code 8 in the position for that category.
92-99	8	DELMETH Method of Delivery
		Each method is assigned a separate position, and the code structure for each method (position) is:
		1 The method was used
		2 The method was not used 8 Method not on certificate
		9 Method unknown or not stated
92	1	VAGINAL Vaginal
93	1	VBAC Vaginal Birth After Previous C-Section
94	1	PRIMAC Primary C-Section
95	1	REPEAC Repeat C-Section
96	1	FORCEP Forceps

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
97	1	VACUUM Vacuum
98	1	Reserved Position
99	1	DELMETH5 Method of Delivery Recode
		Vaginal (excludes Vaginal after previous C-section) Vaginal birth after previous C section Primary C-section Repeat C-Section Not stated
100-117	18	MEDRISK Medical Risk Factors
		Each risk factor is assigned a separate position, and the code structure for each risk factor (position) is:
		Factor reported Eactor not reported Factor not on certificate Factor not classifiable
100	1	MRFLAG No Medical Risk Factors Reported Flag
		Blank One or more medical risk factors coded, one, eight, or nine 2 No medical risk factors reported. Each factor is coded a two.
101	1	ANEMIA Anemia (Hct.<30/Hgb.<10)
102	1	CARDIAC Cardiac disease
103	1	LUNG Acute or chronic lung disease
104	1	DIABETES Diabetes
105	1	HERPES Genital herpes
106	1	HYDRA Hydramnios/Oligohydramnios

Item Location	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>		
107	1	HEMO Hemoglobinopathy		
108	1	CHYPER Hypertension, chronic		
109	1	PHYPER Hypertension, pregnancy-associated		
110	1	ECLAMP Eclampsia		
111	1	INCERVIX Incompetent cervix		
112	1	PRE4000 Previous infant 4000+ g	<u>rams</u>	
113	1	PRETERM Previous preterm or sm	all-for-gestational-age infant	
114	1	RENAL Renal disease		
115	1	RH Rh sensitization		
116	1	UTERINE Uterine bleeding		
117	1	OTHERMR Other Medical Risk Fac	<u>etors</u>	
118-128	11	OTHERRSK Other Risk Factors for t	this Pregnancy	
118-121	4	TOBACRSK Tobacco Risks		
118	1	TOBACCO Tobacco Use During Pro	<u>egnancy</u>	
		1 2	Yes No	
		9	Unknown or not stated	
119-120	2	CIGAR Average Number of Cig	arettes Per Day	
		00-97	As stated	
		98 99	98 or more cigarettes per day Unknown or not stated	
		99	Unknown of not stated	

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>	
121	1	CIGAR6 Average Number of Cigarettes Per I	Day Recode
		3 11-20 cigar 4 21-40 cigar	es per day ttes per day ettes per day rettes per day cigarettes per day
122-125	4	ALCOHRSK Alcohol	
122	1	ALCOHOL Alcohol Use During Pregnancy	
		1 Yes 2 No 9 Unknown o	r not stated
123-124	2	<u>DRINK</u> <u>Average Number of Drinks Per Wee</u>	<u>k</u>
		00-97 As stated 98 98 or more 99 Unknown or	drinks per week or not stated
125	1	DRINK5 Average Number of Drinks Per Wee	k Recode
		0 Non-drinke 1 1 drink per 2 2 drinks per 3 3-4 drinks p 4 5 or more d 5 Unknown o	week r week per week rinks per week
126-128	3	WTGANRSK Weight Gain During Pregnancy	
126-127	2	WTGAIN Weight Gain	
		00-97 Stated num 98 98 pounds of 99 Unknown of	

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Outlin	<u>e</u>
128	1	WTGAIN9 Weight Gain Recode	<u>e</u>
		1 2 3 4 5 6 7 8 9	Less than 16 pounds 16-20 pounds 21-25 pounds 26-30 pounds 31-35 pounds 36-40 pounds 41-45 pounds 46 or more pounds Unknown or not stated
129-136	8	OBSTETRC Obstetric Procedure	<u>es</u>
		Each procedure is as each procedure (pos	ssigned a separate position, and the code structure for ition) is:
		1 2 8 9	Procedure reported Procedure not reported Procedure not on certificate Procedure not classifiable
129	1	OBFLAG Obstetric Flag	
		Blank 2	One or more obstetric procedures coded, one, eight, or nine No obstetric procedures reported. Each factor is coded a two.
130	1	AMNIO Amniocentesis	
131	1	MONITOR Electronic fetal mon	itoring
132	1	INDUCT Induction of labor	
133	1	STIMULA Stimulation of labor	
134	1	TOCOL Tocolysis	
135	1	ULTRAS Ultrasound	
136	1	OTHEROB Other Obstetric Pro	ocedures

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
137-153	17	<u>LABOR</u> Complications of Labor and/or Delivery
		Each complication is assigned a separate position, and the code structure for each complication (position) is:
		Complication reported Complication not reported Complication not on certificate Complication not classifiable
137	1	FBFLAG Labor Flag
		Blank One or more labor and/or delivery complications coded, one, eight, or nine 2 No labor and/or delivery complication reported. Each factor is coded a two.
138	1	FEBRILE Febrile (>100 degrees F. or 38 degrees C.)
139	1	MECONIUM Meconium, moderate/heavy
140	1	RUPTURE Premature rupture of membrane (>12 hours)
141	1	ABRUPTIO Abruptio placenta
142	1	PREPLACE Placenta previa
143	1	EXCEBLD Other excessive bleeding
144	1	SEIZURE Seizures during labor
145	1	PRECIP Precipitous labor (<3 hours)
146	1	PROLONG Prolonged labor (>20 hours)
147	1	DYSFUNC Dysfunctional labor
148	1	BREECH Breech/Malpresentation

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
149	1	CEPHALO Cephalopelvic disproportion
150	1	CORD Cord prolapse
151	1	ANESTHE Anesthetic complications
152	1	DISTRESS Fetal distress
153	1	OTHERLB Other Complications of Labor and/or Delivery
154-163	10	NEWBORN Abnormal conditions of the Newborn
		Each condition is assigned a separate position, and the code structure for each condition (position)is:
		Condition reported Condition not reported Condition not on certificate Condition not classifiable
154	1	NBFLAG Newborn Flag
		Blank One or more abnormal conditions of the newborn coded, one, eight, or nine No abnormal condition of the newborn reported. Each factor is coded a two.
155	1	NANEMIA Anemia Hct.>39/Hgb.<13)
156	1	INJURY Birth injury
157	1	ALCOSYN Fetal alcohol syndrome
158	1	HYALINE Hyaline membrane disease
159	1	MECONSYN Meconium aspiration syndrome
160	1	VENL30 Assisted ventilation, less than 30 minutes

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
161	1	<u>VEN30M</u> <u>Assisted ventilation, 30 minutes or more</u>
162	1	NSEIZ Seizures
163	1	OTHERAB Other Abnormal Conditions of the Newborn
164-186	23	CONGENIT Congenital Anomalies
		Each anomaly is assigned a separate position, and the code structure for each anomaly (position) is:
		1 Anomaly reported 2 Anomaly not reported 8 Anomaly not on certificate 9 Anomaly not classifiable
164	1	CGFLAG Congenital Flag
		Blank One or more congenital anomalies coded, one, eight, or nine No congenital anomaly is reported. Each factor is coded a two.
165	1	ANEN Anencephalus
166	1	SPINA Spina bifida/Meningocele
167	1	HYDRO Hydrocephalus
168	1	MICROCE Microcephalus
169	1	NERVOUS Other central nervous system anomalies
170	1	HEART Heart malformations
171	1	CIRCUL Other circulatory/respiratory anomalies
172	1	RECTAL Rectal atresia/stenosis

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
173	1	TRACHEO Tracheo-esophageal fistula/Esophageal atresia
174	1	OMPHALO Omphalocele/Gastroschisis
175	1	GASTRO Other gastrointestinal anomalies
176	1	<u>GENITAL</u> <u>Malformed genitalia</u>
177	1	RENALAGE Renal agenesis
178	1	<u>UROGEN</u> Other urogenital anomalies
179	1	<u>CLEFTLP</u> <u>Cleft lip/palate</u>
180	1	ADACTYLY Polydactyly/Syndactyly/Adactyly
181	1	CLUBFOOT Club foot
182	1	HERNIA Diaphragmatic hernia
183	1	MUSCULO Other musculoskeletal/integumental anomalies
184	1	DOWNS Down's syndrome
185	1	CHROMO Other chromosomal anomalies
186	1	OTHERCON Other congenital anomalies
187-203	17	FLRES Reporting Flags for Place of Residence

These positions contain flags to indicate whether or not the specified item is included on the birth certificate of the State of residence or of the SMSA of residence. The code structure of each flag (position) is:

0 ... The item is not reported

1 ... The item is reported or partially reported.

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
187	1	ORIGM Origin of mother
188	1	ORIGF Origin of father
189	1	EDUCM Education of mother
190	1	Reserved Position
191	1	GESTE Clinical estimate of gestation
192	1	R5 Reserved position
193	1	FMAPSRF 5-minute Apgar score
194	1	DELMETRF Method of delivery
195	1	MEDRSK Medical risk factors
196	1	TOBUSE Tobacco use
197	1	ALCUSE Alcohol use
198	1	WTGN Weight gain
199	1	OBSTRC Obstetric procedures
200	1	<u>CLABOR</u> <u>Complications of labor and/or delivery</u>
201	1	ABNML Abnormal conditions of newborn
202	1	CONGAN Congenital anomalies
203	1	API flag Race codes 18-68 reported (beginning with 1992 data)

1998 Denominator Record and Natality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Nan <u>Item and Cod</u>		
204	1	CDOBMIM Month of Bir		ld Imputation Flag
		Blank 1		Month is not imputed Month is imputed
205-206	2	BIRMON Month of Bir	<u>rth</u>	
		01 02 03 04 05 06 07 08 09 10 11		January February March April May June July August September October November December
207-208	2	<u>R6</u> Reserved Po	<u>sition</u>	
209	1	WEEKDAY Day of Week		<u>rn</u>
		1 2 3 4 5 6 7		Sunday Monday Tuesday Wednesday Thursday Friday Saturday
210	1	<u>R7</u> <u>Reserved Po</u>	<u>sition</u>	

Locations 211-535 contain data from the Death Certificate. Data in locations 211-222 are included on both the numerator and denominator-plus files. Data in locations 223-535 are include in the numerator file only. Residence items in the Denominator Record and in the natality section of the Numerator (Linked) Record refer to the usual place of residence of the Mother; whereas in the mortality section of the Numerator (Linked) Record, these items refer to the place of residence of the Decedent.

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Out	<u>tline</u>	
211-213	3	AGED Age at Death in D The generated age		th in days is calculated from the date of death on the
		death certificate n reported age of de	ninus the	e date of birth on the birth certificate unless the ess than 2 days, then the reported age is used. If the death is unknown, the age is imputed.
		000-364	•••	Number of days
214	1	AGER5 Infant Age Recod	<u>le 5</u>	
		1 .	•••	Under 1 hour
		2 .		1-23 hours
		3 .	•••	1-6 days
				7-27 days (late neonatal)
		5 .	•••	28 days and over (postneonatal)
215	1	ACCIDPL Place of Accident	for Ca	uses E850-E869 and E880-E928
		Blank .	•••	Causes other than E850-E869 and E880-E928
		0		Home
		1 .	•••	Farm
		2 .		Mine and quarry
		3 .		Industrial place and premises
		4 .		Place for recreation and sport
		5 .	•••	Street and highway
				Public building
				Resident institution
			•••	Other specified places
		9 .	•••	Place of accident not specified
216-219	4	UCOD ICD Code (9th Ro	evision)	1

See the <u>International Classification of Diseases</u>, 1975 Revision, Volume 1. For injuries and poisoning, the external cause is coded (E800-E999) rather than the Nature of Injury (800-999). These positions do not include the letter E for the external cause of injury. For those causes that do not have a 4th digit, location 219 is blank.

Item	Item	Variable Name,
Location	<u>Length</u>	Item and Code Outline

220-222 3 UCODR61

61 Infant Cause Recode

A recode of the ICD cause code into 61 groups for NCHS publications. Further back in this document is a complete list of recodes and the causes included.

010-680 ... Code range (not inclusive)

223-230 8 <u>**RECWT**</u>

Record weight

Beginning in 1995, a record weight was added to the linked file to adjust for the approximately 2-3% of infant death records each year which cannot be linked to their corresponding birth certificates. Weights are generally slightly greater than 1.0 for infant death records, and are set at 1.0 for surviving live birth records. Weights are appropriate for us in some circumstances, but not others — please see Introduction for further details. The weights were used to produce all NCHS linked file tables, including Documentation tables 1-5 included in this tape documentation. The general format for the record weight is the number one followed by a decimal point and six decimal places as follows:

1.XXXXXX

Here ends the Denominator file. Documentation for the Mortality Section of the Numerator (Linked) file begins with multiple conditions in positions 261-504.

1998 Mortality Section of Numerator (Linked) Record

Item Location	Item <u>Length</u>	Variable Name, Item and Code O	Putline
261-504	244	MULTCOND Multiple Condi	tions
			axis and record-axis conditions are coded according to this
261-262	2	<u>EANUM</u> <u>Number of Enti</u>	ty-Axis Conditions
		00-20	Code range
263-402	140	ENTITY ENTITY - AXIS	S CONDITIONS
			provided for a maximum of 20 conditions. Each condition s in the record. Records that do not have 20 conditions are used area.
		Position 1:	Part/line number on certificate
		1 2 3 4 5 6	Part I, line 1 (a) Part I, line 2 (b) Part I, line 3 (c) Part I, line 4 (d) Part I, line 5 (e) Part II,
		Position 2:	Sequence of condition within part/line
		1-7	Code range
		Position 3 - 6:	Condition code (ICD 9th Revision)
		Position 7:	Nature of Injury Flag
		1	Indicates that the code in positions 3-6 is a Nature
		0	of Injury code All other codes
263-269	7	1st Condition	
270-276	7	2nd Condition	
277-283	7	3rd Condition	
284-290	7	4th Condition	
291-297	7	5th Condition	

1998 Mortality Section of Numerator (Linked) Record

Item Location	Item <u>Length</u>	Variable Name, Item and Code Outline
298-304	7	6th Condition
305-311	7	7th Condition
312-318	7	8th Condition
319-325	7	9th Condition
326-332	7	10th Condition
333-339	7	11th Condition
340-346	7	12th Condition
347-353	7	13th Condition
354-360	7	14th Condition
361-367	7	15th Condition
368-374	7	16th Condition
375-381	7	17th Condition
382-388	7	18th Condition
389-395	7	19th Condition
396-402	7	20th Condition
403-404	2	RANUM Number of Record-Axis Conditions
		00-20 Code range
405-504	100	RECORD RECORD - AXIS CONDITIONS

Space has been provided for a maximum of 20 conditions. Each condition takes 5 positions in the record. Records that do not have 20 conditions are blank in the unused area.

Positions 1-4:	Condition code	(ICD 9th Revision)
Positions 1-4:	Condition code	(ICD 9th Revision)

Position 5:	Nature of Injury Flag	
1		Indicates that the code in positions 1-4 is a Nature of Injury code
0		All other codes

1998 Mortality Section of Numerator (Linked) Record

Item Location	Item <u>Length</u>	Variable Name, Item and Code Outline
405-409	5	1st Condition
410-414	5	2nd Condition
415-419	5	3rd Condition
420-424	5	4th Condition
425-429	5	5th Condition
430-434	5	6th Condition
435-439	5	7th Condition
440-444	5	8th Condition
445-449	5	9th Condition
450-454	5	10th Condition
455-459	5	11th Condition
460-464	5	12th Condition
465-469	5	13th Condition
470-474	5	14th Condition
475-479	5	15th Condition
480-484	5	16th Condition
485-489	5	17th Condition
490-494	5	18th Condition
495-499	5	19th Condition
500-504	5	20th Condition
505	1	Resident Status - Death 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.
		INTERSTATE NONRESIDENTS: State of occurrence and residence are different, but both are in the 50 States and D.C.
		FOREIGN RESIDENTS: State of occurrence is one of the 50 States or the District of Columbia, but place of residence is outside of the 50 States and D.C.

Item	Item	Variable Name,
Location	<u>Length</u>	Item and Code Outline
505	1	RESSTATD Resident Status - Death (Cond't)
		Puerto Pico Accurrance

Puerto Rico Occurrence

RESIDENTS: State and county of occurrence and residence are the same.
 INTRASTATE NONRESIDENTS: State of occurrence and residence are the same, but county is different.
 FOREIGN RESIDENTS: Occurred in Puerto Rico to a resident of any other place.

Virgin Islands 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.
4		FOREIGN RESIDENTS: Occurred in the Virgin
		Islands to a resident of any other place.

Guam Occurrence

RESIDENTS: Occurred in Guam to a resident of Guam or to a resident of the U.S.

4 ... FOREIGN RESIDENTS: Occurred in Guam to a resident of any place other than Guam or the U.S.

506-507 2 **DRSTATE**

Expanded State of Residence - NCHS Codes - Deaths

This item is designed to separately identify New York City records from other New York State records.

Alabama

United States Occurrence

	•••	
02		Alaska
03		Arizona
04	•••	Arkansas
05		California
06		Colorado
07		Connecticut
08	•••	Delaware
09	•••	District of Columbia
10		Florida
11	•••	Georgia
12		Hawaii
13	•••	Idaho
14	•••	Illinois
15	•••	Indiana
16		Iowa
17		Kansas
18		Kentucky
19		Louisiana
20		Maine

Item	Item	Variable Name,
Location	<u>Length</u>	Item and Code Outline
506-507	2	DRSTATE

DRSTATE

Expanded State of Residence - NCHS Codes - Deaths (Cond't)

United States Occurrence			
21		Maryland	
22		Massachusetts	
23		Michigan	
24		Minnesota	
25		Mississippi	
26		Missouri	
27		Montana	
28		Nebraska	
29		Nevada	
30		New Hampshire	
31		New Jersey	
32		New Mexico	
33		New York	
34		New York City	
35		North Carolina	
36		North Dakota	
37		Ohio	
38		Oklahoma	
39		Oregon	
40		Pennsylvania	
41		Rhode Island	
42		South Carolina	
43		South Dakota	
44		Tennessee	
45		Texas	
46		Utah	
47		Vermont	
48		Virginia	
49		Washington	
50		West Virginia	
51		Wisconsin	
52	•••	Wyoming	
53-58,60		Foreign Residents	
53		Puerto Rico	
54		Virgin Islands	
55	•••	Guam	
56		Canada	
57	•••	Cuba	
58		Mexico	
60	•••	Remainder of the World	

Puerto Rico Occurrence

53	 Puerto Rico	
01-52,54-58,60	 Foreign Residents:	Refer to U.S. for specific code
	structure.	

		Morality Section of Authorator (Effice) Record
Item <u>Location</u>	Item <u>Length</u>	Variable Name, <u>Item and Code Outline</u>
506-507	2	<u>DRSTATE</u> <u>Expanded State of Residence - NCHS Codes - Deaths (Cond't)</u>
		Virgin Islands Occurrence 54 Virgin Islands 01-53,55-58,60 Foreign Residents: Refer to U.S. for specific code structure. Guam Occurrence 55 Guam 01-52 U.S. resident is also considered a resident of Guam. 53,54,58,60 Foreign Residents: Refer to U.S. for specific code structure.
508-512	5	FIPSOCCD Federal Information Processing Standards (FIPS) Geographic Codes (Occurrence) - Death Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.
508-509	2	STOCCFIPD

State of Occurrence (FIPS) - Death

United States		
01		Alabama
02		Alaska
04		Arizona
05		Arkansas
06		California
08		Colorado
09		Connecticut
10		Delaware
11		District of Columbia
12		Florida
13		Georgia
15		Hawaii
16		Idaho
17		Illinois
18		Indiana
19		Iowa
20	•••	Kansas
21		Kentucky
22		Louisiana
23	•••	Maine
24	•••	Maryland
25		Massachusetts
26	•••	Michigan
27	•••	Minnesota
28		Mississippi
29		Missouri
30	•••	Montana

		Mortality Section of Numera	ator (Linked) Record
Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Outline	<u>e</u>
508-509	2	STOCCFIPD State of Occurrence	(FIPS) - Death (Cond't)
		United States	
		31	Nebraska
		32	Nevada
		33	New Hampshire
		2.4	New Jersey
		25	New Mexico
		26	New York
		27	North Carolina
		38	
		36 39	North Dakota Ohio
		40	Oklahoma
		41	Oregon
		42	Pennsylvania
		44	Rhode Island
		45	South Carolina
		46	South Dakota
		47	Tennessee
		48	Texas
		49	Utah
		50	Vermont
		51	Virginia
		53	Washington
		54	West Virginia
		55	Wisconsin
		56	Wyoming
		Puerto Rico	
		72	Puerto Rico
		Virgin Islands	
		78	Virgin Islands
		Guam	_
			Guam
510-512	3	CNTOCFIPD County of Occurren	ce (FIPS) - Death
		001-nnn	Counties and county equivalents (independent and coextensive cities) are numbered alphabetically within each State. (Note: To uniquely identify a county, both the State and county codes must be

999

used.)

County with less than 250,000 population

ItemItemLocationLength		Variable Name, <u>Item and Code Outline</u>
513-517 5		FIPSRESD

Federal Information Processing Standards (FIPS) Geographic Codes (Residence) - Death

Refer to the Geographic Code Outline further back in this document for a detailed list of areas and codes. For an explanation of FIPS codes, reference should be made to various National Institute of Standards and Technology (NIST) publications.

513-514 2 **STRESFIPD** State of Residence (FIPS) - Death

United Sta	ates Occurr	ence
00	•••	F
01		Α

Omica Stat	cs Occurr	<u>circe</u>
00		Foreign residents
01		Alabama
02		Alaska
04		Arizona
05		Arkansas
06		California
08		Colorado
09		Connecticut
10	•••	Delaware
11		District of Columbia
12		Florida
13		Georgia
15		Hawaii
16		Idaho
17		Illinois
18		Indiana
19		Iowa
20		Kansas
21		Kentucky
22		Louisiana
23		Maine
24		Maryland
25		Massachusetts
26		Michigan
27		Minnesota
28		Mississippi
29		Missouri
30		Montana
31		Nebraska
32		Nevada
33		New Hampshire
34		New Jersey
35		New Mexico
36		New York
37		North Carolina
38		North Dakota
39		Ohio
4.0		0111

Oklahoma

40

Item	Item	Variable Name,	
Location	Length	Item and Code Outline	
			-
513-514	2	STRESFIPD	
		· · · · · · · · · · · · · · · · · · ·	FIPS) - Death (Cond't)
			
		United States Occu	<u>rrence</u>
		41	Oregon
		42	Pennsylvania
		44	Rhode Island
		45	South Carolina
		46	South Dakota
		47	Tennessee
		48	Texas
		49	Utah
		50	Vermont
		51	Virginia
		53	Washington
		54	West Virginia
		55	Wisconsin
		56	Wyoming
			, -
		Puerto Rico Occurr	rence
		72	Puerto Rico
		00-56, 66,78	Foreign resident: Refer to U.S. for specific code
			structure.
		Virgin Islands Occu	irrence
		78	Virgin Islands
		00-56, 66,72	Foreign resident: Refer to U.S. for specific code
			structure.
		Guam Occurrence	
		66	Guam
		01-56,	
		00,72,78	Foreign resident: Refer to U.S. for specific code
			structure.
515-517	3	CNTYRFPD	
		County of Residence	(FIPS) - Death
			Foreign residents
		001-nnn	Counties and county equivalents (independent and
			coextensive cities) are numbered alphabetically
			within each State (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.
		000	County with loss than 250,000 nonulation

County with less than 250,000 population

999

1998 Mortality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code Outline	
518-522	5	PLRES Place (City) of Reside	ence (FIPS)
		A complete list of citi in this document.	es is shown in the Geographic code outline further back
		00000 00001-nnnnn 99999	Foreign residents Code range Balance of county; or city less than 250,000 population
523	1	HOSPD Hospital and Patient	<u>Status</u>
		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	Hospital, Clinic or Medical Center - Patient status unknown
		5	Nursing home
		6	Residence
		7	Other
		9	Place of death unknown
524-527	4	<u>DTHYR</u> <u>Year of Death</u>	
		1998	Death occurred in 1998
		1999	Death occurred in 1999
528-529	2	<u>DTHMON</u> <u>Month of Death</u>	
		01	January
		02	February
		03	March
		04	April
		05	May
		06	June
		07	July
		08	August
		09 10	September October
		1.1	November
		12	December
530-531	2	R8 Reserved Position	

1998 Mortality Section of Numerator (Linked) Record

Item <u>Location</u>	Item <u>Length</u>	Variable Name, Item and Code C	<u>Outline</u>	
532	1	WEEKDAYD Day of Week of	<u>Death</u>	
		1		Sunday
		2		Monday
		3	•••	Tuesday
		4		Wednesday
		5		Thursday
		6		Friday
		7		Saturday
		9		Unknown
533-535	3	Reserved positi	<u>ons</u>	

LIVE BIRTHS AND INFANT DEATHS BY STATE OF OCCURRENCE AND BY STATE OF RESIDENCE AT BIRTH UNITED STATES, PUERTO RICO, VIRGIN ISLANDS, AND GUAM - 1998 LINK BIRTH COHORT DATA

(RESIDENCE OF BIRTH IS OF THE MOTHER)

		BIRTHS			DEATHS		
· ·	LIVE	DIKINS	I I IINWET		NT DEATHS WEIGHTED 1/		
STATE	Occurrence	Residence	Occurrence	Residence		Residence	
UNITED STATES 2/	3,945,192	3,941,553	27,743	27,720	28,221	28,198	
ALABAMA	61,209	62,074	617	615	619	616	
ALASKA	9,832	9,926	63	66	63	67	
ARIZONA	78,076	78,243	566	558	573	569	
ARKANSAS	35,763	36,865	302	326	310	335	
CALIFORNIA	522,290	521,661	2,905	2,901	3,024	3,012	
COLORADO	59,816	59,577	422	408	423	409	
CONNECTICUT	43,669	43,820	299	295	301	298	
DELAWARE	11,023	10,578	104	98	104	98	
DISTRICT OF COLUMBIA	15,138	7,686	181	91	183	92	
FLORIDA	195,734	195,637	1,429	1,426	1,432	1,428	
GEORGIA	123,262	122,368	1,027	1,028	1,028	1,028	
HAWAII	17,619	17,583	119	117	119	117	
IDAHO	18,959	19,391	118	131	123	134	
ILLINOIS	179,462	182,588	1,455	1,514	1,472	1,536	
INDIANA	85,176	85,122	640	649	651	660	
IOWA	37,433	37,282	219	237	219	237	
KANSAS	37,450	38,422	254	271	254	274	
KENTUCKY	52,880	54,329	353	391	362	399	
LOUISIANA	67,100	66,888	604	604	617	616	
MAINE	13,530	13,733	77	82	79	84	
MARYLAND	67,408	71,972	532	613	538	620	
MASSACHUSETTS	82,216	81,411	410	413	419	422	
MICHIGAN	132,443	133,666	1,066	1,071	1,079	1,084	
MINNESOTA	65,094	65,202	394	388	394	388	
MISSISSIPPI	41,942	42,939	397	420	400	422	
MISSOURI	77,701	75,358	624	558	638	566	
MONTANA	10,742	10,795	74	73	77	75	
NEBRASKA	23,915	23,534	199	182	199	182	
NEVADA	28,218	28,699	183	187	189	195	
NEW HAMPSHIRE	13,933	14,429	65	67	65	67	
NEW JERSEY	111,709	114,550	676	714	688	728	
NEW MEXICO	26,960	27,318	175	186	185	196	
NEW YORK STATE	135,408	138,296	783	792	806	808	
NEW YORK CITY	124,240	119,911	794	775	803	793	
NORTH CAROLINA	112,785	111,688	1,035	1,022	1,038	1,025	
NORTH DAKOTA	9,156	7,932	82	70	82	70	
OHIO	153,400	152,794	1,172	1,148	1,221	1,207	
OKLAHOMA	48,449	49,461	401	401	433	432	
OREGON	46,278	45,273	254	235	256	236	
PENNSYLVANIA	146,465	145,899	1,041	1,012	1,060	1,027	
RHODE ISLAND	13,489	12,599	101	87	102	87	
SOUTH CAROLINA	51,701	53,877	496	525	496	525	
SOUTH DAKOTA	10,391	10,288	93	95	93	95	
TENNESSEE	82,412	77,396	722	632	723	632	
TEXAS	346,101	342,283	2,118	2,093	2,164	2,139	
UTAH	46,128	45,165	263	244	264	245	
VERMONT	6,257	6,582	49	53	49	53	

LIVE BIRTHS AND INFANT DEATHS BY STATE OF OCCURRENCE AND BY STATE OF RESIDENCE AT BIRTH UNITED STATES, PUERTO RICO, VIRGIN ISLANDS, AND GUAM - 1998 LINK BIRTH COHORT DATA

(RESIDENCE OF BIRTH IS OF THE MOTHER)

	LIVE	BIRTHS	INFANT DEATHS					
!	_	!		GHTED		IGHTED 1/		
STATE	Occurrence	Residence	Occurrence	Residence	Occurrence	Residence		
VIRGINIA	92,021	94,351	674	694	681	701		
WASHINGTON	78,980	79,663	441	458	444	462		
WEST VIRGINIA	21,574	20,747	164	154	168	157		
WISCONSIN	66,421	67,450	487	503	487	503		
WYOMING	5,834	6,252	24	47	24	47		
FOREIGN RESIDENTS	-	3,637	-	23	-	23		
PUERTO RICO 3/	60,518	60,412	640	638	-	-		
VIRGIN ISLANDS 3/	1,915	1,800	17	17	-	-		
GUAM 3/	4,328	4,318	35	35	-	-		

^{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 occurrences. 3/ Data from the Puerto Rico, Virgin Islands, and Guam file.

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY RACE OF MOTHER, SEX AND BIRTHWEIGHT OF CHILD: UNITED STATES, 1998 BIRTH COHORT DATA (INFANT DEATHS WEIGHTED)

(RATES ARE PER 1000 LIVE BIRTHS)

RACE OF MOTHER AND SEX	TOTAL	<500 GRAMS 	500-749 GRAMS	750-999 GRAMS	 1000-1249 GRAMS	 1250-1499 GRAMS 	 1500-1999 GRAMS	 2000-2499 GRAMS	 2500 GRAMS OR MORE 	NOT STATED
ALL RACES 1/										
BOTH SEXES LIVE BIRTHS INFANT DEATHS INF.MORT.RATE MALE	3,941,553 28,197 7.2	6,349 5,480 863.1	11,041 5,336 483.3	11,716 1,865 159.2	13,238 936 70.7	756	1,705	2,274	- /	2,020 374 185.0
LIVE BIRTHS INFANT DEATHS INF.MORT.RATE FEMALE	2,016,205 15,713 7.8	3,175 2,765 870.7	5,528 3,047 551.1	6,129 1,187 193.7	6,828 550 80.5	419	875	1,194	5,446	1,045 232 221.6
LIVE BIRTHS INFANT DEATHS INF.MORT.RATE	1,925,348 12,484 6.5	3,174 2,716 855.6	5,513 2,290 415.3	5,587 678 121.4	6,410 386 60.3	336		1,080	4,026	975 142 145.9
WHITE BOTH SEXES										
LIVE BIRTHS INFANT DEATHS INF.MORT.RATE MALE		3,502 3,049 870.6	6,510 3,231 496.4	7,360 1,222 166.0	8,670 613 70.8	507		1,593		1,198 208 173.8
LIVE BIRTHS INFANT DEATHS INF.MORT.RATE	1,596,704 10,300 6.5	1,723 1,506 874.0	3,280 1,845 562.4	3,891 772 198.4	4,555 362 79.5	283	598	819	3,988	614 127 207.6
FEMALE LIVE BIRTHS INFANT DEATHS INF.MORT.RATE	, - ,	1,779 1,543 867.3	3,230 1,387 429.3	3,469 450 129.8	4,115 251 61.1	224		773	,	584 81 138.2
BLACK BOTH SEXES										
LIVE BIRTHS INFANT DEATHS INF.MORT.RATE	609,902 8,392 13.8	2,583 2,206 854.1	4,127 1,903 461.0	3,861 555 143.6	4,017 283 70.3	215	15,383 439 28.5	566	2,099	314 129 410.7
MALE LIVE BIRTHS INFANT DEATHS INF.MORT.RATE FEMALE	310,107 4,667 15.1	1,319 1,147 869.6	2,038 1,078 528.7	1,972 359 182.2	1,981 162 81.7	117	7,179 229 31.9	316	1,177	166 83 497.2
LIVE BIRTHS INFANT DEATHS INF.MORT.RATE	299,795 3,725 12.4	1,264 1,059 837.9	2,089 825 394.9	1,889 195 103.4	2,036 121 59.3	98	- , -	249	922	148 46 313.6

^{1/} INCLUDES RACES OTHER THAN WHITE AND BLACK

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LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND GESTATIONAL AGE: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED) (RATES ARE PER 1000 LIVE BIRTHS)

 	GESTATION											
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		
ALL RACES 1/												
TOTAL LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	3,941,553	29,037	47,486	212,210	163,542	1,859,198	853,416	443,502	292,766	40,396		
	28,197	11,836	2,207	2,533	1,063	5,628	1,914	1,162	921	932		
	7.2	407.6	46.5	11.9	6.5	3.0	2.2	2.6	3.1	23.1		
LESS THAN 2,500 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	299,209	27,959	35,733	99,134	33,588	75,882	11,455	5,354	6,393	3,711		
	18,352	11,815	2,120	1,882	525	1,110	207	146	141	406		
	61.3	422.6	59.3	19.0	15.6	14.6	18.1	27.2	22.1	109.5		
LESS THAN 500 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	6,349 5,480 863.1	5,921 5,197 877.7	218 139 636.9	12 11 936.5	3 2 675.3	13 7 552.1	3 1 333.3	- - -		179 123 685.2		
500-749 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	11,041 5,336 483.3	9,333 4,784 512.6	1,307 372 284.8	126 41 323.7	19 11 585.6	13 2 158.1	:	2 -	6 4 669.9	235 122 520.3		
750-999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	11,716	7,042	3,751	501	42	113	48	19	17	183		
	1,865	1,351	388	61	6	8	6	3	3	39		
	159.2	191.8	103.4	122.0	146.5	72.5	127.2	158.5	182.0	214.1		
1,000-1,249 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	13,238	3,135	7,070	2,131	153	326	98	48	82	195		
	936	295	424	131	19	27	6	2	6	26		
	70.7	94.1	59.9	61.5	126.4	81.9	63.5	42.4	74.5	132.4		
1,250-1,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	15,389	861	8,051	4,797	408	662	146	77	142	245		
	756	84	317	230	32	53	5	6	11	19		
	49.1	97.3	39.3	47.9	77.5	79.9	35.0	78.9	78.6	76.3		
1,500-1,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	59,014	988	11,224	31,506	5,035	7,191	989	548	806	727		
	1,705	77	357	698	128	296	47	35	31	36		
	28.9	78.4	31.8	22.2	25.4	41.1	47 . 4	63.0	38.0	49.8		

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND GESTATIONAL AGE: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED) (RATES ARE PER 1000 LIVE BIRTHS)

	 GESTATION											
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		
ALL RACES 1/												
2,000-2,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	182,462	679	4,112	60,061	27,928	67,564	10,171	4,660	5,340	1,947		
	2,274	27	123	710	326	717	142	100	86	41		
	12.5	39.1	30.0	11.8	11.7	10.6	14.0	21.4	16.2	21.3		
2,500-2,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	650,006	1,078	4,251	53,704	59,439	362,599	88,982	38,929	34,772	6,252		
	3,090	21	41	375	299	1,564	361	207	178	44		
	4.8	19.9	9.6	7.0	5.0	4.3	4.1	5.3	5.1	7.1		
3,000-3,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	1,458,017	-	4,955	37,738	47,946	772,992	321,158	152,255	106,987	13,986		
	3,684	-	34	193	168	1,832	676	389	340	53		
	2.5	-	6.8	5.1	3.5	2.4	2.1	2.6	3.2	3.8		
3,500-3,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	1,136,056	-	2,547	17,152	17,886	501,416	314,195	170,344	101,961	10,555		
	1,993	-	12	57	57	862	479	295	196	35		
	1.8	-	4.8	3.3	3.2	1.7	1.5	1.7	1.9	3.3		
4,000-4,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	335,215	-	-	3,796	3,902	125,268	100,003	63,771	35,268	3,207		
	561	-	-	21	8	211	154	102	53	11		
	1.7	-	-	5.6	2.1	1.7	1.5	1.6	1.5	3.5		
4,500-4,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	54,827	-	-	586	679	18,689	16,010	11,661	6,637	565		
	114	-	-	1	6	37	32	21	10	6		
	2.1	-	-	1.8	8.9	2.0	2.0	1.8	1.5	11.0		
5,000 GRAMS OR MORE LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	6,203 29 4.8	- - -	- - -	100 4 40.6	102 - -	2,352 13 5.6	1,613 5 3.1	1,188 2 1.7	748 2 2.7	100 3 31.1		
NOT STATED LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	2,020	-	-	-	-	-	-	-	-	2,020		
	374	-	-	-	-	-	-	-	-	374		
	185.0	-	-	-	-	-	-	-	-	185.0		

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND GESTATIONAL AGE: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED) (RATES ARE PER 1000 LIVE BIRTHS)

 					GESTA	ATION				
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										
TOTAL LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	3,118,727	17,020	31,415	152,717	123,132	1,470,983	693,703	364,840	234,996	29,921
	18,460	6,960	1,410	1,781	727	4,054	1,411	863	675	578
	5.9	408.9	44.9	11.7	5.9	2.8	2.0	2.4	2.9	19.3
LESS THAN 2,500 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	203,886	16,409	23,760	70,440	23,561	51,698	7,697	3,541	4,325	2,455
	11,387	6,946	1,357	1,308	348	796	151	108	104	268
	55.8	423.3	57.1	18.6	14.8	15.4	19.6	30.5	24.0	109.3
LESS THAN 500 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	3,502 3,049 870.6	3,249 2,879 886.1	129 80 622.1	7 6 884.3	2 1 500.0	7 7 1025.3	2 -	- - -	- - -	106 75 708.5
500-749 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	6,510 3,231 496.4	5,414 2,890 533.8	821 215 261.3	90 33 362.4	7 5 727.8	10 1 105.6	- - -	2 -	6 4 669.9	160 84 526.5
750-999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	7,360	4,362	2,373	337	27	81	34	15	13	118
	1,222	880	249	48	4	5	5	3	2	26
	166.0	201.7	105.1	142.3	151.7	63.2	149.6	200.7	156.9	218.4
1,000-1,249 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	8,670	1,934	4,680	1,438	108	227	60	32	53	138
	613	189	272	90	15	21	5	2	3	17
	70.8	97.6	58.2	62.4	141.3	90.8	87.1	63.5	57.5	120.3
1,250-1,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	10,252	493	5,381	3,269	280	436	91	56	87	159
	507	46	201	169	24	39	3	4	6	16
	49.5	93.7	37.4	51.6	84.0	88.7	33.6	72.8	70.3	98.2
1,500-1,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	40,802	548	7,804	22,135	3,472	4,849	654	343	521	476
	1,171	46	247	481	87	209	32	25	22	23
	28.7	83.9	31.6	21.7	25.0	43.0	48.5	74.0	43.1	48.3

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND GESTATIONAL AGE: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED) (RATES ARE PER 1000 LIVE BIRTHS)

 					GESTA	TION				
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										
2,000-2,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	126,790 1,593 12.6	409 16 39.9	2,572 93 36.1	43,164 482 11.2	19,665 213 10.8	46,088 515 11.2	6,856 106 15.4	3,093 73 23.8	3,645 66 18.2	1,298 28 21.6
2,500-2,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	465,494 2,109 4.5	611 14 23.4	2,499 23 9.1	38,891 264 6.8	44,322 209 4.7	259,518 1,058 4.1	63,011 257 4.1	27,908 143 5.1	24,542 115 4.7	4,192 26 6.1
3,000-3,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	1,140,741 2,676 2.3	- - -	3,291 20 6.2	26,963 145 5.4	37,200 116 3.1	607,353 1,352 2.2	252,252 476 1.9	120,192 277 2.3	83,191 255 3.1	10,299 36 3.5
3,500-3,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	958,968 1,524 1.6	- - -	1,865 10 5.4	12,901 47 3.6	14,247 42 2.9	424,219 644 1.5	266,592 368 1.4	145,093 240 1.7	85,517 150 1.8	8,534 24 2.8
4,000-4,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	294,403 442 1.5	- - -	- - -	2,980 14 4.8	3,181 6 1.9	109,817 167 1.5	88,369 126 1.4	56,500 77 1.4	30,872 43 1.4	2,684 9 3.4
4,500-4,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	48,687 90 1.9	- - -	- - -	469 - -	542 6 11.2	16,384 29 1.7	14,376 28 2.0	10,552 16 1.5	5,887 7 1.2	477 4 8.9
5,000 GRAMS OR MORE LIVE BIRTHSINFANT DEATHS INF. MORT. RATE	5,350 23 4.4	- - -	- - -	73 3 41.6	79 - -	1,994 9 4.6	1,406 5 3.6	1,054 2 1.9	662 2 3.1	82 2 25.1
NOT STATED LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	1,198 208 173.8	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	1,198 208 173.8

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND GESTATIONAL AGE: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED) (RATES ARE PER 1000 LIVE BIRTHS)

	 				GESTA	TION				
BIRTHWEIGHT		<28 WEEKS	28-31 WEEKS	32-35 WEEKS	36 WEEKS	37-39 WEEKS	40 WEEKS	41 WEEKS	 42 WEEKS OR MORE	NOT STATED
BLACK										
TOTAL										
LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	609,902 8,392 13.8	10,899 4,400 403.7	13,988 693 49.6	48,954 640 13.1	31,932 278 8.7	282,824 1,272 4.5	114,888 398 3.5	57,500 231 4.0	43,931 205 4.7	4,986 275 55.1
LESS THAN 2,500 GRAMS LIVE BIRTHSINFANT DEATHS	79,772 6,165	10,477 4,393	10,501	24,093	8,138	19,342 263	3,140	1,486	1,759	836 110
INF. MORT. RATE	77.3	419.3	63.7	20.2	17.2	13.6	13.9	18.4	17.9	131.6
LESS THAN 500 GRAMS LIVE BIRTHS INFANT DEATHS	2,583 2,206	2,438 2,113	82 52	3	-	5 -	1 1	-	-	54 36
INF. MORT. RATE	854.1	866.9	639.7	1009.4	-	-	1000.0	-	-	668.5
500-749 GRAMS	4 427	2 577		20	10					63
LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	4,127 1,903 461.0	3,577 1,714 479.2	444 143 323.1	30 6 203.2	10 4 400.6	3 1 333.3	-	- - -	- - -	63 34 538.5
750-999 GRAMS										
LIVE BIRTHSINFANT DEATHS	3,861 555	2,406 407	1,225 119	127 11	13 1	26 3	12 1	4 -	4 1	44 11
INF. MORT. RATE	143.6	169.1	97.3	87.7	78.7	118.1	85.2	-	263.9	256.7
1,000-1,249 GRAMS										
LIVE BIRTHS INFANT DEATHS	4,017 283	1,076 94	2,107 130	598 39	38 4	84 5	35 1	15	25 2	39 7
INF. MORT. RATE	70.3	87.4	61.6	65.8	107.2	60.5	28.6	-	81.7	183.0
1,250-1,499 GRAMS										
LIVE BIRTHS	4,432	332	2,355	1,279	105	192	44	17	49	59
INFANT DEATHS INF. MORT. RATE	215 48.4	32 97.7	104 44.2	51 39.6	6 57.9	12 63.5	2 46.6	1 58.8	4 82.6	2 34.3
1,500-1,999 GRAMS										
LIVE BIRTHS	15,383	400	2,937	7,960	1,264	1,953 72	298	170	240	161
INFANT DEATHS INF. MORT. RATE	439 28.5	23 58.2	95 32.5	178 22.4	33 26.4	36.8	13 44.1	8 47.9	6 25.5	9 56.7

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND GESTATIONAL AGE: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED) (RATES ARE PER 1000 LIVE BIRTHS)

	 				GESTA	TION				
BIRTHWEIGHT		<28 WEEKS	28-31 WEEKS	32-35 WEEKS	36 WEEKS	37-39 WEEKS	40 WEEKS	41 WEEKS	42 WEEKS OR MORE	NOT STATED
BLACK										
2,000-2,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	45,369	248	1,351	14,096	6,708	17,079	2,750	1,280	1,441	416
	566	9	24	199	91	170	25	18	18	10
	12.5	36.9	18.1	14.1	13.6	10.0	9.2	14.2	12.6	25.0
2,500-2,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	141,146	422	1,514	12,093	11,927	77,695	19,564	8,533	8,304	1,094
	805	7	14	95	76	409	86	49	56	13
	5.7	17.0	9.4	7.9	6.4	5.3	4.4	5.7	6.7	12.2
3,000-3,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	230,937	-	1,421	8,688	8,410	119,135	49,680	23,724	18,267	1,612
	815	-	9	39	46	389	157	90	72	12
	3.5	-	6.5	4.5	5.4	3.3	3.2	3.8	3.9	7.6
3,500-3,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	125,007	-	552	3,337	2,838	54,158	33,319	17,886	12,050	867
	371	-	1	9	14	173	84	44	38	8
	3.0	-	1.8	2.7	5.0	3.2	2.5	2.4	3.1	9.4
4,000-4,499 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	27,972	-	-	628	509	10,633	7,929	5,059	2,993	221
	84	-	-	7	2	28	23	17	6	-
	3.0	-	-	11.2	4.0	2.7	3.0	3.4	2.0	-
4,500-4,999 GRAMS LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	4,170 18 4.4	- - -	-	96 1 10.7	91 - -	1,613 6 3.8	1,109 4 3.7	721 4 5.7	507 2 4.0	33 1 30.3
5,000 GRAMS OR MORE LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	584	-	-	19	19	248	147	91	51	9
	5	-	-	1	-	3	-	-	-	1
	8.7	-	-	53.7	-	12.2	-	-	-	117.3
NOT STATED LIVE BIRTHS INFANT DEATHS INF. MORT. RATE	314	-	-	-	-	-	-	-	-	314
	129	-	-	-	-	-	-	-	-	129
	410.7	-	-	-	-	-	-	-	-	410.7

^{1/} INCLUDES RACES OTHER THAN WHITE AND BLACK

⁻ DATA NOT AVAILABLE.

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND AGE AT DEATH:
UNITED STATES, 1998 BIRTH COHORT DATA
(INFANT DEATHS 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 I	EARLY NEONATAL	 LATE NEONATAL	POST- NEONATAL
ALL RACES1/						
TOTAL (ALL BIRTHWEIGHTS)NUMBER	, ,	28,197	18,874	15,039	3,836	9,323
RATE		7.2	4.8	3.8	1.0	2.4
LESS THAN 2,500 GRAMSNUMBER		18,352	15,066	12,622	2,444	3,286
RATE		61.3	50.4	42.2	8.2	11.0
LESS THAN 500 GRAMSNUMBER		5,480	5,397	5,236	161	83
RATE		863.1	850.0	824.7	25.4	13.1
500-749 GRAMSNUMBER		5,336	4,671	3,821	851	665
RATE		483.3	423.1	346.1	77.0	60.2
750-999 GRAMSNUMBER	,	1,865 159.2	1,438 122.7	972 83.0	466 39.7	428 36.5
1,000-1,249 GRAMSNUMBER	,	936	686	497	189	250
RATE		70.7	51.8	37.5	14.3	18.9
1,250-1,499 GRAMSNUMBER	,	756	553	407	146	202
RATE		49.1	36.0	26.5	9.5	13.1
1,500-1,999 GRAMSNUMBER	, -	1,705	1,099	827	272	606
RATE		28.9	18.6	14.0	4.6	10.3
2,000-2,499 GRAMSNUMBER		2,274	1,223	862	360	1,051
RATE		12.5	6.7	4.7	2.0	5.8
2,500-2,999 GRAMSNUMBER	,	3,090	1,198	721	476	1,893
RATE		4.8	1.8	1.1	.7	2.9
3,000-3,499 GRAMSNUMBER		3,684	1,269	732	537	2,415
RATE		2.5	.9	.5	.4	1.7
3,500-3,999 GRAMSNUMBER	, ,	1,993	694	422	272	1,299
RATE		1.8	. 6	.4	.2	1.1

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND AGE AT DEATH:
UNITED STATES, 1998 BIRTH COHORT DATA
(INFANT DEATHS 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)

BIRTHWEIGHT AND RACE OF MOTHER L	.IVE BIRTHS 	INFANT	TOTAL NEONATAL	EARLY NEONATAL	LATE NEONATAL I	POST- NEONATAL
ALL RACES1/						
4,000-4,499 GRAMSNUMBER	335,215	561	213	130	83	348
RATE		1.7	.6	.4	. 2	1.0
4,500-4,999 GRAMSNUMBER	54,827	114	64	54	10	50
RATE		2.1	1.2	1.0	. 2	. 9
5,000 GRAMS OR MORENUMBER	6,203	29	20	17	3	9
RATE		4.8	3.3	2.8	. 5	1.5
NOT STATEDNUMBER	2,020	374	350	340	10	23
RATE		185.0	173.5	168.5	5.0	11.6

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND AGE AT DEATH:
UNITED STATES, 1998 BIRTH COHORT DATA
(INFANT DEATHS 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)

BIRTHWEIGHT AND RACE OF MOTHER	 LIVE BIRTHS 	INFANT INFANT	TOTAL NEONATAL I	EARLY NEONATAL	LATE NEONATAL 	POST- NEONATAL
WHITE						
TOTAL (ALL BIRTHWEIGHTS)NUMBER		18,460	12,328	9,724	2,604	6,132
RATE		5.9	4.0	3.1	.8	2.6
ESS THAN 2,500 GRAMSNUMBER		11,387	9,479	7,921	1,559	1,907
RATE		55.8	46.5	38.8	7.6	9.4
LESS THAN 500 GRAMSNUMBER		3,049	3,005	2,913	92	44
RATE		870.6	858.1	831.9	26.2	12.4
500-749 GRAMSNUMBER	- ,	3,231	2,889	2,403	486	342
RATE		496.4	443.8	369.1	74.6	52.6
750-999 GRAMSNUMBER	,	1,222	988	673	314	234
RATE		166.0	134.2	91.5	42.7	31.8
1,000-1,249 GRAMSNUMBER		613	479	352	127	134
RATE		70.8	55.3	40.6	14.7	15.5
1,250-1,499 GRAMSNUMBER	10,252	507	389	297	92	118
RATE		49.5	38.0	29.0	9.0	11.5
1,500-1,999 GRAMSNUMBER	40,802	1,171	805	621	184	367
RATE		28.7	19.7	15.2	4.5	9.6
2,000-2,499 GRAMSNUMBER		1,593	924	661	264	668
RATE		12.6	7.3	5.2	2.1	5.3
2,500-2,999 GRAMSNUMBER		2,109	869	544	325	1,239
RATE		4.5	1.9	1.2	.7	2.7
3,000-3,499 GRAMSNUMBER		2,676	977	568	409	1,699
RATE		2.3	.9	. 5	. 4	1.5
3,500-3,999 GRAMSNUMBER RATE		1,524 1.6	568 . 6	344 .4	224	956 1.0

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND AGE AT DEATH:
UNITED STATES, 1998 BIRTH COHORT DATA
(INFANT DEATHS 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)

BIRTHWEIGHT AND RACE OF MOTHER	 LIVE BIRTHS 	INFANT	TOTAL NEONATAL 	EARLY NEONATAL	 LATE NEONATAL 	POST- NEONATAL
WHITE						
4,000-4,499 GRAMSNUMBER RATE	294,403	442 1.5	177 .6	106 .4	71 . 2	265 . 9
4,500-4,999 GRAMSNUMBER RATE	48,687	90 1.9	47 1.0	39 .8	8.2	43 . 9
5,000 GRAMS OR MORENUMBER RATE	5,350	23 4.4	15 2.9	12 2.3	. 6	8 1.5
NOT STATEDNUMBER	1,198	208 173.8	195 162.8	190 158.6	5 4.2	13 11.0

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND AGE AT DEATH:
UNITED STATES, 1998 BIRTH COHORT DATA
(INFANT DEATHS 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)

BIRTHWEIGHT AND RACE OF MOTHER	 LIVE BIRTHS 	INFANT	TOTAL NEONATAL I	EARLY NEONATAL	LATE NEONATAL	POST- NEONATAL
BLACK						
TOTAL (ALL BIRTHWEIGHTS)NUMBER		8,392	5,677	4,629	1,048	2,715
RATE		13.8	9.3	7.6	1.7	4.5
LESS THAN 2,500 GRAMSNUMBER RATE	79,772	6,165 77.3	4,934 61.8	4,148 52.0	785 9.8	1,231 15.4
LESS THAN 500 GRAMSNUMBER	,	2,206	2,172	2,106	65	34
RATE		854.1	840.7	815.4	25.3	13.3
500-749 GRAMSNUMBER	,	1,903	1,606	1,271	335	296
RATE		461.0	389.3	308.0	81.2	71.8
750-999 GRAMSNUMBER	- ,	555 143.6	378 98.0	249 64.6	129 33.4	176 45.7
1,000-1,249 GRAMSNUMBER	, .	283	172	118	54	110
RATE		70.3	42.9	29.3	13.6	27.5
1,250-1,499 GRAMSNUMBER		215	141	90	50	74
RATE		48.4	31.7	20.4	11.3	16.7
1,500-1,999 GRAMSNUMBER		439	229	156	73	210
RATE		28.5	14.9	10.1	4.7	13.7
2,000-2,499 GRAMSNUMBER		566	236	157	79	330
RATE		12.5	5.2	3.5	1.7	7.3
2,500-2,999 GRAMSNUMBER		805	250	140	110	555
RATE		5.7	1.8	1.0	.8	3.9
3,000-3,499 GRAMSNUMBER		815	228	121	107	587
RATE		3.5	1.0	.5	.5	2.5
3,500-3,999 GRAMSNUMBER	- ,	371	97	60	37	274
RATE		3.0	.8	. 5	.3	2.2

LIVE BIRTHS, INFANT DEATHS, AND INFANT MORTALITY RATES BY BIRTHWEIGHT, RACE OF MOTHER, AND AGE AT DEATH:
UNITED STATES, 1998 BIRTH COHORT DATA
(INFANT DEATHS 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)-Continued

BIRTHWEIGHT AND RACE OF MOTHER	 LIVE BIRTHS 	INFANT	TOTAL NEONATAL	 EARLY NEONATAL 	LATE NEONATAL	POST- NEONATAL
BLACK						
4,000-4,499 GRAMSNUMBER RATE		84 3.0	25 . 9	17 .6	. 3	59 2.1
4,500-4,999 GRAMSNUMBER		18 4.4	14 3.4	13 3.2	. 1 . 2	4 1.0
5,000 GRAMS OR MORENUMBER RATE		5 8.7	5 8.7	5 8.7	- -	-
NOT STATEDNUMBER		129 410.7	124 394.3	124 394.3	-	5 16.3

^{1/} INCLUDES RACES OTHER THAN WHITE AND BLACK

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LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
ALL RACES 1/,						
ALL BIRTHWEIGHTS						
LL CAUSESNUMBER RATE	3,941,553	28,197 715.4	18,874 478.9	15,039 381.5	3,836 97.3	9,323 236.5
CONGENITAL ANOMALIES (740-759)NUMBER RATE		6,134 155.6	4,538 115.1	3,469 88.0	1,069 27.1	1,597 40.5
PREMATURITY (765)NUMBER		4,070 103.3	4,018 101.9	3,930 99.7	88 2.2	52 1.3
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		2,081 52.8	176 4.5	21 .5	154 3.9	1,905 48.3
MATERNAL COMPLICATIONS (761)NUMBER RATE		1,340 34.0	1,334 33.8	1,318 33.4	16 .4	6
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		1,313 33.3	1,226 31.1	961 24.4	264 6.7	87 2.2
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		955 24.2	940 23.8	907 23.0	33 .8	15 . 4
INFECTIONS (771)NUMBER		811 20.6	764 19.4	345 8.8	418 10.6	48 1.2
ACCIDENTS (E800-E949)NUMBER		713 18.1	81 2.1	39 1.0	42 1.1	632 16.0
HYPOXIA AND ASPHYXIA (768)NUMBER		459 11.6	418 10.6	349 8.9	69 1.8	41 1.0
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		428 10.9	88 2.2	26 . 7	63 1.6	340 8.6
LL OTHER CAUSESNUMBER		9,893 251.0	5,292 134.3	3,674 93.2	1,618 41.0	4,601 116.7

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
ALL RACES 1/,						
LESS THAN 2,500 GRAMS						
ALL CAUSESNUMBER RATE	299,209	18,352 6,133.5	15,066 5,035.4	12,622 4,218.4	2,444 817.0	3,286 1,098.2
CONGENITAL ANOMALIES (740-759)NUMBER RATE		3,546 1,185.2	2,936 981.3	2,440 815.6	496 165.8	610 203.8
PREMATURITY (765)NUMBER RATE		3,892 1,300.8	3,844 1,284.6	3,757 1,255.5	87 29.0	49 16.3
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		408 136.3	34 11.5	3 1.0	31 10.5	374 124.8
MATERNAL COMPLICATIONS (761)NUMBER RATE		1,250 417.7	1,245 416.0	1,231 411.3	14 4.7	5 1.7
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		1,239 414.2	1,176 393.1	926 309.5	250 83.7	63 21.0
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		811 270.9	799 267.2	774 258.7	25 8.4	11 3.8
INFECTIONS (771)NUMBER RATE		676 225.8	644 215.3	293 98.0	351 117.3	31 10.5
ACCIDENTS (E800-E949)NUMBER		133 44.3	24 8.1	14 4.8	10 3.4	108 36.2
HYPOXIA AND ASPHYXIA (768)NUMBER RATE		218 72.9	209 69.8	188 62.7	21 7.1	9 3.1
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		192 64.1	54 18.0	20 6.5	34 11.5	138 46.1
ALL OTHER CAUSESNUMBER		5,988 2,001.3		2,976 994.7	1,124 375.7	1,887 630.8

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	TOTAL NEONATAL 	EARLY NEONATAL 	LATE NEONATAL 	 POST- NEONATAL
ALL RACES 1/,						
2,500 GRAMS $\overline{0}R$ MORE						
LL CAUSESNUMBER	3,640,324	9,472 260.2	3,458 95.0	2,076 57.0	1,381 37.9	6,014 165.2
CONGENITAL ANOMALIES (740-759)NUMBER		2,549 70.0	1,567 43.1	996 27.4	571 15.7	982 27.0
PREMATURITY (765)NUMBER		55 1.5	55 1.5	54 1.5	. 0	-
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		1,672 45.9	140 3.9	17 .5	123 3.4	1,532 42.1
MATERNAL COMPLICATIONS (761)NUMBER RATE		32 .9	31 .8	29 .8	. 1	.0
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		67 1.8	42 1.2	28 .8	14 .4	24 .7
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		105 2.9	101 2.8	92 2.5	. 2	. 1
INFECTIONS (771)NUMBER		133 3.6	116 3.2	51 1.4	65 1.8	16 . 4
ACCIDENTS (E800-E949)NUMBER		580 15.9	57 1.6	24 .7	32 .9	523 14.4
HYPOXIA AND ASPHYXIA (768)NUMBER RATE		230 6.3	200 5.5	152 4.2	48 1.3	29 .8
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		235 6.5	34 .9	6.2	28 .8	201 5.5
LL OTHER CAUSESNUMBER		3,814 104.8	1,113 30.6	625 17.2	488 13.4	2,701 74.2

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
ALL RACES 1/,						
NOT STATED BIRTHWEIGHT						
ALL CAUSESNUMBER RATE	2,020		350 17,348.3	340 16,849.9	10 498.4	23 1,155.8
CONGENITAL ANOMALIES (740-759)NUMBER RATE		39 1,944.1	34 1,694.9	32 1,595.9	2 99.0	5 249.1
PREMATURITY (765)NUMBER		122 6,045.3	119 5,894.3	119 5,894.3	-	3 151.1
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		1 51.1	1 51.1	1 51.1	-	-
MATERNAL COMPLICATIONS (761)NUMBER RATE		58 2,881.9	58 2,881.9	58 2,881.9	-	-
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		7 350.6	7 350.6	7 350.6	-	-
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		40 1,980.8	40 1,980.8	40 1,980.8	-	-
INFECTIONS (771)NUMBER		3 148.7	3 148.7	1 49.7	2 99.0	-
ACCIDENTS (E800-E949)NUMBER				-		-
HYPOXIA AND ASPHYXIA (768)NUMBER		11 554.0	9 453.4	9 453.4	-	2 100.6
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		1 50.8	-		-	1 50.8
ALL OTHER CAUSESNUMBER		91 4,496.8	79 3,892.6	73 3,592.2	6 300.4	12 604.2

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
WHITE, ALL BIRTHWEIGHTS						
ALL CAUSESNUMBER	3,118,727	18,460 591.9	12,328 395.3	9,724 311.8	2,604 83.5	6,132 196.6
CONGENITAL ANOMALIES (740-759)NUMBER		4,715 151.2	3,530 113.2	2,726 87.4	803 25.8	1,186 38.0
PREMATURITY (765)NUMBER		2,207 70.8	2,179 69.9	2,126 68.2	53 1.7	28 .9
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		1,372 44.0	124 4.0	13 . 4	111 3.6	1,248 40.0
MATERNAL COMPLICATIONS (761)NUMBER RATE		835 26.8	830 26.6	821 26.3	9.3	. 2
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		830 26.6	778 25.0	610 19.5	169 5.4	52 1.7
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		624 20.0	614 19.7	590 18.9	23 . 7	10 . 3
INFECTIONS (771)NUMBER		529 17.0	498 16.0	230 7.4	268 8.6	30 1.0
ACCIDENTS (E800-E949)NUMBER		475 15.2	66 2.1	31 1.0	35 1.1	409 13.1
HYPOXIA AND ASPHYXIA (768)NUMBER		321 10.3	292 9.4	241 7.7	51 1.6	28 . 9
PNEUMONIA AND INFLUENZA (480-487)NUMBER		261 8.4	62 2.0	20 .6	42 1.4	199 6.4
ALL OTHER CAUSES		6,291 201.7	3,355 107.6	2,317 74.3	1,039 33.3	2,936 94.1

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED)

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CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
WHITE, LESS THAN 2,500 GRAMS						
ALL CAUSESNUMBER	203,886	11,387 5,584.9	9,479 4,649.4	7,921 3,884.8	1,559 764.6	1,907 935.5
CONGENITAL ANOMALIES (740-759)NUMBER		2,684 1,316.4	2,269 1,112.8	1,910 936.8	359 175.9	415 203.6
PREMATURITY (765)NUMBER		2,101 1,030.4	2,074 1,017.5	2,022 991.7	53 25.8	26 12.9
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		229 112.4	26 12.9	-	26 12.9	203 99.5
MATERNAL COMPLICATIONS (761)NUMBER RATE		785 385.3	780 382.8	772 378.9	8 3.9	5 2.5
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		776 380.5	740 363.1	583 285.8	158 77.3	36 17.4
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		514 252.0	508 249.0	489 240.0	18 8.9	6 3.0
INFECTIONS (771)NUMBER		424 207.7	405 198.7	186 91.3	219 107.4	18 9.0
ACCIDENTS (E800-E949)NUMBER		83 40.7	19 9.5	11 5.5	8 3.9	64 31.2
HYPOXIA AND ASPHYXIA (768)NUMBER		133 65.2	129 63.2	116 56.7	13 6.4	4 2.0
PNEUMONIA AND INFLUENZA (480-487)NUMBER		110 53.8	37 18.0	14 7.1	22 10.9	73 35.8
ALL OTHER CAUSESNUMBER		3,549 1,740.6	2,492 1,222.1	1,817 891.0	675 331.2	1,057 518.4

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
WHITE, 2,500 GRAMS OR MORE						
ALL CAUSESNUMBER RATE	2,913,643	6,865 235.6	2,654 91.1	1,614 55.4	1,040 35.7	4,211 144.5
CONGENITAL ANOMALIES (740-759)NUMBER		2,002 68.7	1,235 42.4	791 27.2	444 15.2	767 26.3
PREMATURITY (765)NUMBER		38 1.3	38 1.3	38 1.3	-	-
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		1,143 39.2	98 3.4	13 .5	85 2.9	1,045 35.9
MATERNAL COMPLICATIONS (761)NUMBER RATE		22 .7	22 .7	21 .7	. 0	-
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		51 1.8	35 1.2	24 .8	11 .4	16 .6
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		83 2.9	79 2.7	74 2.5	5 . 2	. 1
INFECTIONS (771)NUMBER		104 3.6	92 3.2	43 1.5	49 1.7	12 . 4
ACCIDENTS (E800-E949)NUMBER		392 13.4	47 1.6	19 .7	27 . 9	345 11.8
HYPOXIA AND ASPHYXIA (768)NUMBER		180 6.2	157 5.4	118 4.1	38 1.3	23 .8
PNEUMONIA AND INFLUENZA (480-487)NUMBER		150 5.2	25 . 9	. 2	20 . 7	125 4.3
ALL OTHER CAUSESNUMBER		2,700 92.7	827 28.4	467 16.0	360 12.3	1,873 64.3

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

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CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
WHITE, NOT STATED BIRTHWEIGHT						
ALL CAUSESNUMBER RATE	1,198		195 16,278.9	190 15,859.1	5 419.8	13 1,101.0
CONGENITAL ANOMALIES (740-759)NUMBER		29 2,434.8	26 2,182.2	25 2,098.7	1 83.5	3 252.6
PREMATURITY (765)NUMBER		68 5,711.9	66 5,543.4	66 5,543.4		2 168.5
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		-	-	-	-	-
MATERNAL COMPLICATIONS (761)NUMBER		28 2,304.0	28 2,304.0	28 2,304.0	-	-
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		3 255.2	3 255.2	3 255.2	-	-
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		27 2,243.8	27 2,243.8	27 2,243.8	-	-
INFECTIONS (771)NUMBER RATE		1 83.7	1 83.7	1 83.7		-
ACCIDENTS (E800-E949)NUMBER		-	-		-	-
HYPOXIA AND ASPHYXIA (768)NUMBER		8 678.1	7 594.6	7 594.6	-	1 83.5
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		1 85.7	-		-	1 85.7
ALL OTHER CAUSESNUMBER		43 3,582.5	37 3,071.9	33 2,735.6	4 336.3	6 510.6

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS WEIGHTED)

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CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
BLACK, ALL BIRTHWEIGHTS						
ALL CAUSESNUMBER RATE	609,902	8,392 1,376.0	5,677 930.8	4,629 759.0	1,048 171.9	2,715 445.2
CONGENITAL ANOMALIES (740-759)NUMBER		1,091 178.9	766 125.6	567 93.0	198 32.5	326 53.4
PREMATURITY (765)NUMBER		1,686 276.4	1,662 272.5	1,630 267.2	32 5.3	23 3.8
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		613 100.6	39 6.4	6 1.0	33 5.4	574 94.1
MATERNAL COMPLICATIONS (761)NUMBER RATE		444 72.7	443 72.6	438 71.8	. 8	. 2
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		436 71.5	402 66.0	315 51.6	88 14.4	33 5.5
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		299 49.0	294 48.1	285 46.7	9 1.5	. 8
INFECTIONS (771)NUMBER		248 40.6	231 38.0	101 16.5	131 21.5	16 2.7
ACCIDENTS (E800-E949)NUMBER		209 34.2	11 1.8	7 1.2	. 7	198 32.4
HYPOXIA AND ASPHYXIA (768)NUMBER		113 18.6	103 16.9	86 14.1	17 2.8	10 1.7
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		132 21.6	22 3.6	. 5 . 8	17 2.8	109 18.0
ALL OTHER CAUSESNUMBER RATE		3,122 511.9	1,703 279.3	1,190 195.1	513 84.2	1,419 232.6

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
BLACK, LESS THAN 2,500 GRAMS						
ALL CAUSESNUMBER	79,772		4,934 6,184.6	4,148 5,200.0	785 984.6	1,231 1,543.4
CONGENITAL ANOMALIES (740-759)NUMBER		677 848.4	519 650.1	407 509.9	112 140.2	158 198.3
PREMATURITY (765)NUMBER		1,629 2,041.6	1,606 2,013.5	1,574 1,973.2	32 40.4	22 28.0
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		171 213.9	7 8.9	2 2.6	5 6.3	164 205.0
MATERNAL COMPLICATIONS (761)NUMBER RATE		411 515.3	411 515.3	407 510.2	4 5.0	-
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		417 522.1	391 490.3	306 384.1	85 106.2	25 31.8
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		271 340.1	266 333.7	259 324.9	7 8.9	5 6.4
INFECTIONS (771)NUMBER		225 281.5	212 266.2	95 118.5	118 147.7	12 15.2
ACCIDENTS (E800-E949)NUMBER		47 58.4	4 5.1	3 3.8	1 1.3	43 53.3
HYPOXIA AND ASPHYXIA (768)NUMBER		69 86.4	65 81.3	57 71.2	8 10.1	4 5 . 1
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		68 85.2	14 17.8	4 5.2	10 12.6	54 67.3
ALL OTHER CAUSESNUMBER		2,182 2,735.3	1,438 1,802.4	1,034 1,296.5	404 505.9	744 932.9

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
BLACK, 2,500 GRAMS OR MORE						
ALL CAUSESNUMBER	529,816	2,099 396.1	620 117.0	357 67.4	263 49.6	1,479 279.1
CONGENITAL ANOMALIES (740-759)NUMBER		410 77.3	243 45.9	157 29.5	87 16.3	166 31.4
PREMATURITY (765)NUMBER		11 2.2	11 2.2	11 2.2	-	-
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		442 83.4	31 5.9	3 .6	28 5.3	411 77.5
MATERNAL COMPLICATIONS (761)NUMBER RATE		7 1.3	6 1.2	5 1.0	. 2	1.2
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		15 2.9	7 1.4	. 8	. 6	8 1.5
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		15 2.9	15 2.9	13 2.5	. 4	-
INFECTIONS (771)NUMBER		23 4.4	19 3.6	6 1.1	13 2.5	. 8
ACCIDENTS (E800-E949)NUMBER		162 30.6	7 1.3	. 8	. 6	155 29.3
HYPOXIA AND ASPHYXIA (768)NUMBER		41 7.8	36 6.9	27 5.2	9 1.7	5 1.0
PNEUMONIA AND INFLUENZA (480-487)NUMBER		64 12.0	8 1.5	1.2	7 1.3	56 10.5
ALL OTHER CAUSES		908 171.3	235 44.4	125 23.6	110 20.7	673 126.9

LIVE BIRTHS BY BIRTHWEIGHT AND RACE OF MOTHER AND INFANT DEATHS AND INFANT MORTALITY RATES BY AGE AT DEATH, BIRTHWEIGHT, AND RACE OF MOTHER FOR 10 MAJOR CAUSES OF INFANT DEATH: UNITED STATES, 1998 BIRTH COHORT DATA

(INFANT DEATHS 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)

CAUSE OF DEATH, BIRTHWEIGHT, AND RACE OF MOTHER	LIVE BIRTHS	INFANT DEATHS	 TOTAL NEONATAL 	 EARLY NEONATAL 	 LATE NEONATAL 	 POST- NEONATAL
BLACK, NOT STATED BIRTHWEIGHT						
ALL CAUSESNUMBER RATE	314		124 39,431.2	124 39,431.2	-	5 1,633.9
CONGENITAL ANOMALIES (740-759)NUMBER RATE		5 1,613.2	4 1,292.7	4 1,292.7	-	1 320.4
PREMATURITY (765)NUMBER		46 14,502.4	45 14,173.7	45 14,173.7	-	1 328.7
SUDDEN INFANT DEATH SYNDROME (798.0)NUMBER RATE		1 328.5	1 328.5	1 328.5	-	-
MATERNAL COMPLICATIONS (761)NUMBER RATE		26 8,133.5	26 8,133.5	26 8,133.5	-	-
RESPIRATORY DISTRESS SYNDROME (769)NUMBER RATE		4 1,282.0	4 1,282.0	4 1,282.0	-	-
COMPLICATIONS OF PLACENTA, ETC. (762)NUMBER RATE		12 3,857.2	12 3,857.2	12 3,857.2	-	-
INFECTIONS (771)NUMBER			-			-
ACCIDENTS (E800-E949)NUMBER			-		-	-
HYPOXIA AND ASPHYXIA (768)NUMBER		3 976.7	2 648.1	2 648.1	-	1 328.7
PNEUMONIA AND INFLUENZA (480-487)NUMBER RATE		-	-	-	-	-
ALL OTHER CAUSESNUMBER		33 10,371.5	31 9,715.5	31 9,715.5		2 656.0

^{1/} INCLUDES RACES OTHER THAN WHITE AND BLACK

UNLINKED INFANT DEATHS BY RACE, AGE AT DEATH, AND STATE OF RESIDENCE: UNITED STATES, PUERTO RICO, VIRGIN ISLANDS, GUAM -- 1998 BIRTH COHORT DATA

(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)

(DATA IN THIS TABLE IS FOR INFANT DEATHS IN 1998 THAT ARE NOT INCLUDED IN THE LINKED FILE BECAUSE THEY WERE NOT LINKED WITH THEIR CORRESPONDING BIRTH CERTIFICATES.

SEE METHODOLOGY SECTION.

Area and Race of Child 1/	Infant	Total NeoNatal	Early NeoNatal	Late NeoNatal	Post- NeoNatal
United States 2/	478	342	306	36	136
WHITE	326	228	206	22	98
BLACK	133	101	88	13	32
Alabama	1	1	-	1	-
WHITE	1	1	_	1	_
BLACK	_	_	_	-	_
Alaska	1	_	_	_	1
WHITE	1	_	_	_	1
BLACK	_	_	_	_	-
Arizona	11	4	4	_	7
WHITE	9	4	4	_	5
BLACK	1	-	-	_	1
Arkansas	9	5	4	1	4
WHITE	9	5	4	1	4
BLACK	-	-	-	-	-
California	111	97	85	12	14
WHITE	79	67	56	11	12
BLACK	26	24	24		2
Colorado	1			_	1
WHITE	1	_	_	_	1
BLACK	_	_	_	_	-
Connecticut	3	1	1	_	2
WHITE	3	1	1	_	2
BLACK	-	_	-	_	-
Delaware	_	_	_	_	_
WHITE	_	_	_	_	_
BLACK	-	-	-	_	-
District of Columbia	1	_	-	_	1
WHITE	_	_	_	_	_
BLACK	1	_	-	_	1
Florida	2	_	-	_	2
WHITE	1	_	-	_	1
BLACK	1	_	_	-	1
Georgia	-	_	_	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Hawaii	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Idaho	3	1	1	-	2
WHITE	3	1	1	-	2
BLACK	-	-	-	-	-
Illinois	22	13	9	4	9
WHITE	11	7	6	1	4
BLACK	9	5	2	3	4
Indiana	11	10	8	2	1
WHITE	6	5	5	-	1
BLACK	4	4	2	2	-
Iowa	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-

UNLINKED INFANT DEATHS BY RACE, AGE AT DEATH, AND STATE OF RESIDENCE: UNITED STATES, PUERTO RICO, VIRGIN ISLANDS, GUAM -- 1998 BIRTH COHORT DATA

(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)

(DATA IN THIS TABLE IS FOR INFANT DEATHS IN 1998 THAT ARE NOT INCLUDED IN THE LINKED FILE BECAUSE THEY WERE NOT LINKED WITH THEIR CORRESPONDING BIRTH CERTIFICATES.

SEE METHODOLOGY SECTION.

Area and Race of Child 1/	Infant	Total NeoNatal	Early NeoNatal	Late NeoNatal	Post- NeoNatal
Kansas	3	1	1	-	2
WHITE	3	1	1	_	2
BLACK	-	-	-	_	-
Kentucky	8	7	7	_	1
WHITÉ	6	5	5	-	1
BLACK	2	2	2	-	-
Louisiana	12	7	7	-	5
WHITE	4	2	2	-	2
BLACK	8	5	5	-	3
Maine	2	2	2	-	-
WHITE	2	2	2	-	-
BLACK	-	-	-	-	-
Maryland	7	2	2	-	5
WHITE	3	=	-	-	3
BLACK	4	2	2	-	2
Massachusetts	9	8	7	1	1
WHITE	6	6	5	1	-
BLACK	3	2	2	-	1
Michigan	13	10	9	1	3
WHITE	5 8	2 8	2 7	- 1	3
BLACK	•	ō	/	_	-
Minnesota WHITE	-	-	-	-	-
BLACK	-	-	_	-	_
Mississippi	2	_	_	_	2
WHITE	2	_	_	_	2
BLACK	-	_	_	_	-
Missouri	8	8	8	_	_
WHITE	3	3	3	_	-
BLACK	5	5	5	-	-
Montana	2	=	-	-	2
WHITE	2	-	-	-	2
BLACK	-	-	-	-	
Nebraska	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Nevada	8	4	3	1	4
WHITE	7	4	3	1	3
BLACK	1	=	-	-	1
New Hampshire	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
New Jersey	14	11	11	-	3
WHITE	7	6	6	-	1
BLACK	7	5	5	- 1	2
New Mexico WHITE	10	8	7 3	1 1	2
	5 2	4 2	2	_	1
BLACK	۷	2	۷	-	-

UNLINKED INFANT DEATHS BY RACE, AGE AT DEATH, AND STATE OF RESIDENCE: UNITED STATES, PUERTO RICO, VIRGIN ISLANDS, GUAM -- 1998 BIRTH COHORT DATA

(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)

(DATA IN THIS TABLE IS FOR INFANT DEATHS IN 1998 THAT ARE NOT INCLUDED IN THE LINKED FILE BECAUSE THEY WERE NOT LINKED WITH THEIR CORRESPONDING BIRTH CERTIFICATES.

SEE METHODOLOGY SECTION.

Area and Race of Child 1/	Infant	Total NeoNatal	Early NeoNatal	Late NeoNatal	Post- NeoNatal
New York State	16	7	6	1	9
WHITE	12	5	5	_	7
BLACK	4	2	1	1	2
New York City	_	_	-	_	-
WHITE	_	_	-	_	_
BLACK	_	_	-	_	_
North Carolina	18	8	8	_	10
WHITE	8	5	5	_	3
BLACK	10	3	3	_	7
North Dakota	3	-	-	_	3
WHITE	2	_	-	_	2
BLACK	_	_	-	_	-
Ohio	_	_	-	_	-
WHITE	_	-	-	_	-
BLACK	_	-	-	_	-
Oklahoma	59	43	40	3	16
WHITE	45	31	29	2	14
BLACK	14	12	11	1	2
Oregon	31	26	23	3	5
WHITE	21	18	17	1	3
BLACK	6	6	4	2	-
Pennsylvania	1	-	-	-	1
WHITE	1	-	-	-	1
BLACK	-	-	-	-	-
Rhode Island	15	12	11	1	3
WHITE	8	6	6	-	2
BLACK	6	5	4	1	1
South Carolina	-	-	-	-	-
WHITE	-	-	-	-	=-
BLACK	-	-	-	-	-
South Dakota	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Tennessee	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Texas	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Utah	46	36	32	4	10
WHITE	37	29	27	2	8
BLACK	9	7	5	2	2
Vermont	1	1	1	-	-
WHITE	1	1	1	-	-
BLACK	-	-	-	-	-
Virginia	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-

UNLINKED INFANT DEATHS BY RACE, AGE AT DEATH, AND STATE OF RESIDENCE: UNITED STATES, PUERTO RICO, VIRGIN ISLANDS, GUAM -- 1998 BIRTH COHORT DATA

(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)

(DATA IN THIS TABLE IS FOR INFANT DEATHS IN 1998 THAT ARE NOT INCLUDED IN THE LINKED FILE BECAUSE THEY WERE NOT LINKED WITH THEIR CORRESPONDING BIRTH CERTIFICATES.

SEE METHODOLOGY SECTION.

Area and Race of Child 1/	Infant	Total NeoNatal	Early NeoNatal	Late NeoNatal	Post- NeoNatal
Washington	7	5	5		7
WHITE	5	3	3	_	2
BLACK	2	2	2	_	-
West Virginia	4	3	3	-	1
WHITE	4	3	3	-	1
BLACK	-	-	-	-	-
Wisconsin	3	1	1	-	2
WHITE	3	1	1	-	2
BLACK	-	-	-	-	-
Wyoming	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Puerto Rico 3/	-	-	-	-	-
WHITE	-	-	-	-	-
BLACK	-	-	-	-	-
Virgin Islands 3/	4	4	4	-	-
WHITE	4	4	4	-	-
BLACK	-	-	-	-	-
Guam 3/	3	1	1	-	2
WHITE	1	-	-	-	1
BLACK	2	1	1	-	1

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

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

^{/3} Data from the Puerto Rico, Virgin Islands, and Guam file.

Chapter 5

Ninth Revision 61 Causes of Death Adapted for use by DVS ST: 1 = Subtotal Limited: Sex: 1 = Males; 2 = Females Length = of Cause Title Age: 1 = 5 & Over; 2 = 10-54; 3 = 28 Days & Over

**** Cause Subtotals are not Identified in this File *****

61 Recode	S Limited Le	
010 020 030	0:	39 Certain intestinal infections (008-009) 20 Whooping cough (033) 29 Meningococcal infection (036)
040	3 0:	16 Septicemia (038)
050		24 Viral diseases (045-079)
060		25 Congenital syphilis (090)
070	1:	10 Remainder of infectious and parasitic diseases (001-007,010-032,034-035,037,039-041, *042-*044,080-088,091-139)
080	08	89 Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues (140-208)
090	10	08 Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature (210-239)
100	0:	30 Diseases of thymus gland (254)
110	0:	23 Cystic fibrosis (277.0)
120	0!	Diseases of blood and blood-forming organs (280-289)
130	0:	20 Meningitis (320-322)
140	0!	59 Other diseases of nervous system and sense organs (323-389)
150	04	44 Acute upper respiratory infections (460-465)
160	04	42 Bronchitis and bronchiolitis (466,490-491)
170	1 0:	Pneumonia and influenza (480-487)
180		21 Pneumonia (480-486)
190	0:	17 Influenza (487)
200	0	Remainder of diseases of respiratory system (470-478, 492-519)
210	0 !	93 Hernia of abdominal cavity and intestinal obstruction without mention of hernia (550-553,560)
220	0'	75 Gastritis, duodenitis, and noninfective enteritis and colitis (535,555-558)
230	0	67 Remainder of diseases of digestive system (520-534,536-543,562-579)
240 250		Congenital anomalies (740-759) Anencephalus and similar anomalies (740)

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260		020	Spina bifida (741)
270		034	Congenital hydrocephalus (742.3)
280		092	Other congenital anomalies of central nervous system and eye (742.0-742.2,742.4-742.9,743)
290		041	Congenital anomalies of heart (745-746)
300		056	Other congenital anomalies of circulatory system (747)
310		050	Congenital anomalies of respiratory system (748)
320		052	Congenital anomalies of digestive system (749-751)
330		056	Congenital anomalies of genitourinary system (752-753)
340		058	Congenital anomalies of musculoskeletal system (754-756)
350		025	Down's syndrome (758.0)
360		043	Other chromosomal anomalies (758.1-758.9)
370		062	All other and unspecified congenital anomalies (744,757,759)
380	1	064	Certain conditions originating in the perinatal period (760-779)
390		091	Newborn affected by maternal conditions which may be unrelated to present pregnancy (760)
400		063	Newborn affected by maternal complications of pregnancy (761)
410		074	Newborn affected by complications of placenta, cord, and membranes (762)
420		069	Newborn affected by other complications of labor and delivery (763)
430		048	Slow fetal growth and fetal malnutrition (764)
440		077	Disorders relating to short gestation and unspecified low birthweight (765)
450		065	Disorders relating to long gestation and high birthweight (766)
460		020	Birth trauma (767)
470	1	047	Intrauterine hypoxia and birth asphyxia (768)
480		051	Fetal distress in liveborn infant (768.2-768.4)
490		032	Birth asphyxia (768.5-768.9)
500		037	Respiratory distress syndrome (769)
510		047	Other respiratory conditions of newborn (770)
520		051	Infections specific to the perinatal period (771)
530		027	Neonatal hemorrhage (772)
540		094	Hemolytic disease of newborn, due to isoimmunization, and other perinatal jaundice (773-774)
550		088	Syndrome of "infant of a diabetic mother" and neonatal diabetes mellitus (775.0-775.1)
560		040	Hemorrhagic disease of newborn (776.0)
570		098	All other and ill-defined conditions originating in the perinatal period (775.2-775.9,776.1-779)

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580	1	053	Symptoms, signs, and ill-defined conditions (780-799)
590		038	Sudden infant death syndrome (798.0)
600		075	Symptoms, signs, and all other ill-defined
			conditions (780-797,798.1-799)
610	1	041	Accidents and adverse effects (E800-E949)
620		118	Inhalation and ingestion of food or other object
			causing obstruction of respiratory tract or
			suffocation (E911-E912)
630		042	Accidental mechanical suffocation (E913)
640		067	Other accidental causes and adverse
			effects (E800-E910,E914-E949)
650	1	020	Homicide (E960-E969)
660		047	Child battering and other maltreatment (E967)
670		038	Other homicide (E960-E966,E968-E969)
680		027	All other causes (Residual)

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