
Instruction Manual

Part 11

Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths
Effective 2023

From the CENTERS FOR DISEASE CONTROL AND PREVENTION/ National Center for Health Statistics

Instruction Manual

Part 11

Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths Effective 2023

Vital Statistics
Data Preparation

U.S. DEPARTMENT of HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
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Questions concerning interpretation of mortality data should be referred to the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics, 3311 Toledo Road, Hyattsville, Maryland 20782.

Errata Notice: This manual includes additional codes to Table J 'Infrequent and Rare Cause-of-Death Edits [...] which were left out in error from the previous version of the Manual. Codes A39.0 and A39.4 have been added as a revision to Table J on page 52 in **BOLD** typeface to indicate these are newly added in 2023.

CONTENTS

<u>Section</u>		<u>Page</u>
I	Introduction.....	1
	A. Purpose of This Manual	1
	B. Revisions from Previous Manual.....	2
II	Mortality File Computer Edits.....	3
	A. Demographic Items	4
	B. Medical Items	4
	1. Codes Valid for Both Underlying and Multiple Causes of Death.....	4
	2. Codes Valid for Multiple Cause Only.....	4
	3. Created Codes	4
	C. Composite Medical/Demographic Record.....	6
	1. Age/Cause, Sex/Cause Consistency Edits.....	6
	2. Edits on Manner of Death.....	6
	3. Infrequent and Rare Cause-of-Death Edits	7
	4. Place-of-Occurrence Edits for Selected External Causes of Death.....	7
III	Tables	
	A. Demographic Edits and ICD-10 Cause-of-Death Edits for Final Mortality File and Provisional mortality data stream and Resulting Action if a Record Fails the Edit	8
	B. Edits for Demographic Items on U.S. Standard Certificate	9
	C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification.....	18
	D. ICD-10 Nature of Injury Codes Valid for Multiple Cause Classification Only (From Chapter XIX, Injury, Poisoning and Certain Other Consequences of External Causes).....	27

E. ICD-10 Codes Valid for Multiple Cause Classification Only (From Chapters I-XVIII and XX).....	28
F. Created Codes and their Complementary Valid ICD-10 Codes	29
G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification.....	30
H. Age/Cause, Sex/Cause Consistency Edits for ICD-10 Codes Valid for Multiple Cause-of-Death Classification Only	50
I. Age and Cause Consistency Edits for "Manner of Death" Variable	51
J. Infrequent and Rare Cause-of-Death Edits for Underlying and Multiple Cause-of-Death Classification	52
K. Place-of-Occurrence Edits for Selected External Causes of Death (ICD-10 W00-Y34, except Y06._, Y07._)	54
L. Edits on checkbox item number 36 ("IF FEMALE") used to classify pregnancy status of female decedent.....	55
IV Fetal Death File Cause-of-Death Computer Edits	57
A. Medical Items	57
1. Codes Valid for Causes of Fetal Death	57
2. Created Codes	57
3. Sex/Cause Consistency Edits	57
4. Plurality/Cause Consistency Edits	57

Section on the Fetal Death File

<u>Section</u>	<u>Page</u>
V Fetal Death File Cause-of-Death Computer Edits.....	57
A. Medical Items	57
1. Codes Valid for Causes of Fetal Death	57
2. Created Codes	57
3. Sex/Cause Consistency Edits.....	57
4. Plurality/Cause Consistency Edits	57
VI Fetal Death File Tables	
M. ICD-10 Codes Valid for Causes of Fetal Death.....	58
N. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Causes of Fetal Death	56
Appendix I	
Bridging of Multiple Race Data into a Single Race Category	71

VITAL STATISTICS COMPUTER EDITS
FOR
MORTALITY DATA, EFFECTIVE 2023

I. INTRODUCTION

A. Purpose of This Manual

This manual presents a comprehensive description of the computer edits used by the National Center for Health Statistics (NCHS) in processing mortality data. **Relative to the last revision published[†], this manual includes edits that are effective for data year 2023.** The edits include both medical edits for the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems, Corrected and Updated by NCHS (ICD-10) and demographic edits. Edits for **two** different data files are discussed in this manual:

- (1) the final mortality file which consists of death certificates filed for all deaths occurring in the United States in a calendar year. Depending on the type of edit, edits might be performed as a single run on the whole file once it is “cut” (closed to additional record entries) for the calendar year, or they might be applied in a continuous manner on records as they are being received from the states and processed by NCHS.
- (2) the fetal death file which is based on reports of fetal death received by NCHS from State registration offices. All 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam participate in the fetal-death reporting system. The U.S. Standard Report of Fetal Death issued by the Public Health Service (last revision 2003) served as a model to attain uniformity in the contents of documents used to collect fetal mortality information. The fetal death file is separate from the mortality file discussed above.

[†] “Instruction Manual Part 11: Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths, Effective 2020.” https://www.cdc.gov/nchs/data/dvs/manuals/2020_PT11_B.pdf

Edits used for processing of the final mortality file are likely to be of interest to researchers in the field and other users of these data. The file is generated through a series of processing steps including data collection, data entry, and computer processing. Editing of the coded data to assure code validity and consistency among variables is carried out at both the data entry and server processing stages. The data entry edits, performed either manually or interactively on a data entry computer, enable detection and correction of major inconsistencies at the point of data entry. Edits applied after data are received by NCHS utilize greater computer capability to provide a more comprehensive edit, yet generally require reject reconciliation for correction of errors. Thus, the data entry edits are composed of a small selective subset of these more comprehensive edits. This manual does not list data entry edits.

Computer edits are performed at strategic locations (appropriate to their function and application) within the processing flow. They are applied only after the data have already passed key entry quality control standards and key entry edit criteria.

A. Revisions from Previous Manual

Codes and text that have been deleted from tables have been ~~struck out~~ and the text color appears lighter. Codes and text added are shown in **bold print**. Following is a summary of the major changes:

1. The following code has been added to Table E “ICD 10 Codes Valid for Multiple Cause Classification Only (From Chapters I XVIII and XX)": U09.9 (Post COVID-19 condition, unspecified).
2. The following codes have been added to Table J “Infrequent and Rare Cause of Death Edits for Underlying and Multiple Cause of Death Classification": A39.0 (Meningococcal meningitis) and A39.4 (Meningococcaemia, unspecified).

II. MORTALITY FILE COMPUTER EDITS

The final mortality file is used to produce annual detailed tabulations of demographic and geographic data and contains both underlying and multiple cause-of-death data. The demographic and medical data are entered at the jurisdictional level (in most cases, in Electronic Death Registration systems). In most cases, the data come to NCHS together as a single record even though demographic data and medical data are processed separately once the records arrive at NCHS. The resultant demographic record is then established as a master control record in checks of file completeness and subsequent edits of the geographic, demographic, and control variables. On a separate track, the medical data are verified. Edits are then applied to check code validity for each variable. Finally, the demographic and medical data are merged into one composite record at which point demographic/medical consistency edits are applied. In addition, this stage rechecks medical code validity and lists rare causes for review.

Since NCHS receives the death records on a flow basis, all of the above edits are performed on a continuous basis and records that fail the edits are adjudicated on a continuous basis. At the time the final mortality file is closed (within 9 months after the end of the data year), all records have been included in the file and adjudicated.

It should be noted that at many points during the processing of the file computer software will reject records for reasons other than failure to meet the edit criteria in this manual. In particular, the software systems that automatically code and classify the causes of death may reject records for resolution of issues which cannot be handled automatically.

The automated edits are designed to (1) assure code validity for each variable and (2) verify codes or code combinations which are considered either impossible or unlikely occurrences. Additionally, for certain demographic variables, the edits convert codes which are unacceptable for statistical analysis to acceptable codes. In edit failures, the proper code is determined in one of two ways. In specific situations, the proper code is imputed or automatically generated without reference to the source certificate. In other situations, the record is rejected and listed for adjudication of the codes with the information in the source document and/or with the State health department.

The kind of action is dependent on the type of edit ("conditional" versus "absolute"). Edits for unlikely occurrences (conditional edits) are always checked with the source document. When a record is rejected, the corrected record is once again processed through the edits to verify passage of the edit (conditional edits are deactivated in the second pass). The edits and their resulting actions are summarized in table A.

A detailed description of the computer edits is provided below.

A. Demographic Items

Table B provides, for each demographic variable, the edit criteria (if any) which are applied to each value of the variable. This table generally follows the variable structure and value criteria defined by the U.S. Standard Certificate of Death.

Failed edits are identified in terms of whether the results are imputed or rejected for adjudication. For example, records having failed edits on the “place of death” (occurrence) and “residence of decedent” items are rejected and are listed for reference to the source document to establish the proper code assignment.

B. Medical Items

Valid cause-of-death codes in ICD-10 are categorized in terms of their validity for underlying and multiple cause-of-death classification.

1. Codes Valid for Both Underlying and Multiple Causes of Death

Table C lists the codes valid for both underlying and multiple cause classification.

2. Codes Valid for Multiple Cause Only

Tables D and E list the ICD-10 codes which are valid for multiple cause coding but not for underlying cause coding. Table D contains the Nature of Injury codes from Chapter XIX, Injury, poisoning and certain other consequences of external causes (S00-T98).

Table E lists other codes in ICD-10 Chapters I-XVIII and XX which are valid for multiple cause coding only. Included in this group are Postprocedural endocrine, metabolic, nervous system, eye, adnexa, ear, mastoid process, circulatory system, respiratory, digestive system, musculoskeletal, and genitourinary system disorders, not elsewhere classified. Also included in this group are Complications following abortion and ectopic and molar pregnancy. The rules for underlying cause-of-death classification prefer other codes over those listed in this table. (For more detail, see Part 2a of this Vital Statistics Instruction Manual series.)

3. Created Codes

Table F contains a list of special five-digit codes (plus R97) and their complementary valid ICD-10 codes. The created codes are used at the stage medical conditions are coded. They have been created to facilitate automated identification of causal and modification relationships between certain medical conditions when they are processed by the computer

systems that code and classify the causes of death. After they have served this purpose, they are converted to their complementary valid ICD-10 codes and do not appear on the final master death file or in NCHS tabulations of causes of death. Further explanation of the use of these codes may be found in Parts 2b and 2c of this Vital Statistics Instruction Manual series.

C. Composite Medical/Demographic Record

After the demographic and medical data are merged, the following edits are performed:

1. Age/Cause, Sex/Cause Consistency Edits

The purpose of this computer edit is to maintain consistency between a reported underlying or multiple cause of death and the age and/or sex of the decedent. Table G lists the consistency edits applicable to codes given earlier in Table C (codes valid for both underlying and multiple causes of death). Table H lists consistency edits applicable to codes given earlier in Tables D and E (codes valid for multiple cause coding only). The limitations embody the concept that certain combinations of cause of death with age or sex are either impossible (absolute limitation) or that the combinations are highly improbable (conditional limitation). The causes of death shown in these lists include age and/or sex absolute or conditional limitations explicit in ICD-10. Additional conditional limitation edits are applied to ICD-10 categories where occurrence of the category with particular age/sex combinations is considered to be highly improbable or where experience has shown that a particular cause is especially prone to coding error. In general, the source document is examined to determine if the medical and demographic data are accurately coded based on reporting. Where inaccurate, the codes are corrected. When coded data agree with reported information, no change is made if the edit is conditional in nature. If the edit is absolute, the age (or sex) is arbitrarily retained as coded, and the cause(s) are changed to the minimum necessary to pass the edit.

2. Edits on Manner of Death

Table I contains a list of edits performed on values of the variable "Manner of Death," as appears on item 37 of the 2003 revision of the U.S. Standard Certificate of Death. The purpose of these edits is to maintain consistency between the reported manner of death (natural, accident, suicide, homicide, pending investigation, cannot be determined) and the age of the decedent and the reported underlying cause of death.

3. Infrequent and Rare Cause-of-Death Edits

Table J contains a list of infrequent and rare causes of death in the United States. These causes of death occur rarely and/or present threats to public health in the United States. As a result, each case should be verified to make sure there was no error in certification. When NCHS requests confirmation of a rare cause of death, the Vital Statistics Cooperative Program (VSCP) project director should work with staff to verify that the cause-of-death coding is correct and obtain corroboration from the State Health Officer before signing the confirmation letter. A notation of confirmation should also be recorded on the copy of the certificate sent to NCHS. In the absence of this notation, the NCHS coder will code the disease as stated; the VSCP project officer will be contacted at the time of reconciliation of rejected data records by control cycle to confirm the accuracy of the certification.

4. Place-of-Occurrence Edits for Selected External Causes of Death

Table K lists the place-of-occurrence edits for selected external causes of death (ICD-10 W00-Y34, except Y06._ and Y07._) that may be either an underlying or a multiple cause of death. The table includes valid place-of-occurrence codes that denote the place where the external cause of death occurred. For a listing of place- of-occurrence codes and their definitions see ICD-10, Vol. 1, in the beginning of Chapter XX.

Table A. Demographic Edits and ICD-10 Cause-of-Death Edits for the Mortality File and the Resulting Action if a Record Fails the Edit (impute; reject and adjudicate; or delete the record)

Edit table	Edit	Resulting Action	
		Impute	Reject
<i>Demographic</i>			
B	All items, except Place of death and Residence of decedent	X	
B	Place of death (State)		X
B	Place of death (county)		X
B	Residence of decedent (State)		X
B	Residence of decedent (county/city)		X
<i>Cause-of-death</i>			
C	ICD-10 codes valid for underlying and multiple causes		X
D	ICD-10 nature-of-injury codes valid for multiple causes only		X
E	ICD-10 codes valid for multiple causes only		X
G	Age/cause and sex/cause consistency edits for ICD-10 codes valid for both underlying and multiple causes (absolute)		X
G	Age/cause and sex/cause consistency edits for ICD-10 codes valid for both underlying and multiple causes (conditional)		X
H	Age/cause and sex/cause consistency edits for ICD-10 codes valid for multiple causes only (absolute)		X
H	Age/cause and sex/cause consistency edits for ICD-10 codes valid for multiple causes only (conditional)		X
I	Age and Cause Consistency Edits for "Manner of Death" Variable	X	
J	Infrequent and rare cause-of-death edits for underlying and multiple cause-of-death		X
K	Place-of-occurrence edits for selected external causes of death	X	

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit</u> <u>Corrected By</u>
State of Death	Code must be valid FIPS value (section II, Part 8A manual).	Reject for correction
Sex	Code must be valid ('M', 'F') and other than 'Unknown' ('U').	Imputation: If last digit of certificate number is odd number, sex is assigned female code. If last digit of certificate number is even number, sex is assigned male code.

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format
Continued

Variable: Decedent's Age:

IF UNIT OF AGE IS:	AND NO. OF UNITS IS:	THEN FINAL EDITED AGE IS:
--------------------	----------------------	------------------------------

9 (not classifiable)	Anything -----)
Codes 1-6	000 -----)
Code 1 (years)	Greater than 135 -----)
Code 2 (months)	Greater than 023 -----) 9999 (not
Code 4 (days)	Greater than 060 -----	classifiable)
Code 5 (hours)	Greater than 072 -----)
Code 6 (minutes)	Greater than 095 -----)
Code 1 (years)	001-135	1001-1135
Code 2 (months)	001-011	2001-2011
Code 2 (months)	012-023	1001 (1 year)
Code 4 (days)	001-027	4001-4027
" " "	028-059	2001 (1 month)
" " "	060	2002 (2 months)
Code 5 (hours)	001-023	5001-5023
Code 5 (hours)	024-047	4001 (1 day)
Code 5 (hours)	048-071	4002 (2 days)
Code 5 (hours)	072	4003 (3 days)
Code 6 (minutes)	001-059	6001-6059
Code 6 (minutes)	60-95	5001 (1 hour)
Codes 1-6 (years-minutes)	999 (no. of units unknown/ not classifiable)	1-6, 999*

*In the age reencoding process, unknown number of months is allocated to 1 month; unknown number of days is allocated to 1 day; unknown number of hours is allocated to 1 hour; unknown number of minutes is allocated to under 1 hour. If age of decedent is not stated, age is derived by referring to date of birth and date of death.

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit</u> <u>Corrected By</u>
Country of Birth	Code must be valid FIPS value (Section III, Part 8A manual).	Imputation: Convert invalid / blank code to “not classifiable” code ('ZZ').
State of Birth	Code must be valid FIPS value (Section II, Part 8A manual). If Country of Birth (see preceding) is not U.S., then State of Birth must be blank.	Imputation: Convert invalid code to “unknown or blank” code ('ZZ').
City of Residence	Code must be valid FIPS value (FIPS table 55-3). Code combination for Country, State, County, and City of residence must be valid. If Country of Residence (see further below) is not U.S. or Canada, City of Residence must be blank.	Imputation: Convert invalid code to “not classifiable” code ('99999'). For foreign residents, convert invalid /blank code to '000.'

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit</u> <u>Corrected By</u>
County of Residence	<p>Code must be valid FIPS value (Section IV, Part 8 manual).</p> <p>Code combination for Country, State, County, and City of residence must be valid.</p> <p>If Country of Residence (see further below) is not U.S. or Canada, County of Residence must be blank.</p>	<p>Imputation: Convert invalid / blank code to “not classifiable” code ('999').</p>
State of Residence	<p>Code must be valid FIPS value (Section II, Part 8A manual).</p> <p>Code combination for Country, State, County, and City of residence must be valid.</p> <p>If Country of Residence (see further below) is not U.S. or Canada, State of Residence must be ‘XX’.</p> <p>If Country of Residence is ‘unknown,’ then State of Residence must be ‘ZZ.’</p>	<p>Reject for correction</p> <p>Imputation: For foreign residents, convert invalid / blank code to ‘XX’ (‘not applicable.’) For unknown Country of Residence, convert invalid / blank code to ‘ZZ.’</p>
Country of Residence	<p>Code must be valid FIPS value (Section III, Part 8A manual) and not be blank.</p> <p>Code combination for Country, State, County, and City of residence must be valid.</p>	<p>Imputation: Convert invalid / blank code to ‘unknown’ code ('ZZ').</p>

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit</u> <u>Corrected By</u>
Marital Status	Code must be valid ('M', 'A', 'W', 'D', 'S', 'U')	Imputation: Code record to the marital status of preceding record of same 5-year age group and sex. Initial marital status (as set by programmers) should be established by modal value for the given age group of most recent data year. Note: Value "A" (Married but separated) is recoded to "M" (Married).
	If age of decedent is less than 12 years, marital status must be "Never Married" ('S').	Imputation: Convert marital status code to "Never Married" ('S').
Place of Death (type of facility included)	Code must be valid (1-7, 9). Note: changes to coding from previous certificate revision include: 4= "Decedent's home" ¹ , 5= "Hospice facility," 6= "Nursing home/Long term care facility," 9= "Unknown"	Imputation: Convert place of death code to "Unknown" ('9').

¹ This code extends to homes other than the decedent's own.

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit</u> <u>Corrected By</u>																			
County of Death	Code must be valid FIPS value (Section IV, Part 8 manual). Code combination for State and County of death must be valid.	Reject for correction																			
Method of Disposition	Code must be valid ('B', 'C', 'D', 'E', 'R', 'O', 'U').	Imputation: Code invalid / blank method of disposition to "Unknown" ('U').																			
Time of Death	Code must be valid (0000-2400, 9999).	Imputation: Convert '2400' to '0000'. Convert invalid / blank Time of Death to '9999'.																			
Education of Decedent	Code must be valid (1-9).	Imputation: Code invalid / blank education to "Unknown" ('9').																			
	Combination of education and age of decedent must be acceptable.	Imputation: If education is not valid or not classifiable and age is less than 8 years, then assign education to "1." Else, if education differs for the given minimum age, then code education to "Unknown" (9).																			
	<table> <thead> <tr> <th>Minimum Age</th> <th>Education</th> </tr> </thead> <tbody> <tr> <td>Any age</td> <td>1</td> </tr> <tr> <td>9 years</td> <td>2</td> </tr> <tr> <td>16 years</td> <td>3</td> </tr> <tr> <td>17 years</td> <td>4</td> </tr> <tr> <td>18 years</td> <td>5</td> </tr> <tr> <td>20 years</td> <td>6</td> </tr> <tr> <td>21 years</td> <td>7</td> </tr> <tr> <td>23 years</td> <td>8</td> </tr> <tr> <td>None</td> <td>9</td> </tr> </tbody> </table>	Minimum Age	Education	Any age	1	9 years	2	16 years	3	17 years	4	18 years	5	20 years	6	21 years	7	23 years	8	None	9
Minimum Age	Education																				
Any age	1																				
9 years	2																				
16 years	3																				
17 years	4																				
18 years	5																				
20 years	6																				
21 years	7																				
23 years	8																				
None	9																				

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Decedent of Hispanic ² (Mexican) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: If Country of Birth is Mexico, code blank to "Yes, Mexican." Otherwise, convert blank Mexican origin to "No, not Mexican" ('N').
Decedent of Hispanic ² (Puerto Rican) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: If Country of Birth is Puerto Rico, code blank to "Yes, Puerto Rican." Otherwise, convert blank Puerto Rican origin to "No, not Puerto Rican" ('N').
Decedent of Hispanic ² (Cuban) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: If Country of Birth is Cuba, code blank to "Yes, Cuban." Otherwise, convert blank Cuban origin to "No, not Cuban" ('N').
Decedent of Hispanic ² (Other) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: If country of birth is among the following: -Argentina -Bolivia -Chile -Colombia -Costa Rica -Dominican Republic -Ecuador -El Salvador -Guatemala -Honduras -Nicaragua -Panama -Panama Canal Zone -Paraguay -Peru -Spain -Uruguay -Venezuela Then convert blank other Hispanic origin to "Yes, other... Hispanic/Latino" ('Y').

Note: Hispanic origin is not imputed for records with ethnicity not stated or not classifiable.

² Hispanic Origin item is not part of the death certificate in Puerto Rico, American Samoa nor Northern Marianas – therefore, it is unnecessary to run these imputation procedures for these territories.

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Decedent's Race: Race item 'White'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Black or African American'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'American Indian or Alaska Native'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Asian Indian'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Chinese'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Filipino'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Korean'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Vietnamese'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).

Table B. Edits for Demographic Items Under U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit</u> <u>Corrected By</u>
Decedent's Race: Race item 'Other Asian'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Native Hawaiian'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Guamanian or Chamorro'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Samoan'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Other Pacific Islander'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).
Decedent's Race: Race item 'Other'	Code must be valid ('Y', 'N') and not be blank.	Imputation: Convert blank race item to "No" ('99'; box for given race not checked).

Note: For a technical discussion on bridging multiple-race data to a single race value on years 2003-2019, see Appendix I.

Note: All records coded as 'Other' race will be assigned to the specified race of the previous (single-race) record. Records for which race was unknown, not stated, or not classifiable are assigned the racial designation of the previous (single-race) record. For imputation of race among decedents of Hispanic origin, "preceding record" is restricted to those also of Hispanic origin that have valid race data. Hispanic origin is not imputed for records with ethnicity not stated or not classifiable.

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

Y583	Y599	Y610	Y621	Y633	Y651	Y703	Y728	Y750	Y771	Y792	Y813	Y834	Y846	Y881
Y584	Y600	Y611	Y622	Y634	Y652	Y708	Y730	Y751	Y772	Y793	Y818	Y835	Y847	Y882
Y585	Y601	Y612	Y623	Y635	Y653	Y710	Y731	Y752	Y773	Y798	Y820	Y836	Y848	Y883
Y586	Y602	Y613	Y624	Y636	Y654	Y711	Y732	Y753	Y778	Y800	Y821	Y838	Y849	Y890
Y588	Y603	Y614	Y625	Y638	Y655	Y712	Y733	Y758	Y780	Y801	Y822	Y839	Y850	Y891
Y589	Y604	Y615	Y626	Y639	Y658	Y713	Y738	Y760	Y781	Y802	Y823	Y840	Y859	Y899
Y590	Y605	Y616	Y628	Y640	Y66	Y718	Y740	Y761	Y782	Y803	Y828	Y841	Y86	
Y591	Y606	Y617	Y629	Y641	Y69	Y720	Y741	Y762	Y783	Y808	Y830	Y842	Y870	
Y592	Y607	Y618	Y630	Y648	Y700	Y721	Y742	Y763	Y788	Y810	Y831	Y843	Y871	
Y593	Y608	Y619	Y631	Y649	Y701	Y722	Y743	Y768	Y790	Y811	Y832	Y844	Y872	
Y598	Y609	Y620	Y632	Y650	Y702	Y723	Y748	Y770	Y791	Y812	Y833	Y845	Y880	

Table D. ICD-10 Nature-of-Injury Codes Valid for Multiple Cause Classification Only
 (from Chapter XIX, Injury, poisoning and certain other consequences of external causes) - Continued

T485	T572	T690	T817	T887
T486	T573	T691	T818	T888
T487	T578	T698	T819	T889
T490	T579	T699	T820	T900
T491	T58	T700	T821	T901
T492	T590	T701	T822	T902
T493	T591	T702	T823	T903
T494	T592	T703	T824	T904
T495	T593	T704	T825	T905
T496	T594	T708	T826	T908
T497	T595	T709	T827	T909
T498	T596	T71	T828	T910
T499	T597	T730	T829	T911
T500	T598	T731	T830	T912
T501	T599	T732	T831	T913
T502	T600	T733	T832	T914
T503	T601	T738	T833	T915
T504	T602	T739	T834	T918
T505	T603	T740	T835	T919
T506	T604	T741	T836	T920
T507	T608	T742	T838	T921
T508	T609	T743	T839	T922
T509	T610	T748	T840	T923
T510	T611	T749	T841	T924
T511	T612	T750	T842	T925
T512	T618	T751	T843	T926
T513	T619	T752	T844	T928
T518	T620	T753	T845	T929
T519	T621	T754	T846	T930
T520	T622	T758	T847	T931
T521	T628	T780	T848	T932
T522	T629	T781	T849	T933
T523	T630	T782	T850	T934
T524	T631	T783	T851	T935
T528	T632	T784	T852	T936
T529	T633	T788	T853	T938
T530	T634	T789	T854	T939
T531	T635	T790	T855	T940
T532	T636	T791	T856	T941
T533	T638	T792	T857	T950
T534	T639	T793	T858	T951
T535	T64	T794	T859	T952
T536	T650	T795	T860	T953
T537	T651	T796	T861	T954
T539	T652	T797	T862	T958
T540	T653	T798	T863	T959
T541	T654	T799	T864	T96
T542	T655	T800	T868	T97
T543	T656	T801	T869	T980
T549	T658	T802	T870	T981
T55	T659	T803	T871	T982
T560	T66	T804	T872	T983
T561	T670	T805	T873	
T562	T671	T806	T874	
T563	T672	T808	T875	
T564	T673	T809	T876	
T565	T674	T810	T880	
T566	T675	T811	T881	
T567	T676	T812	T882	
T568	T677	T813	T883	
T569	T678	T814	T884	
T570	T679	T815	T885	
T571	T68	T816	T886	

Table E. ICD-10 Codes Valid for Multiple Cause Classification Only (from Chapters I-XVIII and XX)

E890	O086
E891	O087
E892	O088
E893	O089
E894	U099
E895	
E896	
E898	
E899	
G970	
G971	
G972	
G978	
G979	
H590	
H598	
H599	
H950	
H951	
H958	
H959	
I970	
I971	
I972	
I978	
I979	
J950	
J951	
J952	
J953	
J954	
J955	
J958	
J959	
K910	
K911	
K912	
K913	
K914	
K915	
K918	
K919	
M960	
M961	
M962	
M963	
M964	
M965	
M966	
M968	
M969	
N990	
N991	
N992	
N993	
N994	
N995	
N998	
N999	
O080	
O081	
O082	
O083	
O084	
O085	

Table F. Created Codes and their Complementary Valid ICD-10 Codes

Created code	Valid ICD-10 code
A1690	A169
E0390	E039
G1220	G122
G2000	G20
I2190	I219
I4200	I420
I4210	I421
I4220	I422
I4250	I425
I4280	I428
I4290	I429
I5000	I500
I5140	I514
I5150	I515
I6000	I600
I6060	I606
I6070	I607
I6080	I608
I6090	I609
I6100	I610
I6110	I611
I6120	I612
I6130	I613
I6140	I614
I6150	I615
I6180	I618
I6190	I619
I6300	I630
I6310	I631
I6320	I632
I6330	I633
I6340	I634
I6350	I635
I6360	I636
I6380	I638
I6390	I639
I6400	I64
I6910	I691
I6930	I693
I6940	I694
J1010	J101
J1110	J111
J8490	J849
J9840	J984
K3190	K319
K5500	K550
K6310	K631
K7200	K720
K7210	K721
K7290	K729
M1990	M199
Q2780	Q278
Q2820	Q282
Q2830	Q283
R5800	R58
R97	R99

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹	
		1 - Absolute				
		2 - Not Applicable				
ICD-10 code	Age exclusion	Age	Sex exclusion	Sex	Edit code ¹	
A32	Under 28 days	1	No	2	3	
A33	1 year and over	1	No	2	2	
A34	Under 10 years or 55 years and over	0	Male	1	14	
A35	Under 28 days	1	No	2	3	
A40	Under 28 days	1	No	2	3	
A41	Under 28 days	1	No	2	3	
A50.3	Under 2 years	0	No	2	5	
A50.4	Under 2 years	0	No	2	5	
A50.5	Under 2 years	0	No	2	5	
A50.6	Under 2 years	0	No	2	5	
A50.7	Under 2 years	0	No	2	5	
A52	Under 2 years	0	No	2	5	
A53.9	Under 2 years	0	No	2	5	
A56	Under 28 days	1	No	2	3	
A74	Under 28 days	1	No	2	3	
B26.0	No	2	Female	1	10	
B30	Under 28 days	1	No	2	3	
B37.0	Under 28 days	1	No	2	3	
B37.1	Under 28 days	1	No	2	3	
B37.2	Under 28 days	1	No	2	3	
B37.3	Under 28 days	1	Male	1	13	
B37.4	Under 28 days	1	No	2	3	
B37.5	Under 28 days	1	No	2	3	
B37.6	Under 28 days	1	No	2	3	
B37.7	Under 28 days	1	No	2	3	
B37.8	Under 28 days	1	No	2	3	
B37.9	Under 28 days	1	No	2	3	
B90	Under 1 year	1	No	2	4	
B91	Under 1 year	1	No	2	4	
B92	Under 1 year	1	No	2	4	
B94	Under 1 year	1	No	2	4	
C51	No	2	Male	1	11	
C52	No	2	Male	1	11	
C53	No	2	Male	1	11	
C54	No	2	Male	1	11	
C55	No	2	Male	1	11	

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹
		Age	Sex exclusion	Sex	
C56	No	2	Male	1	11
C57	No	2	Male	1	11
C58	Under 10 years or 55 years and over	0	Male	1	14
C60	No	2	Female	1	10
C61	No	2	Female	1	10
C62	No	2	Female	1	10
C63	No	2	Female	1	10
C79.6	No	2	Male	1	11
D06	No	2	Male	1	11
D07.0	No	2	Male	1	11
D07.1	No	2	Male	1	11
D07.2	No	2	Male	1	11
D07.3	No	2	Male	1	11
D07.4	No	2	Female	1	10
D07.5	No	2	Female	1	10
D07.6	No	2	Female	1	10
D17.6	No	2	Female	1	10
D25	No	2	Male	1	11
D26	No	2	Male	1	11
D27	No	2	Male	1	11
D28	No	2	Male	1	11
D29	No	2	Female	1	10
D39.0	No	2	Male	1	11
D39.1	No	2	Male	1	11
D39.2	Under 10 years or 55 years and over	0	Male	1	14
D39.7	No	2	Male	1	11
D39.9	No	2	Male	1	11
D40	No	2	Female	1	10
D65	Under 28 days	1	No	2	3
D75.1	Under 28 days	1	No	2	3
E05	Under 28 days	1	No	2	3
E10	Under 28 days	1	No	2	3
E11	Under 28 days	1	No	2	3
E12	Under 28 days	1	No	2	3
E13	Under 28 days	1	No	2	3

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹	
		1 - Absolute				
		2 - Not Applicable				
ICD-10 code	Age exclusion	Age	Sex exclusion	Sex	Edit code ¹	
E14	Under 28 days	1	No	2	3	
E16.2	Under 28 days	1	No	2	3	
E28	No	2	Male	1	11	
E29	No	2	Female	1	10	
E30	Under 5 years	1	No	2	6	
E56.1	Under 28 days	1	No	2	3	
E63	Under 28 days	1	No	2	3	
E64	Under 1 year	1	No	2	4	
E68	Under 1 year	1	No	2	4	
E83.4	Under 28 days	1	No	2	3	
E83.5	Under 28 days	1	No	2	3	
E86	Under 28 days	0	No	2	3	
F01	Under 20 years	0	No	2	7	
F03	Under 55 years	0	No	2	23	
F10	Under 1 year	1	No	2	4	
F11	Under 1 year	1	No	2	4	
F12	Under 1 year	1	No	2	4	
F13	Under 1 year	1	No	2	4	
F14	Under 1 year	1	No	2	4	
F15	Under 1 year	1	No	2	4	
F16	Under 1 year	1	No	2	4	
F17	Under 1 year	1	No	2	4	
F18	Under 1 year	1	No	2	4	
F19	Under 1 year	1	No	2	4	
F20	Under 1 year	1	No	2	4	
F21	Under 1 year	1	No	2	4	
F22	Under 1 year	1	No	2	4	
F23	Under 1 year	1	No	2	4	
F24	Under 1 year	1	No	2	4	
F25	Under 1 year	1	No	2	4	
F28	Under 1 year	1	No	2	4	
F29	Under 1 year	1	No	2	4	
F30	Under 1 year	1	No	2	4	
F31	Under 1 year	1	No	2	4	
F32	Under 1 year	1	No	2	4	
F33	Under 1 year	1	No	2	4	
F34	Under 1 year	1	No	2	4	

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹	
		1 - Absolute				
		2 - Not Applicable				
ICD-10 code	Age exclusion	Age	Sex exclusion	Sex	Edit code ¹	
F38	Under 1 year	1	No	2	4	
F39	Under 1 year	1	No	2	4	
F40	Under 1 year	1	No	2	4	
F41	Under 1 year	1	No	2	4	
F42	Under 1 year	1	No	2	4	
F43	Under 1 year	1	No	2	4	
F44	Under 1 year	1	No	2	4	
F45	Under 1 year	1	No	2	4	
F48	Under 1 year	1	No	2	4	
F50	Under 1 year	1	No	2	4	
F51	Under 1 year	1	No	2	4	
F52.0	Under 10 years	1	No	2	20	
F52.1	Under 10 years	1	No	2	20	
F52.2	Under 10 years	1	No	2	20	
F52.3	Under 10 years	1	No	2	20	
F52.4	Under 10 years	1	Female	1	19	
F52.5	Under 10 years	1	Male	1	18	
F53	Under 10 years or 55 years and over	1	Male	1	14	
F54	Under 1 year	1	No	2	4	
F55	Under 1 year	1	No	2	4	
F59	Under 1 year	1	No	2	4	
F60	Under 1 year	1	No	2	4	
F61	Under 1 year	1	No	2	4	
F62	Under 1 year	1	No	2	4	
F63	Under 1 year	1	No	2	4	
F64	Under 1 year	1	No	2	4	
F65	Under 1 year	1	No	2	4	
F66	Under 1 year	1	No	2	4	
F68	Under 10 years	1	No	2	20	
F69	Under 10 years	1	No	2	20	
G09	Under 1 year	0	No	2	4	
G14	Under 1 year	1	No	2	4	
G30.0	Under 30 years	0	No	2	24	
G30.1	Under 65 years	0	No	2	9	
G30.8	Under 30 years	0	No	2	24	
G30.9	Under 30 years	0	No	2	24	

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable			Edit code ¹
		Age	Sex exclusion	Sex	
G47.3	Under 28 days	1	No	2	3
G70.0	Under 28 days	1	No	2	3
H25	Under 10 years	1	No	2	20
I48	Under 28 days	1	No	2	3
I49	Under 28 days	1	No	2	3
I50	Under 28 days	1	No	2	3
I61	Under 28 days	1	No	2	3
I62	Under 28 days	1	No	2	3
I69	Under 1 year	1	No	2	4
I86.1	No	2	Female	1	10
I86.3	No	2	Male	1	11
J12	Under 28 days	1	No	2	3
J13	Under 28 days	1	No	2	3
J14	Under 28 days	1	No	2	3
J15	Under 28 days	1	No	2	3
J16	Under 28 days	1	No	2	3
J18	Under 28 days	1	No	2	3
J43	Under 28 days	1	No	2	3
J80	Under 28 days	1	No	2	3
J84.9	Under 28 days	1	No	2	3
J96	Under 28 days	1	No	2	3
J98.1	Under 28 days	1	No	2	3
J98.2	Under 28 days	1	No	2	3
J98.4	Under 28 days	1	No	2	3
J98.8	Under 28 days	1	No	2	3
K27	Under 28 days	1	No	2	3
K31.1	Under 1 year	1	No	2	4
K31.3	Under 1 year	1	No	2	4
K56.6	Under 28 days	0	No	2	3
K63.1	Under 28 days	1	No	2	3
K65	Under 28 days	1	No	2	3
K70	Under 1 year	1	No	2	4
K92	Under 28 days	1	No	2	3
L01	Under 28 days	1	No	2	3
L10	Under 28 days	1	No	2	3
L29.1	No	2	Female	1	10
L29.2	No	2	Male	1	11

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹
		Age	Sex exclusion	Sex	
L50	Under 28 days	1	No	2	3
L53.0	Under 28 days	1	No	2	3
L70.0	Under 1 year	1	No	2	4
L70.1	Under 1 year	1	No	2	4
L70.2	Under 1 year	1	No	2	4
L70.3	Under 1 year	1	No	2	4
L70.5	Under 1 year	1	Male	1	21
L70.9	Under 1 year	1	No	2	4
M34	Under 28 days	1	No	2	3
M42.1	Under 10 years	1	No	2	20
M80.0	No	2	Male	1	11
M80.1	No	2	Male	1	11
M81.0	No	2	Male	1	11
M81.1	No	2	Male	1	11
M83.0	Under 10 years or 55 years and over	1	Male	1	14
M83.1	Under 10 years	1	No	2	20
M83.2	Under 10 years	1	No	2	20
M83.3	Under 10 years	1	No	2	20
M83.4	Under 10 years	1	No	2	20
M83.5	Under 10 years	1	No	2	20
M83.8	Under 10 years	1	No	2	20
M83.9	Under 10 years	1	No	2	20
N39.0	Under 28 days	1	No	2	3
N40	No	2	Female	1	10
N41	No	2	Female	1	10
N42	No	2	Female	1	10
N43	No	2	Female	1	10
N44	No	2	Female	1	10
N45	No	2	Female	1	10
N46	No	2	Female	1	10
N47	No	2	Female	1	10
N48	No	2	Female	1	10
N49	No	2	Female	1	10
N50	No	2	Female	1	10
N61	Under 28 days	1	No	2	3
N70	No	2	Male	1	11

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable				Edit code ¹	
		Age	Sex exclusion	Sex			
N71	No	2	Male	1	11		
N72	No	2	Male	1	11		
N73	No	2	Male	1	11		
N75	No	2	Male	1	11		
N76	No	2	Male	1	11		
N80	No	2	Male	1	11		
N81	No	2	Male	1	11		
N82	No	2	Male	1	11		
N83	No	2	Male	1	11		
N84	No	2	Male	1	11		
N85	No	2	Male	1	11		
N86	No	2	Male	1	11		
N87	No	2	Male	1	11		
N88	No	2	Male	1	11		
N89	No	2	Male	1	11		
N90	No	2	Male	1	11		
N91	Under 10 years	1	Male	1	18		
N91	55 years and over	0	Male	1	26		
N92	Under 10 years or 55 years and over	0	Male	1	14		
N93	No	2	Male	1	11		
N94	Under 10 years or 55 years and over	0	Male	1	14		
N95	Under 10 years	1	Male	1	18		
N95	55 years and over	0	Male	1	26		
N96	Under 10 years	1	Male	1	18		
N96	55 years and over	0	Male	1	26		
N97	Under 10 years	1	Male	1	18		
N97	55 years and over	0	Male	1	26		
N98	Under 10 years	1	Male	1	18		
N98	55 years and over	0	Male	1	26		
O00	Under 10 years	1	Male	1	18		
O00	55 years and over	0	Male	1	26		
O01	Under 10 years	1	Male	1	18		
O01	55 years and over	0	Male	1	26		
O02	Under 10 years	1	Male	1	18		
O02	55 years and over	0	Male	1	26		
O03	Under 10 years	1	Male	1	18		

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable			
		Age	Sex exclusion	Sex	Edit code ¹
003	55 years and over	0	Male	1	26
004	Under 10 years	1	Male	1	18
004	55 years and over	0	Male	1	26
005	Under 10 years	1	Male	1	18
005	55 years and over	0	Male	1	26
006	Under 10 years	1	Male	1	18
006	55 years and over	0	Male	1	26
007	Under 10 years	1	Male	1	18
007	55 years and over	0	Male	1	26
O10	Under 10 years	1	Male	1	18
O10	55 years and over	0	Male	1	26
O11	Under 10 years	1	Male	1	18
O11	55 years and over	0	Male	1	26
O12	Under 10 years	1	Male	1	18
O12	55 years and over	0	Male	1	26
O13	Under 10 years	1	Male	1	18
O13	55 years and over	0	Male	1	26
O14	Under 10 years	1	Male	1	18
O14	55 years and over	0	Male	1	26
O15	Under 10 years	1	Male	1	18
O15	55 years and over	0	Male	1	26
O16	Under 10 years	1	Male	1	18
O16	55 years and over	0	Male	1	26
O20	Under 10 years	1	Male	1	18
O20	55 years and over	0	Male	1	26
O21	Under 10 years	1	Male	1	18
O21	55 years and over	0	Male	1	26
O22	Under 10 years	1	Male	1	18
O22	55 years and over	0	Male	1	26
O23	Under 10 years	1	Male	1	18
O23	55 years and over	0	Male	1	26
O24	Under 10 years	1	Male	1	18
O24	55 years and over	0	Male	1	26
O25	Under 10 years	1	Male	1	18
O25	55 years and over	0	Male	1	26
O26	Under 10 years	1	Male	1	18
O26	55 years and over	0	Male	1	26

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable			
		Age	Sex exclusion	Sex	Edit code ¹
O28	Under 10 years	1	Male	1	18
O28	55 years and over	0	Male	1	26
O29	Under 10 years	1	Male	1	18
O29	55 years and over	0	Male	1	26
O30	Under 10 years	1	Male	1	18
O30	55 years and over	0	Male	1	26
O31	Under 10 years	1	Male	1	18
O31	55 years and over	0	Male	1	26
O32	Under 10 years	1	Male	1	18
O32	55 years and over	0	Male	1	26
O33	Under 10 years	1	Male	1	18
O33	55 years and over	0	Male	1	26
O34	Under 10 years	1	Male	1	18
O34	55 years and over	0	Male	1	26
O35	Under 10 years	1	Male	1	18
O35	55 years and over	0	Male	1	26
O36	Under 10 years	1	Male	1	18
O36	55 years and over	0	Male	1	26
O40	Under 10 years	1	Male	1	18
O40	55 years and over	0	Male	1	26
O41	Under 10 years	1	Male	1	18
O41	55 years and over	0	Male	1	26
O42	Under 10 years	1	Male	1	18
O42	55 years and over	0	Male	1	26
O43	Under 10 years	1	Male	1	18
O43	55 years and over	0	Male	1	26
O44	Under 10 years	1	Male	1	18
O44	55 years and over	0	Male	1	26
O45	Under 10 years	1	Male	1	18
O45	55 years and over	0	Male	1	26
O46	Under 10 years	1	Male	1	18
O46	55 years and over	0	Male	1	26
O47	Under 10 years	1	Male	1	18
O47	55 years and over	0	Male	1	26
O48	Under 10 years	1	Male	1	18
O48	55 years and over	0	Male	1	26
O60	Under 10 years	1	Male	1	18

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable			
		Age	Sex exclusion	Sex	Edit code ¹
060	55 years and over	0	Male	1	26
061	Under 10 years	1	Male	1	18
061	55 years and over	0	Male	1	26
062	Under 10 years	1	Male	1	18
062	55 years and over	0	Male	1	26
063	Under 10 years	1	Male	1	18
063	55 years and over	0	Male	1	26
064	Under 10 years	1	Male	1	18
064	55 years and over	0	Male	1	26
065	Under 10 years	1	Male	1	18
065	55 years and over	0	Male	1	26
066	Under 10 years	1	Male	1	18
066	55 years and over	0	Male	1	26
067	Under 10 years	1	Male	1	18
067	55 years and over	0	Male	1	26
068	Under 10 years	1	Male	1	18
068	55 years and over	0	Male	1	26
069	Under 10 years	1	Male	1	18
069	55 years and over	0	Male	1	26
070	Under 10 years	1	Male	1	18
070	55 years and over	0	Male	1	26
071	Under 10 years	1	Male	1	18
071	55 years and over	0	Male	1	26
072	Under 10 years	1	Male	1	18
072	55 years and over	0	Male	1	26
073	Under 10 years	1	Male	1	18
073	55 years and over	0	Male	1	26
074	Under 10 years	1	Male	1	18
074	55 years and over	0	Male	1	26
075	Under 10 years	1	Male	1	18
075	55 years and over	0	Male	1	26
085	Under 10 years	1	Male	1	18
085	55 years and over	0	Male	1	26
086	Under 10 years	1	Male	1	18
086	55 years and over	0	Male	1	26
087	Under 10 years	1	Male	1	18
087	55 years and over	0	Male	1	26

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable			
		Age	Sex exclusion	Sex	Edit code ¹
O88	Under 10 years	1	Male	1	18
O88	55 years and over	0	Male	1	26
O89	Under 10 years	1	Male	1	18
O89	55 years and over	0	Male	1	26
O90	Under 10 years	1	Male	1	18
O90	55 years and over	0	Male	1	26
O91	Under 10 years	1	Male	1	18
O91	55 years and over	0	Male	1	26
O92	Under 10 years	1	Male	1	18
O92	55 years and over	0	Male	1	26
O95	Under 10 years	1	Male	1	18
O95	55 years and over	0	Male	1	26
O96	Under 10 years	1	Male	1	18
O96	55 years and over	0	Male	1	26
O97	Under 10 years	1	Male	1	18
O97	55 years and over	0	Male	1	26
O98	Under 10 years	1	Male	1	18
O98	55 years and over	0	Male	1	26
O99	Under 10 years	1	Male	1	18
O99	55 years and over	0	Male	1	26
P00	1 year and over	0	No	2	2
P01	1 year and over	0	No	2	2
P02	1 year and over	0	No	2	2
P03	1 year and over	0	No	2	2
P04	1 year and over	0	No	2	2
P05	1 year and over	0	No	2	2
P07	15 years and over	0	No	2	27
P08	1 year and over	0	No	2	2
P10	1 year and over	0	No	2	2
P11	1 year and over	0	No	2	2
P12	1 year and over	0	No	2	2
P13	1 year and over	0	No	2	2
P14	1 year and over	0	No	2	2
P15	1 year and over	0	No	2	2
P20	1 year and over	0	No	2	2
P21	1 year and over	0	No	2	2
P22	1 year and over	0	No	2	2

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹	
		1 - Absolute				
		2 - Not Applicable				
ICD-10 code	Age exclusion	Age	Sex exclusion	Sex	Edit code ¹	
P23	1 year and over	0	No	2	2	
P24	1 year and over	0	No	2	2	
P25	1 year and over	0	No	2	2	
P26	1 year and over	0	No	2	2	
P27	1 year and over	0	No	2	2	
P28	1 year and over	0	No	2	2	
P29	1 year and over	0	No	2	2	
P35	1 year and over	0	No	2	2	
P36	1 year and over	0	No	2	2	
P37	1 year and over	0	No	2	2	
P38	1 year and over	0	No	2	2	
P39	1 year and over	0	No	2	2	
P50	1 year and over	0	No	2	2	
P51	1 year and over	0	No	2	2	
P52	1 year and over	0	No	2	2	
P53	1 year and over	0	No	2	2	
P54.0	1 year and over	0	No	2	2	
P54.1	1 year and over	0	No	2	2	
P54.2	1 year and over	0	No	2	2	
P54.3	1 year and over	0	No	2	2	
P54.4	1 year and over	0	No	2	2	
P54.5	1 year and over	0	No	2	2	
P54.6	1 year and over	0	Male	1	22	
P54.8	1 year and over	0	No	2	2	
P54.9	1 year and over	0	No	2	2	
P55	1 year and over	0	No	2	2	
P56	1 year and over	0	No	2	2	
P57	1 year and over	0	No	2	2	
P58	1 year and over	0	No	2	2	
P59	1 year and over	0	No	2	2	
P60	1 year and over	0	No	2	2	
P61	1 year and over	0	No	2	2	
P70	1 year and over	0	No	2	2	
P71	1 year and over	0	No	2	2	
P72	1 year and over	0	No	2	2	
P74	1 year and over	0	No	2	2	
P76	1 year and over	0	No	2	2	

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹
		Age	Sex exclusion	Sex	
P77	1 year and over	0	No	2	2
P78	1 year and over	0	No	2	2
P80	1 year and over	0	No	2	2
P81	1 year and over	0	No	2	2
P83	1 year and over	0	No	2	2
P90	1 year and over	0	No	2	2
P91	1 year and over	0	No	2	2
P92	1 year and over	0	No	2	2
P93	1 year and over	0	No	2	2
P94	1 year and over	0	No	2	2
P96	1 year and over	0	No	2	2
Q50	No	2	Male	1	11
Q51	No	2	Male	1	11
Q52	No	2	Male	1	11
Q53	No	2	Female	1	10
Q54	No	2	Female	1	10
Q55	No	2	Female	1	10
Q96.0	No	2	Male	1	11
Q96.1	No	2	Male	1	11
Q96.2	No	2	Male	1	11
Q96.4	No	2	Male	1	11
Q96.8	No	2	Male	1	11
Q96.9	No	2	Male	1	11
Q97	No	2	Male	1	11
Q98	No	2	Female	1	10
R00	Under 28 days	1	No	2	3
R01	Under 28 days	1	No	2	3
R04.8	Under 28 days	1	No	2	3
R06.8	Under 28 days	0	No	2	3
R09.0	Under 28 days	1	No	2	3
R09.2	Under 28 days	1	No	2	3
R11	Under 28 days	1	No	2	3
R17	Under 28 days	1	No	2	3
R23.0	Under 28 days	1	No	2	3
R23.3	Under 28 days	1	No	2	3
R29.0	Under 28 days	1	No	2	3
R40	Under 28 days	1	No	2	3

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹
		Age	Sex exclusion	Sex	
R50	Under 28 days	1	No	2	3
R53	Under 28 days	1	No	2	3
R54	Under 65 years	0	No	2	9
R54	Under 30 years	1	No	2	24
R56	Under 28 days	1	No	2	3
R58	Under 28 days	1	No	2	3
R60	Under 28 days	1	No	2	3
R63.3	Under 28 days	1	No	2	3
R68.0	Under 28 days	1	No	2	3
R68.1	Under 28 days	1	No	2	3
R73	Under 28 days	0	No	2	3
R86	No	2	Female	1	10
R87	No	2	Male	1	11
R95	1 year and over	1	No	2	2
R96.0	Under 1 year	1	No	2	4
R96.1	Under 1 year	0	No	2	4
*U03	Under 5 years	1	No	2	6
U07.0	Under 1 year	1	No	2	4
V10.0	Under 10 years	0	No	2	20
V10.4	Under 10 years	0	No	2	20
V11.0	Under 10 years	0	No	2	20
V11.4	Under 10 years	0	No	2	20
V12.0	Under 10 years	0	No	2	20
V12.4	Under 10 years	0	No	2	20
V13.0	Under 10 years	0	No	2	20
V13.4	Under 10 years	0	No	2	20
V14.0	Under 10 years	0	No	2	20
V14.4	Under 10 years	0	No	2	20
V15.0	Under 10 years	0	No	2	20
V15.4	Under 10 years	0	No	2	20
V16.0	Under 10 years	0	No	2	20
V16.4	Under 10 years	0	No	2	20
V17.0	Under 10 years	0	No	2	20
V17.4	Under 10 years	0	No	2	20
V18.0	Under 10 years	0	No	2	20
V18.4	Under 10 years	0	No	2	20
V19.0	Under 10 years	0	No	2	20

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹
		Age	Sex exclusion	Sex	
V19.4	Under 10 years	0	No	2	20
V20.0	Under 10 years	0	No	2	20
V20.4	Under 10 years	0	No	2	20
V21.0	Under 10 years	0	No	2	20
V21.4	Under 10 years	0	No	2	20
V22.0	Under 10 years	0	No	2	20
V22.4	Under 10 years	0	No	2	20
V23.0	Under 10 years	0	No	2	20
V23.4	Under 10 years	0	No	2	20
V24.0	Under 10 years	0	No	2	20
V24.4	Under 10 years	0	No	2	20
V25.0	Under 10 years	0	No	2	20
V25.4	Under 10 years	0	No	2	20
V26.0	Under 10 years	0	No	2	20
V26.4	Under 10 years	0	No	2	20
V27.0	Under 10 years	0	No	2	20
V27.4	Under 10 years	0	No	2	20
V28.0	Under 10 years	0	No	2	20
V28.4	Under 10 years	0	No	2	20
V29.0	Under 10 years	0	No	2	20
V29.4	Under 10 years	0	No	2	20
V30.0	Under 10 years	0	No	2	20
V31.0	Under 10 years	0	No	2	20
V31.5	Under 10 years	0	No	2	20
V32.0	Under 10 years	0	No	2	20
V32.5	Under 10 years	0	No	2	20
V33.0	Under 10 years	0	No	2	20
V30.5	Under 10 years	0	No	2	20
V33.5	Under 10 years	0	No	2	20
V34.0	Under 10 years	0	No	2	20
V34.5	Under 10 years	0	No	2	20
V35.0	Under 10 years	0	No	2	20
V35.5	Under 10 years	0	No	2	20
V36.0	Under 10 years	0	No	2	20
V36.5	Under 10 years	0	No	2	20
V37.0	Under 10 years	0	No	2	20
V37.5	Under 10 years	0	No	2	20

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable			Edit code ¹
		Age	Sex exclusion	Sex	
V38.0	Under 10 years	0	No	2	20
V38.5	Under 10 years	0	No	2	20
V39.0	Under 10 years	0	No	2	20
V39.4	Under 10 years	0	No	2	20
V40.0	Under 10 years	0	No	2	20
V40.5	Under 10 years	0	No	2	20
V41.0	Under 10 years	0	No	2	20
V41.5	Under 10 years	0	No	2	20
V42.0	Under 10 years	0	No	2	20
V42.5	Under 10 years	0	No	2	20
V43.0	Under 10 years	0	No	2	20
V43.5	Under 10 years	0	No	2	20
V44.0	Under 10 years	0	No	2	20
V44.5	Under 10 years	0	No	2	20
V45.0	Under 10 years	0	No	2	20
V45.5	Under 10 years	0	No	2	20
V46.0	Under 10 years	0	No	2	20
V46.5	Under 10 years	0	No	2	20
V47.0	Under 10 years	0	No	2	20
V47.5	Under 10 years	0	No	2	20
V48.0	Under 10 years	0	No	2	20
V48.5	Under 10 years	0	No	2	20
V49.0	Under 10 years	0	No	2	20
V49.4	Under 10 years	0	No	2	20
V50.0	Under 10 years	0	No	2	20
V50.5	Under 10 years	0	No	2	20
V51.0	Under 10 years	0	No	2	20
V51.5	Under 10 years	0	No	2	20
V52.0	Under 10 years	0	No	2	20
V52.5	Under 10 years	0	No	2	20
V53.0	Under 10 years	0	No	2	20
V53.5	Under 10 years	0	No	2	20
V54.0	Under 10 years	0	No	2	20
V54.5	Under 10 years	0	No	2	20
V55.0	Under 10 years	0	No	2	20
V55.5	Under 10 years	0	No	2	20
V56.0	Under 10 years	0	No	2	20

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹
		Age	Sex exclusion	Sex	
V56.5	Under 10 years	0	No	2	20
V57.0	Under 10 years	0	No	2	20
V57.5	Under 10 years	0	No	2	20
V58.0	Under 10 years	0	No	2	20
V58.5	Under 10 years	0	No	2	20
V59.0	Under 10 years	0	No	2	20
V59.4	Under 10 years	0	No	2	20
V60.0	Under 10 years	0	No	2	20
V60.5	Under 10 years	0	No	2	20
V61.0	Under 10 years	0	No	2	20
V61.5	Under 10 years	0	No	2	20
V62.0	Under 10 years	0	No	2	20
V62.5	Under 10 years	0	No	2	20
V63.0	Under 10 years	0	No	2	20
V63.5	Under 10 years	0	No	2	20
V64.0	Under 10 years	0	No	2	20
V64.5	Under 10 years	0	No	2	20
V65.0	Under 10 years	0	No	2	20
V65.5	Under 10 years	0	No	2	20
V66.0	Under 10 years	0	No	2	20
V66.5	Under 10 years	0	No	2	20
V67.0	Under 10 years	0	No	2	20
V67.5	Under 10 years	0	No	2	20
V68.0	Under 10 years	0	No	2	20
V68.5	Under 10 years	0	No	2	20
V69.0	Under 10 years	0	No	2	20
V69.4	Under 10 years	0	No	2	20
V70.0	Under 10 years	0	No	2	20
V70.5	Under 10 years	0	No	2	20
V71.0	Under 10 years	0	No	2	20
V71.5	Under 10 years	0	No	2	20
V72.0	Under 10 years	0	No	2	20
V72.5	Under 10 years	0	No	2	20
V73.0	Under 10 years	0	No	2	20
V73.5	Under 10 years	0	No	2	20
V74.0	Under 10 years	0	No	2	20
V74.5	Under 10 years	0	No	2	20

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional			Edit code ¹
		Age	Sex exclusion	Sex	
V75.0	Under 10 years	0	No	2	20
V75.5	Under 10 years	0	No	2	20
V76.0	Under 10 years	0	No	2	20
V76.5	Under 10 years	0	No	2	20
V77.0	Under 10 years	0	No	2	20
V77.5	Under 10 years	0	No	2	20
V78.0	Under 10 years	0	No	2	20
V78.5	Under 10 years	0	No	2	20
V79.0	Under 10 years	0	No	2	20
V79.4	Under 10 years	0	No	2	20
V83.0	Under 10 years	0	No	2	20
V83.5	Under 10 years	0	No	2	20
V84.0	Under 10 years	0	No	2	20
V84.5	Under 10 years	0	No	2	20
V85.0	Under 10 years	0	No	2	20
V85.5	Under 10 years	0	No	2	20
V86.0	Under 10 years	0	No	2	20
V86.5	Under 10 years	0	No	2	20
X60	Under 5 years	1	No	2	6
X61	Under 5 years	1	No	2	6
X62	Under 5 years	1	No	2	6
X63	Under 5 years	1	No	2	6
X64	Under 5 years	1	No	2	6
X65	Under 5 years	1	No	2	6
X66	Under 5 years	1	No	2	6
X67	Under 5 years	1	No	2	6
X68	Under 5 years	1	No	2	6
X69	Under 5 years	1	No	2	6
X70	Under 5 years	1	No	2	6
X71	Under 5 years	1	No	2	6
X72	Under 5 years	1	No	2	6
X73	Under 5 years	1	No	2	6
X74	Under 5 years	1	No	2	6
X75	Under 5 years	1	No	2	6
X76	Under 5 years	1	No	2	6
X77	Under 5 years	1	No	2	6
X78	Under 5 years	1	No	2	6

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age exclusion	0 - Conditional 1 - Absolute 2 - Not Applicable			Edit code ¹
		Age	Sex exclusion	Sex	
X79	Under 5 years	1	No	2	6
X80	Under 5 years	1	No	2	6
X81	Under 5 years	1	No	2	6
X82	Under 5 years	1	No	2	6
X83	Under 5 years	1	No	2	6
X84	Under 5 years	1	No	2	6
Y06.0	Under 10 years	1	No	2	20
Y06.1	18 years and over	0	No	2	17
Y07.0	Under 10 years	1	No	2	20
Y07.1	18 years and over	0	No	2	17
Y36	Under 10 years	0	No	2	20
Y42.4	Under 10 years or 55 years and over	1	Male	1	14
Y42.5	No	2	Male	0	11
Y59.0	20 years and over	0	No	2	25
Y76	No	2	Male	1	11
Y85	Under 1 year	1	No	2	4
Y86	Under 1 year	1	No	2	4
Y87.0	Under 5 years	1	No	2	6
Y87.1	Under 1 year	1	No	2	4
Y87.2	Under 1 year	1	No	2	4
Y88	Under 1 year	1	No	2	4
Y89	Under 1 year	1	No	2	4

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification – list of edit codes

¹ Edit codes may be useful for programming the age/sex limitations as follows:

<u>Edit code</u>	<u>Limited to</u>	<u>Edit code</u>	<u>Limited to</u>
02	Under 1 year	17	Under 18 years
03	28 days and over	18	Female, 10 years and over
04	1 year and over	19	Male, 10 years and over
05	2 years and over	20	10 years and over
06	5 years and over	21	Female, 1 year and over
07	20 years and over	22	Female, under 1 year
09	65 years and over	23	55 years and over
10	Male	24	30 years and over
11	Female	25	Under 20 years
13	Female, 28 days and over	26	Female under 55 years
14	Female, 10-54 years	27	Under 15 years

Note: Edit codes 01, 08, 12, 15, and 16 are not used for table G.

Table H. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Multiple Cause-of-Death Classification Only

				0 - Conditional 1 - Absolute 2 - Not Applicable
ICD-10 code	Age/sex limitation	Age	Sex	Edit code ¹
E89.4	Female	2	1	11
E89.5	Male	2	1	10
N99.2	Female	2	1	11
N99.3	Female	2	1	11
O08	Female, 10-54	1	1	14
S31.2	Male	2	1	10
S31.3	Male	2	1	10
S31.4	Female	2	1	11
S37.4	Female	2	1	11
S37.5	Female	2	1	11
S37.6	Female	2	1	11
T38.4	Female	2	0	11
T38.5	Female	2	0	11
T70.3	12 years and over	0	2	16
T83.3	Female	2	1	11

¹ Edit codes may be useful for programming the age/sex limitations as follows:

<u>Edit code</u>	<u>Limited to</u>
10	Male
11	Female
14	Female, 10-54 years
16	12 years and over

Note: Edit codes 01-09, 12-13, 15, and 17-22 are not used for table H.

Table I. Age and Cause Consistency Edits for “Manner of Death” Variable

"Manner of Death" value	Age limitation	ICD-10 code(s) limitation	Edit failure corrected by
2 (suicide)	5 years and over	None at this moment	Set value to blank

Table J. Infrequent and Rare Cause-of-Death Edits for Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Cause
A00	Cholera
A01	Typhoid and paratyphoid fevers
A05.1	Botulism (including infant and wound botulism)
A07.0-.2,.8-.9	Other protozoal intestinal diseases (excluding coccidiosis)
A08.0	Rotaviral enteritis (edit exercised only if occurring to children under 5 years old)
A20	Plague
A21	Tularemia
A22	Anthrax
A23	Brucellosis
A24.0	Glanders
A24.1-.4	Melioidosis
A25	Rat-bite fevers
A27	Leptospirosis
A30	Leprosy [Hansen's disease]
A33	Tetanus neonatorum
A34	Obstetrical tetanus
A35	Other tetanus (Tetanus)
A36	Diphtheria
A37	Whooping cough
A39.0	Meningococcal meningitis
A39.4	Meningococcaemia, unspecified
A44	Bartonellosis
A49.1	Streptococcal infection, unspecified (edit exercised only when coding for <i>Streptococcus pneumoniae</i> infection occurring to children under 5 years old)
A65	Nonvenereal syphilis
A66	Yaws
A67	Pinta [carate]
A68	Relapsing fever
A69	Other spirochetal infection
A70	Chlamydia psittaci infection (ornithosis)
A75.0	Epidemic louse-borne typhus fever due to <i>Rickettsia prowazekii</i>
A75.1-.9	Other typhus fever
A77.1	Spotted fever due to <i>Rickettsia conorii</i> (Boutonneuse fever)
A77.2	Spotted fever due to <i>Rickettsia siberica</i> (North Asian tick fever)
A77.3	Spotted fever due to <i>Rickettsia australis</i> (Queensland tick typhus)
A77.8	Other spotted fevers (Other tick-borne rickettsioses)
A77.9	Spotted fever, unspecified (unspecified tick-borne rickettsioses)
A78	Q fever
A79	Other rickettsioses
A80	Acute poliomyelitis
A81	Atypical virus infections of central nervous system
A82	Rabies
A84	Tick-borne viral encephalitis
A85.2	Arthropod-borne viral encephalitis, unspecified (Viral encephalitis transmitted by other and unspecified arthropods)

Table J. Infrequent and Rare Cause-of-Death Edits for Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Cause
A90	Dengue fever [classical dengue]
A91	Dengue hemorrhagic fever
A92	Other mosquito-borne viral fevers
A93	Other arthropod-borne viral fevers, not elsewhere classified (including Oropouche fever, sandfly fever, Colorado tick fever and other specified fevers)
A94	Unspecified arthropod-borne viral fever
A95	Yellow fever
A96	Arenaviral hemorrhagic fever
A98-A99	Other and unspecified viral hemorrhagic fevers (including Crimean-Congo, Omsk, Kyasanur Forest, Ebola virus, Hanta virus)
B01	Varicella [chickenpox]
B03	Smallpox
B04	Monkeypox
B05	Measles
B06	Rubella [German measles]
B08.0	Other orthopoxvirus infections (including cowpox and paravaccinia)
B15	Acute hepatitis A (when occurring to children under 20 years old)
B16	Acute hepatitis B (when occurring to children under 20 years old)
B26	Mumps
B33.0	Epidemic myalgia (epidemic pleurodynia)
B33.4	Hantavirus (cardio-)pulmonary syndrome [HPS] [HCPS]
B50-B54	Malaria
B55	Leishmaniasis
B56	African trypanosomiasis
B57	Chagas' disease (including American trypanosomiasis)
B60.2	Naegleriasis
B65	Schistosomiasis [bilharziasis]
B66	Other fluke infections (including other trematode infections)
B67	Echinococcosis
B68	Teniasis
B69	Cysticercosis
B70	Diphyllobothriasis and sparganosis
B71	Other cestode infections
B72	Dracunculiasis (Dracontiasis)
B73	Onchocerciasis
B74	Filariasis (Filarial infection)
J09	Influenza due to identified avian influenza virus
P35.0	Congenital rubella syndrome
U04.9	Severe acute respiratory syndrome [SARS], unspecified
W88-W91	Exposure to radiation
Y36.5	War operation involving nuclear weapons
<u>Causing adverse effects in therapeutic use:</u>	
Y58	Bacterial vaccines
Y59.0	Viral vaccines
Y59.1	Rickettsial vaccines
Y59.2	Protozoal vaccines
Y59.3	Immunoglobulin

Table K. Place-of-Occurrence Edits for Selected External Causes of Death, ICD-10
W00-Y34, except Y06._, Y07._

[Place-of-occurrence codes are used for ICD-10 codes W00 - Y34 (except Y06._ and Y07._). For a listing of place-of-occurrence codes and their definitions see International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Vol. 1, in the beginning of Chapter XX.]

ICD-10 Code	Place-of-Occurrence Codes Allowed	Allocate Invalid Codes To:
W06	0,1,2,3,5,6,7,8,9	9
W07	0,1,2,3,5,6,7,8,9	9
W08	0,1,2,3,5,6,7,8,9	9
W09	0,1,2,3,5,6,8,9	9
W16	0,1,2,3,5,6,7,8,9	9
W35	0,1,2,3,5,6,7,8,9	9
W65	0,1,2,5,7,8,9	9
W66	0,1,2,5,7,8,9	9
W67	0,1,2,3,5,6,7,8,9	9
W68	0,1,2,3,5,6,7,8,9	9
W69	6,8,9	9
W70	6,8,9	9
W75	0,1,2,3,5,6,7,8,9	9
X00	0,1,2,3,5,6,7,8,9	9
X02	0,1,2,5,6,7,8,9	9
X05	0,1,2,3,4,5,7,8,9	9
X15	0,1,2,3,5,6,7,8,9	9
X52	1,2,5,6,8,9	9
X71	0,1,2,3,5,6,7,8,9	9
X92	0,1,2,3,5,6,7,8,9	9
Y21	0,1,2,3,5,6,7,8,9	9

NOTE 1: For ICD-10 codes included in the range W00 - Y34 (except Y06._ and Y07._) and not specified above, the place-of-occurrence codes 0 through 9 are allowed. Invalid codes will be allocated to code 9.

NOTE 2: The place-of-occurrence codes may be used for selected external causes of death W00-Y34 (except Y06._ and Y07._) that may be either an underlying or a multiple cause of death.

Table L. Edits on checkbox item number 36 “IF FEMALE” used to classify pregnancy status of female decedent

If decedent is male (sex = “M”), then:

Valid values are “7” and “8.” (“Not on certificate” and “Not applicable,” respectively)

If state does not have a pregnancy status item, then assign pregnancy status value to “7”
AND

Set the pregnancy status substitution flag variable to “1.”

If state does have a pregnancy status item and value is NOT “7” or “8,” then assign pregnancy status value to “8”

AND

Set the pregnancy status substitution flag variable to “1.”

If decedent is female (sex = “F”), then:

Valid values are “1,” “2,” “3,” “4,” “7,” “8” and “9.” (Any of the legal values defined by the record layout manual of the historical mortality file)

If state does not have a pregnancy status item, then assign pregnancy status value to “7”
AND

Set the pregnancy status substitution flag variable to “1.”

If state does have a pregnancy status item, and age of female decedent is less than 10 years or more than 54 years, and pregnancy status value is NOT “8,” then assign pregnancy status value to “8”

AND

Set the pregnancy status substitution flag variable to “1.”

If state does have a pregnancy status item, and age of female decedent is more than 9 years and less than 55 years, and pregnancy status value is blank, then assign pregnancy status value to “9”

AND

Set the pregnancy status substitution flag variable to “1.”

Else, if pregnancy status is not valid for the female decedent, then assign pregnancy status to “8”

AND

Set the pregnancy status substitution flag variable to “1.”

For all decedents regardless of sex:

If original pregnancy status value was not the same as the assigned value, then set the pregnancy status substitution flag variable to “1.”

If else, then set this pregnancy status substitution flag variable to blank.

Section on Fetal Death File

V Fetal Death File Cause-of-Death Computer Edits

The fetal death file is used to produce annual detailed tabulations of demographic and geographic data and contains cause-of-death data in most States. The edits are designed to assure code validity for cause of death and verify codes or code combinations which are considered either impossible or unlikely occurrences.

A. Medical Items

Cause-of-death codes in ICD-10 are categorized in terms of their validity for cause-of-death classification.

1. Codes Valid for Causes of Fetal Death

Table L lists the ICD-10 codes valid for coding cause of fetal death. For records that fail the edit, NCHS will review, but then the cause of death will be recoded to P95- cause unknown. This list may also be used for determining the validity of other causes entered on the fetal death report.

Note: The term "underlying cause" is no longer acceptable under the framework of the new (2003) U.S. Standard Report of Fetal Death. "Initiating cause" is the proper term under the new format.

2. Created Codes

The fetal death file does not use created codes in ICD-10.

3. Sex/Cause Consistency Edits

The purpose of this computer edit is to maintain consistency between a reported underlying / initiating cause of death and the sex of the fetus. Table M lists the ICD codes which are applicable only to males or only to females. The sex/cause edit will be done after the imputation for not-stated sex. If sex is coded 1 (male) or 9 (unknown), and the cause of death is listed in table M as being applicable only to females, the sex will be changed to 2 (female). If sex is coded 2 (female) or 9 (unknown) and the cause of death is listed in table M as being applicable only to males, the sex will be changed to 1 (male).

4. Plurality/Cause Consistency Edits

The purpose of this computer edit is to maintain consistency between a reported underlying / initiating cause of death and the plurality of the fetus. Some ICD codes are applicable only to multiple births. If the cause of fetal death is assigned to ICD-10 codes P01.5 or Q89.4, plurality should be coded other than 1 (singleton). The check for consistency between plurality and cause of death should be done after the processing for plurality. If the cause of fetal death is assigned to ICD code Q89.4 and plurality is coded 1, the ICD code will be changed to Q89.9. If the cause of fetal death is coded to ICD code P01.5 and plurality is coded 1, the ICD code will be changed to P01.9.

Table M. ICD-10 Codes Valid for Causes of Fetal Death

A000	A164	A260	A441	A751	A920	B059	B333	B458	B608
A001	A165	A267	A448	A752	A921	B080	B334	B459	B64
A009	A167	A268	A449	A753	A922	B150	B338	B460	B650
A010	A168	A269	A46	A759	A923	B159	B340	B461	B651
A011	A169	A270	A480	A770	A924	B160	B341	B462	B652
A012	A170	A278	A482	A771	A928	B161	B342	B463	B653
A013	A171	A279	A483	A772	A929	B162	B343	B464	B658
A014	A178	A280	A484	A773	A930	B169	B344	B465	B659
A020	A179	A281	A488	A778	A931	B170	B348	B468	B660
A021	A180	A282	A490	A779	A932	B171	B349	B469	B661
A022	A181	A288	A491	A78	A938	B178	B380	B470	B662
A028	A182	A289	A492	A790	A94	B179	B381	B471	B663
A029	A183	A300	A493	A791	A950	B180	B382	B479	B664
A030	A184	A301	A498	A798	A951	B181	B383	B480	B665
A031	A185	A303	A499	A799	A959	B182	B384	B481	B668
A032	A186	A305	A500	A800	A960	B188	B387	B482	B669
A033	A187	A308	A502	A802	A961	B189	B388	B483	B670
A038	A188	A309	A503	A803	A962	B190	B389	B484	B671
A039	A190	A310	A504	A804	A968	B199	B390	B487	B672
A040	A191	A311	A505	A809	A969	B200	B391	B488	B673
A041	A192	A318	A509	A810	A980	B201	B392	B49	B674
A042	A198	A319	A540	A811	A981	B202	B393	B500	B675
A043	A199	A320	A541	A812	A982	B203	B394	B508	B676
A044	A200	A321	A542	A818	A983	B204	B395	B509	B677
A045	A201	A327	A543	A819	A984	B205	B399	B510	B678
A046	A202	A328	A544	A820	A985	B206	B400	B518	B679
A047	A203	A329	A545	A821	A988	B208	B401	B519	B680
A048	A207	A360	A546	A829	A99	B209	B402	B520	B681
A049	A208	A361	A548	A830	B000	B210	B403	B528	B689
A050	A209	A362	A549	A831	B001	B211	B407	B529	B690
A051	A210	A363	A600	A832	B002	B212	B408	B530	B691
A052	A211	A368	A601	A833	B003	B220	B409	B531	B698
A053	A212	A369	A609	A834	B004	B221	B410	B538	B699
A058	A213	A370	A65	A835	B005	B222	B417	B54	B700
A059	A217	A371	A660	A836	B007	B230	B418	B550	B701
A060	A218	A378	A661	A838	B008	B231	B419	B551	B710
A061	A219	A379	A662	A839	B009	B232	B420	B552	B711
A062	A220	A38	A663	A840	B010	B238	B421	B559	B718
A063	A221	A390	A664	A841	B011	B24	B427	B560	B719
A064	A222	A391	A665	A848	B012	B250	B428	B561	B72
A065	A227	A392	A666	A849	B018	B251	B429	B569	B73
A066	A228	A393	A667	A850	B019	B252	B430	B570	B740
A067	A229	A394	A669	A851	B020	B258	B431	B571	B741
A068	A230	A395	A670	A852	B021	B259	B432	B572	B743
A069	A231	A398	A671	A858	B022	B260	B438	B573	B744
A072	A232	A399	A673	A86	B023	B261	B439	B574	B748
A073	A233	A420	A679	A870	B027	B262	B440	B575	B749
A078	A238	A421	A680	A871	B028	B263	B441	B580	B75
A079	A239	A422	A681	A872	B029	B268	B442	B581	B760
A082	A240	A427	A689	A878	B03	B269	B447	B582	B761
A083	A241	A428	A690	A879	B04	B270	B448	B583	B768
A084	A242	A429	A691	A880	B050	B271	B449	B588	B769
A085	A243	A430	A692	A881	B051	B278	B450	B589	B770
A090	A244	A431	A698	A888	B052	B279	B451	B59	B778
A099	A250	A438	A699	A89	B053	B330	B452	B600	B779
A162	A251	A439	A70	A90	B054	B331	B453	B601	B780
A163	A259	A440	A750	A91	B058	B332	B457	B602	B781

Table M. ICD-10 Codes Valid for Causes of Fetal Death

B787	C049	C168	C323	C460	C571	C716	C843	D002	D102
B789	C050	C169	C328	C461	C572	C717	C844	D010	D103
B79	C051	C170	C329	C462	C573	C718	C845	D011	D104
B80	C052	C171	C33	C463	C574	C719	C850	D012	D105
B810	C058	C172	C340	C467	C577	C720	C851	D013	D106
B811	C059	C173	C341	C468	C578	C721	C857	D014	D107
B812	C060	C178	C342	C469	C579	C722	C859	D015	D109
B813	C061	C179	C343	C470	C600	C723	C880	D017	D110
B814	C062	C180	C348	C471	C601	C724	C881	D019	D117
B818	C068	C181	C349	C472	C602	C725	C882	D020	D119
B820	C069	C182	C37	C473	C608	C728	C883	D021	D120
B829	C07	C183	C380	C474	C609	C729	C887	D022	D121
B830	C080	C184	C381	C475	C61	C73	C889	D023	D122
B831	C081	C185	C382	C476	C620	C740	C900	D024	D123
B832	C088	C186	C383	C478	C621	C741	C901	D030	D124
B833	C089	C187	C384	C479	C629	C749	C902	D031	D125
B834	C090	C188	C388	C480	C630	C750	C910	D032	D126
B838	C091	C189	C390	C481	C631	C751	C911	D033	D127
B839	C098	C19	C398	C482	C632	C752	C912	D034	D128
B870	C099	C20	C399	C488	C637	C753	C913	D035	D129
B871	C100	C210	C400	C490	C638	C754	C914	D036	D130
B872	C101	C211	C401	C491	C639	C755	C915	D037	D131
B873	C102	C212	C402	C492	C64	C758	C917	D038	D132
B874	C103	C218	C403	C493	C65	C759	C919	D039	D133
B878	C104	C220	C408	C494	C66	C760	C920	D040	D134
B879	C108	C221	C409	C495	C670	C761	C921	D041	D135
B880	C109	C222	C410	C496	C671	C762	C922	D042	D136
B881	C110	C223	C411	C498	C672	C763	C923	D043	D137
B882	C111	C224	C412	C499	C673	C764	C924	D044	D139
B883	C112	C227	C413	C500	C674	C765	C925	D045	D140
B888	C113	C229	C414	C501	C675	C767	C927	D046	D141
B889	C118	C23	C419	C502	C676	C768	C929	D047	D142
B89	C119	C240	C430	C503	C677	C80	C930	D048	D143
B99	C12	C241	C431	C504	C678	C810	C931	D049	D144
C000	C130	C248	C432	C505	C679	C811	C932	D050	D150
C001	C131	C249	C433	C506	C680	C812	C937	D051	D151
C002	C132	C250	C434	C508	C681	C813	C939	D057	D152
C003	C138	C251	C435	C509	C688	C817	C940	D059	D157
C004	C139	C252	C436	C510	C689	C819	C941	D060	D160
C005	C140	C253	C437	C511	C690	C820	C942	D061	D161
C006	C142	C254	C438	C512	C691	C821	C943	D067	D162
C008	C148	C257	C439	C518	C692	C822	C944	D069	D163
C009	C150	C259	C440	C519	C693	C827	C945	D070	D164
C01	C151	C260	C441	C52	C694	C829	C947	D071	D165
C020	C152	C261	C442	C530	C695	C830	C950	D072	D166
C021	C153	C268	C443	C531	C696	C831	C951	D073	D167
C022	C154	C269	C444	C538	C698	C832	C952	D074	D168
C023	C155	C300	C445	C539	C699	C833	C957	D075	D169
C024	C158	C301	C446	C540	C700	C834	C959	D076	D170
C028	C159	C310	C447	C541	C701	C835	C960	D090	D171
C029	C160	C311	C448	C542	C709	C836	C961	D091	D172
C030	C161	C312	C449	C543	C710	C837	C962	D092	D173
C031	C162	C313	C450	C548	C711	C838	C963	D093	D174
C039	C163	C318	C451	C549	C712	C839	C967	D097	D175
C040	C164	C319	C452	C55	C713	C840	C969	D099	D176
C041	C165	C321	C457	C56	C714	C841	D000	D100	D177
C048	C166	C322	C459	C570	C715	C842	D001	D101	D179

Table M. ICD-10 Codes Valid for Causes of Fetal Death

D180	D301	D397	D508	D618	D803	E168	E712	E833	G711
D181	D302	D399	D509	D619	D804	E169	E713	E838	G712
D190	D303	D400	D510	D640	D805	E200	E720	E839	G719
D191	D304	D401	D511	D641	D806	E201	E721	E840	G723
D197	D307	D407	D512	D642	D807	E208	E722	E841	G800
D199	D309	D409	D513	D643	D808	E209	E723	E848	G801
D200	D310	D410	D518	D644	D809	E210	E724	E849	G802
D201	D311	D411	D519	D648	D810	E213	E725	E850	G803
D210	D312	D412	D520	D649	D811	E214	E728	E851	G804
D211	D313	D413	D521	D66	D812	E215	E729	E852	G808
D212	D314	D414	D528	D67	D813	E220	E740	E853	G809
D213	D315	D417	D529	D680	D814	E221	E741	E854	G900
D214	D316	D419	D530	D681	D815	E228	E742	E858	G901
D215	D319	D420	D531	D682	D816	E229	E743	E859	G902
D216	D320	D421	D532	D683	D817	E230	E744	E880	G903
D219	D321	D429	D538	D684	D818	E233	E748	E881	G904
D220	D329	D430	D539	D685	D819	E236	E749	E882	G908
D221	D330	D431	D550	D686	D820	E237	E750	E888	G909
D222	D331	D432	D551	D688	D821	E240	E751	E889	G910
D223	D332	D433	D552	D689	D822	E241	E752	G000	G911
D224	D333	D434	D553	D690	D823	E243	E753	G001	G912
D225	D334	D437	D558	D691	D824	E248	E754	G002	G913
D226	D337	D439	D559	D692	D828	E249	E755	G003	G918
D227	D339	D440	D560	D693	D829	E250	E756	G008	G919
D229	D34	D441	D561	D694	D830	E258	E760	G009	G935
D230	D350	D442	D562	D695	D831	E259	E761	G030	G938
D231	D351	D443	D563	D696	D832	E260	E762	G038	G950
D232	D352	D444	D564	D698	D838	E268	E763	G039	G951
D233	D353	D445	D568	D699	D839	E269	E768	G040	G952
D234	D354	D446	D569	D70	D840	E270	E769	G041	G958
D235	D355	D447	D570	D71	D841	E271	E770	G042	G959
D236	D356	D448	D571	D720	D848	E272	E771	G048	I210
D237	D357	D449	D572	D721	D849	E274	E778	G120	I211
D239	D358	D45	D573	D728	D860	E275	E779	G121	I212
D24	D359	D460	D578	D729	D861	E278	E780	G122	I213
D250	D360	D461	D580	D730	D862	E279	E781	G128	I214
D251	D361	D462	D581	D731	D863	E310	E782	G129	I219
D252	D367	D463	D582	D732	D868	E311	E783	G318	I220
D259	D369	D464	D588	D733	D869	E318	E784	G319	I221
D260	D370	D467	D589	D734	D890	E319	E785	G361	I228
D261	D371	D469	D590	D735	D891	E320	E786	G368	I229
D267	D372	D470	D591	D738	D892	E321	E788	G369	I241
D269	D373	D471	D592	D739	D898	E328	E789	G370	I248
D27	D374	D472	D593	D740	D899	E329	E791	G371	I249
D280	D375	D473	D594	D748	E000	E341	E798	G372	I251
D281	D376	D477	D595	D749	E001	E343	E799	G373	I255
D282	D377	D479	D596	D750	E002	E345	E800	G374	I300
D287	D379	D480	D598	D752	E009	E348	E801	G375	I301
D289	D380	D481	D599	D758	E030	E349	E802	G378	I308
D290	D381	D482	D600	D759	E031	E700	E803	G379	I309
D291	D382	D483	D601	D760	E071	E701	E804	G403	I319
D292	D383	D484	D608	D761	E079	E702	E805	G404	I330
D293	D384	D485	D609	D762	E15	E703	E806	G600	I339
D294	D385	D486	D610	D763	E160	E708	E807	G601	I400
D297	D386	D487	D611	D800	E161	E709	E830	G608	I409
D299	D390	D489	D612	D801	E163	E710	E831	G609	I422
D300	D391	D501	D613	D802	E164	E711	E832	G710	I424

Table M. ICD-10 Codes Valid for Causes of Fetal Death

I460	K461	P006	P104	P242	P501	P704	P963	Q120	Q211
I461	K469	P007	P108	P243	P502	P708	P965	Q121	Q212
I469	K550	P008	P109	P248	P503	P709	P968	Q122	Q213
I513	K740	P009	P110	P249	P504	P711	P969	Q123	Q214
I600	K741	P010	P111	P250	P505	P712	Q000	Q124	Q218
I601	K742	P011	P112	P251	P508	P713	Q001	Q128	Q219
I602	K743	P012	P113	P252	P509	P714	Q002	Q129	Q220
I603	K745	P013	P114	P253	P510	P718	Q010	Q130	Q221
I604	K768	P014	P115	P258	P519	P719	Q011	Q131	Q222
I605	K828	P015	P119	P260	P520	P720	Q012	Q132	Q223
I606	K838	P016	P120	P261	P521	P721	Q018	Q133	Q224
I607	M000	P017	P121	P268	P522	P722	Q019	Q134	Q225
I608	M001	P018	P122	P269	P523	P728	Q02	Q135	Q226
I609	M002	P019	P123	P270	P524	P729	Q030	Q138	Q228
I630	M008	P020	P124	P271	P525	P741	Q031	Q139	Q229
I631	M009	P021	P128	P278	P526	P742	Q038	Q140	Q230
I632	M329	P022	P129	P279	P528	P743	Q039	Q141	Q231
I633	M359	P023	P130	P280	P529	P744	Q040	Q142	Q232
I634	M600	P024	P131	P281	P540	P745	Q041	Q143	Q233
I635	M898	P025	P132	P285	P541	P748	Q042	Q148	Q234
I636	N040	P026	P133	P288	P542	P749	Q043	Q150	Q238
I638	N041	P027	P134	P289	P543	P760	Q045	Q158	Q239
I639	N042	P028	P138	P290	P544	P768	Q046	Q159	Q240
I780	N043	P029	P139	P291	P545	P769	Q048	Q160	Q241
I789	N044	P030	P140	P292	P546	P77	Q049	Q161	Q242
J100	N045	P031	P141	P294	P548	P780	Q050	Q162	Q243
J101	N046	P032	P142	P298	P549	P781	Q051	Q163	Q244
J108	N047	P033	P143	P299	P550	P782	Q052	Q164	Q245
J110	N048	P034	P148	P350	P551	P783	Q053	Q165	Q246
J111	N049	P035	P149	P351	P558	P788	Q054	Q169	Q248
J118	N050	P036	P150	P352	P559	P789	Q055	Q170	Q249
K070	N051	P038	P151	P353	P560	P810	Q056	Q171	Q250
K071	N052	P039	P152	P358	P569	P819	Q057	Q172	Q251
K078	N053	P040	P153	P359	P570	P830	Q058	Q173	Q252
K079	N054	P041	P154	P360	P578	P831	Q059	Q174	Q253
K400	N055	P042	P155	P361	P579	P832	Q060	Q175	Q254
K401	N056	P043	P156	P362	P580	P833	Q061	Q178	Q255
K402	N057	P044	P158	P363	P581	P838	Q062	Q179	Q256
K403	N058	P045	P159	P364	P582	P910	Q063	Q180	Q257
K404	N059	P046	P200	P365	P583	P911	Q064	Q181	Q258
K409	N070	P048	P201	P368	P584	P912	Q068	Q182	Q259
K410	N071	P049	P209	P369	P585	P913	Q069	Q183	Q260
K411	N072	P050	P219	P370	P588	P914	Q070	Q184	Q261
K412	N073	P051	P220	P371	P589	P915	Q078	Q185	Q262
K413	N074	P052	P228	P372	P591	P916	Q079	Q186	Q263
K414	N075	P059	P229	P373	P60	P918	Q100	Q187	Q264
K419	N076	P070	P230	P374	P610	P919	Q101	Q188	Q265
K420	N077	P071	P231	P375	P612	P93	Q102	Q189	Q266
K421	N078	P072	P232	P378	P613	P940	Q103	Q200	Q268
K429	N079	P073	P233	P379	P614	P941	Q104	Q201	Q269
K430	N328	P080	P234	P38	P616	P942	Q105	Q202	Q270
K431	P000	P081	P235	P392	P618	P948	Q106	Q203	Q271
K439	P001	P082	P236	P393	P619	P949	Q107	Q204	Q272
K450	P002	P100	P238	P394	P700	P95	Q110	Q205	Q273
K451	P003	P101	P239	P398	P701	P960	Q111	Q206	Q274
K458	P004	P102	P240	P399	P702	P961	Q112	Q208	Q278
K460	P005	P103	P241	P500	P703	P962	Q113	Q210	Q279

Table M. ICD-10 Codes Valid for Causes of Fetal Death

Q280	Q384	Q502	Q610	Q682	Q766	Q840	Q933	R788	S025
Q281	Q385	Q503	Q611	Q683	Q767	Q841	Q934	R789	S026
Q282	Q386	Q504	Q612	Q684	Q769	Q842	Q935	R830	S027
Q283	Q387	Q505	Q613	Q685	Q770	Q843	Q936	R831	S028
Q288	Q388	Q506	Q614	Q688	Q771	Q844	Q937	R832	S029
Q289	Q390	Q510	Q615	Q690	Q772	Q845	Q938	R833	S030
Q300	Q391	Q511	Q618	Q691	Q773	Q846	Q939	R834	S031
Q301	Q392	Q512	Q619	Q692	Q774	Q848	Q951	R835	S032
Q302	Q393	Q513	Q620	Q699	Q775	Q849	Q952	R836	S033
Q303	Q394	Q514	Q621	Q700	Q776	Q850	Q954	R837	S034
Q308	Q395	Q515	Q622	Q701	Q777	Q851	Q955	R838	S035
Q309	Q396	Q516	Q623	Q702	Q778	Q858	Q958	R839	S040
Q310	Q398	Q517	Q624	Q703	Q779	Q859	Q959	R840	S041
Q311	Q399	Q518	Q625	Q704	Q780	Q860	Q960	R841	S042
Q312	Q400	Q519	Q626	Q709	Q781	Q861	Q961	R842	S043
Q313	Q401	Q520	Q627	Q710	Q782	Q862	Q962	R843	S044
Q315	Q402	Q521	Q628	Q711	Q783	Q868	Q963	R844	S045
Q318	Q403	Q522	Q630	Q712	Q784	Q870	Q964	R845	S046
Q319	Q408	Q523	Q631	Q713	Q785	Q871	Q968	R846	S047
Q320	Q409	Q524	Q632	Q714	Q786	Q872	Q969	R847	S048
Q321	Q410	Q525	Q633	Q715	Q788	Q873	Q970	R848	S049
Q322	Q411	Q526	Q638	Q716	Q789	Q874	Q971	R849	S050
Q323	Q412	Q527	Q639	Q718	Q790	Q875	Q972	R850	S051
Q324	Q418	Q528	Q640	Q719	Q791	Q878	Q973	R851	S052
Q330	Q419	Q529	Q641	Q720	Q792	Q890	Q978	R852	S053
Q331	Q420	Q530	Q642	Q721	Q793	Q891	Q979	R853	S054
Q332	Q421	Q531	Q643	Q722	Q794	Q892	Q980	R854	S055
Q333	Q422	Q532	Q644	Q723	Q795	Q893	Q981	R855	S056
Q334	Q423	Q539	Q645	Q724	Q796	Q894	Q982	R856	S057
Q335	Q428	Q540	Q646	Q725	Q798	Q897	Q983	R857	S058
Q336	Q429	Q541	Q647	Q726	Q799	Q898	Q984	R858	S059
Q338	Q430	Q542	Q648	Q727	Q800	Q899	Q985	R859	S060
Q339	Q431	Q543	Q649	Q728	Q801	Q900	Q987	R898	S061
Q340	Q432	Q544	Q652	Q729	Q802	Q901	Q988	R99	S062
Q341	Q433	Q548	Q658	Q730	Q803	Q902	Q989	S000	S063
Q348	Q434	Q549	Q659	Q731	Q804	Q909	Q990	S001	S064
Q349	Q435	Q550	Q660	Q738	Q808	Q910	Q991	S002	S065
Q351	Q436	Q551	Q661	Q740	Q809	Q911	Q992	S003	S066
Q353	Q437	Q552	Q662	Q741	Q810	Q912	Q998	S004	S067
Q355	Q438	Q553	Q663	Q742	Q811	Q913	Q999	S005	S068
Q357	Q439	Q554	Q664	Q743	Q812	Q914	R14	S007	S069
Q359	Q440	Q555	Q665	Q748	Q818	Q915	R18	S008	S070
Q360	Q441	Q556	Q666	Q749	Q819	Q916	R190	S009	S071
Q361	Q442	Q558	Q667	Q750	Q820	Q917	R220	S010	S078
Q369	Q443	Q559	Q668	Q751	Q821	Q920	R238	S011	S079
Q370	Q444	Q560	Q669	Q752	Q822	Q921	R298	S012	S080
Q371	Q445	Q561	Q670	Q753	Q823	Q922	R456	S013	S081
Q372	Q446	Q562	Q671	Q754	Q824	Q923	R75	S014	S088
Q373	Q447	Q563	Q672	Q755	Q825	Q924	R772	S015	S089
Q374	Q450	Q564	Q673	Q758	Q828	Q925	R780	S017	S090
Q375	Q451	Q600	Q674	Q759	Q829	Q926	R781	S018	S091
Q378	Q452	Q601	Q675	Q760	Q830	Q927	R782	S019	S092
Q379	Q453	Q602	Q676	Q761	Q831	Q928	R783	S020	S097
Q380	Q458	Q603	Q677	Q762	Q832	Q929	R784	S021	S098
Q381	Q459	Q604	Q678	Q763	Q833	Q930	R785	S022	S099
Q382	Q500	Q605	Q680	Q764	Q838	Q931	R786	S023	S100
Q383	Q501	Q606	Q681	Q765	Q839	Q932	R787	S024	S101

Table M. ICD-10 Codes Valid for Causes of Fetal Death

S107	S220	S315	S390	S498	S601	S681	S807	S902	T008
S108	S221	S317	S396	S499	S602	S682	S808	S903	T009
S109	S222	S318	S397	S500	S607	S683	S809	S907	T012
S110	S223	S320	S398	S501	S608	S684	S810	S908	T013
S111	S224	S321	S399	S507	S609	S688	S817	S909	T019
S112	S225	S322	S400	S508	S610	S689	S818	S910	T021
S117	S228	S323	S407	S509	S611	S697	S819	S911	T022
S118	S229	S324	S408	S510	S617	S698	S820	S912	T023
S119	S230	S325	S409	S517	S618	S699	S821	S913	T024
S120	S231	S327	S410	S518	S619	S700	S822	S917	T025
S121	S232	S328	S411	S519	S620	S701	S823	S920	T028
S122	S233	S330	S417	S520	S621	S707	S824	S921	T029
S127	S234	S331	S418	S521	S622	S708	S825	S922	T031
S128	S235	S332	S420	S522	S623	S709	S826	S923	T032
S129	S240	S333	S421	S523	S624	S710	S827	S924	T033
S130	S241	S334	S422	S524	S625	S711	S828	S925	T038
S131	S242	S335	S423	S525	S626	S717	S829	S927	T039
S132	S243	S336	S424	S526	S627	S718	S830	S929	T041
S133	S244	S337	S427	S527	S628	S720	S831	S930	T042
S134	S245	S340	S428	S528	S630	S721	S832	S931	T043
S135	S246	S341	S429	S529	S631	S722	S833	S932	T048
S136	S250	S342	S430	S530	S632	S723	S834	S933	T049
S140	S251	S343	S431	S531	S633	S724	S835	S934	T050
S141	S252	S344	S432	S532	S634	S727	S836	S935	T052
S142	S253	S345	S433	S533	S635	S728	S837	S936	T053
S143	S254	S346	S434	S534	S636	S729	S840	S940	T055
S144	S255	S348	S435	S540	S637	S730	S841	S941	T058
S145	S257	S350	S436	S541	S640	S731	S842	S942	T059
S146	S258	S351	S437	S542	S641	S740	S847	S943	T062
S150	S259	S352	S440	S543	S642	S741	S848	S947	T063
S151	S260	S353	S441	S547	S643	S742	S849	S948	T064
S152	S268	S354	S442	S548	S644	S747	S850	S949	T065
S153	S269	S355	S443	S549	S647	S748	S851	S950	T07
S157	S270	S357	S444	S550	S648	S749	S852	S951	T08
S158	S271	S358	S445	S551	S649	S750	S853	S952	T090
S159	S272	S359	S447	S552	S650	S751	S854	S957	T091
S16	S273	S360	S448	S557	S651	S752	S855	S958	T092
S170	S274	S361	S449	S558	S652	S757	S857	S959	T093
S178	S275	S362	S450	S559	S653	S758	S858	S960	T094
S179	S276	S363	S451	S560	S654	S759	S859	S961	T095
S18	S277	S364	S452	S561	S655	S760	S860	S962	T096
S197	S278	S365	S453	S562	S657	S761	S861	S967	T098
S198	S279	S366	S457	S563	S658	S762	S862	S968	T099
S199	S280	S367	S458	S564	S659	S763	S863	S969	T10
S200	S281	S368	S459	S565	S660	S764	S867	S970	T110
S201	S290	S369	S460	S567	S661	S767	S868	S971	T111
S202	S297	S370	S461	S568	S662	S770	S869	S978	T112
S203	S298	S371	S462	S570	S663	S771	S870	S980	T113
S204	S299	S372	S463	S578	S664	S772	S878	S981	T114
S207	S300	S373	S467	S579	S665	S780	S880	S982	T115
S208	S301	S377	S468	S580	S666	S781	S881	S983	T116
S210	S302	S378	S469	S581	S667	S789	S889	S984	T118
S211	S307	S379	S47	S589	S668	S797	S897	S997	T119
S212	S308	S380	S480	S597	S669	S798	S898	S998	T12
S217	S309	S381	S481	S598	S670	S799	S899	S999	T130
S218	S310	S382	S489	S599	S678	S800	S900	T002	T131
S219	S311	S383	S497	S600	S680	S801	S901	T003	T132

Table M. ICD-10 Codes Valid for Causes of Fetal Death

T133	T216	T285	T354	T424	T483	T564	T658	T796	T856
T134	T217	T286	T355	T425	T484	T565	T659	T797	T857
T135	T220	T287	T356	T426	T485	T566	T66	T798	T858
T136	T221	T288	T357	T427	T486	T567	T670	T799	T859
T138	T222	T289	T360	T428	T487	T568	T671	T800	T860
T139	T223	T300	T361	T430	T490	T569	T672	T801	T861
T140	T224	T301	T362	T431	T491	T570	T673	T802	T862
T141	T225	T302	T363	T432	T492	T571	T674	T803	T863
T142	T226	T303	T364	T433	T493	T572	T675	T804	T864
T143	T227	T304	T365	T434	T494	T573	T676	T805	T868
T144	T230	T305	T366	T435	T495	T578	T677	T806	T869
T145	T231	T306	T367	T436	T496	T579	T678	T808	T870
T146	T232	T307	T368	T438	T497	T58	T679	T809	T871
T147	T233	T310	T369	T439	T498	T590	T68	T810	T872
T148	T234	T311	T370	T440	T499	T591	T690	T811	T873
T149	T235	T312	T371	T441	T500	T592	T691	T812	T874
T150	T236	T313	T372	T442	T501	T593	T698	T813	T875
T151	T237	T314	T373	T443	T502	T594	T699	T814	T876
T158	T240	T315	T374	T444	T503	T595	T700	T815	T880
T159	T241	T316	T375	T445	T504	T596	T701	T816	T881
T16	T242	T317	T378	T446	T505	T597	T702	T817	T882
T170	T243	T318	T379	T447	T506	T598	T703	T818	T883
T171	T244	T319	T380	T448	T507	T599	T704	T819	T884
T172	T245	T320	T381	T449	T508	T600	T708	T820	T885
T173	T246	T321	T382	T450	T509	T601	T709	T821	T886
T174	T247	T322	T383	T451	T510	T602	T71	T822	T887
T175	T250	T323	T386	T452	T511	T603	T730	T823	T888
T178	T251	T324	T387	T453	T512	T604	T731	T824	T889
T179	T252	T325	T388	T454	T513	T608	T732	T825	T900
T180	T253	T326	T389	T455	T518	T609	T733	T826	T901
T181	T254	T327	T390	T456	T519	T610	T738	T827	T902
T182	T255	T328	T391	T457	T520	T611	T739	T828	T903
T183	T256	T329	T392	T458	T521	T612	T740	T829	T904
T184	T257	T330	T393	T459	T522	T618	T741	T830	T905
T185	T260	T331	T394	T460	T523	T619	T742	T831	T908
T188	T261	T332	T398	T461	T524	T620	T743	T832	T909
T189	T262	T333	T399	T462	T528	T621	T748	T834	T910
T190	T263	T334	T400	T463	T529	T622	T749	T835	T911
T191	T264	T335	T401	T464	T530	T628	T750	T836	T912
T192	T265	T336	T402	T465	T531	T629	T751	T838	T913
T193	T266	T337	T403	T466	T532	T630	T752	T839	T914
T198	T267	T338	T404	T467	T533	T631	T753	T840	T915
T199	T268	T339	T405	T468	T534	T632	T754	T841	T918
T200	T269	T340	T406	T469	T535	T633	T758	T842	T919
T201	T270	T341	T407	T470	T536	T634	T780	T843	T920
T202	T271	T342	T408	T471	T537	T635	T781	T844	T921
T203	T272	T343	T409	T472	T539	T636	T782	T845	T922
T204	T273	T344	T410	T473	T540	T638	T783	T846	T923
T205	T274	T345	T411	T474	T541	T639	T784	T847	T924
T206	T275	T346	T412	T475	T542	T64	T788	T848	T925
T207	T276	T347	T413	T476	T543	T650	T789	T849	T926
T210	T277	T348	T414	T477	T549	T651	T790	T850	T928
T211	T280	T349	T415	T478	T55	T652	T791	T851	T929
T212	T281	T350	T420	T479	T560	T653	T792	T852	T930
T213	T282	T351	T421	T480	T561	T654	T793	T853	T931
T214	T283	T352	T422	T481	T562	T655	T794	T854	T932
T215	T284	T353	T423	T482	T563	T656	T795	T855	T933

Table M. ICD-10 Codes Valid for Causes of Fetal Death

T934	V326	V611	V820	V935	W45	X99
T935	V331	V616	V821	V936	W49	Y00
T936	V336	V621	V822	V937	W50	Y02
T938	V341	V626	V823	V938	W51	Y03
T939	V346	V631	V825	V939	W52	Y04
T940	V351	V636	V826	V940	W55	Y08
T941	V356	V641	V827	V941	W58	Y09
T950	V361	V646	V828	V942	W64	Y10
T951	V366	V651	V829	V943	W85	Y11
T952	V371	V656	V831	V944	W86	Y12
T953	V376	V661	V836	V945	W87	Y13
T954	V381	V666	V841	V946	W88	Y14
T958	V386	V671	V846	V947	W89	Y15
T959	V391	V676	V851	V948	W90	Y16
T96	V395	V681	V856	V949	W91	Y17
T97	V401	V686	V861	V950	W92	Y18
T980	V406	V691	V866	V951	W93	Y19
T981	V411	V695	V870	V952	W99	Y22
T982	V416	V701	V871	V953	X19	Y23
T983	V421	V706	V872	V954	X30	Y24
*U010	V426	V711	V873	V958	X31	Y25
*U011	V431	V716	V874	V959	X32	Y26
*U012	V436	V721	V875	V960	X33	Y27
*U013	V441	V726	V876	V961	X340	Y28
*U014	V446	V731	V877	V962	X341	Y29
*U015	V451	V736	V878	V968	X348	Y32
*U016	V456	V741	V879	V969	X349	Y33
*U017	V461	V746	V880	V970	X35	Y34
*U018	V466	V751	V881	V973	X36	Y360
*U019	V471	V756	V882	V978	X37	Y361
V191	V476	V761	V883	V98	X39	Y362
V195	V481	V766	V884	V99	X40	Y364
V201	V486	V771	V885	W20	X41	Y365
V205	V491	V776	V886	W21	X42	Y366
V211	V495	V781	V887	W22	X43	Y367
V215	V501	V786	V888	W23	X44	Y368
V221	V506	V791	V889	W24	X45	Y369
V225	V511	V795	V890	W25	X46	
V231	V516	V800	V891	W26	X47	
V235	V521	V801	V892	W27	X48	
V241	V526	V802	V893	W28	X49	
V245	V531	V803	V899	W29	X52	
V251	V536	V804	V910	W30	X57	
V255	V541	V805	V911	W31	X58	
V261	V546	V806	V912	W32	X590	
V265	V551	V807	V913	W33	X599	
V271	V556	V808	V914	W34	X85	
V275	V561	V809	V915	W35	X87	
V281	V566	V810	V916	W36	X88	
V285	V571	V811	V917	W37	X89	
V291	V576	V812	V918	W38	X90	
V295	V581	V813	V919	W39	X93	
V301	V586	V815	V930	W40	X94	
V306	V591	V816	V931	W41	X95	
V311	V595	V817	V932	W42	X96	
V316	V601	V818	V933	W43	X97	
V321	V606	V819	V934	W44	X98	

Table N. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Cause of Fetal Death

<u>ICD-10 code</u>	<u>Sex/plurality limitation</u>	<u>Sex</u>	<u>Plurality</u>	<u>Edit code¹</u>
B26.0	Male	1	2	10
C51.0	Female	1	2	11
C51.1	Female	1	2	11
C51.2	Female	1	2	11
C51.8	Female	1	2	11
C51.9	Female	1	2	11
C52	Female	1	2	11
C53.0	Female	1	2	11
C53.1	Female	1	2	11
C53.8	Female	1	2	11
C53.9	Female	1	2	11
C54.0	Female	1	2	11
C54.1	Female	1	2	11
C54.2	Female	1	2	11
C54.3	Female	1	2	11
C54.8	Female	1	2	11
C54.9	Female	1	2	11
C55	Female	1	2	11
C56	Female	1	2	11
C57.0	Female	1	2	11
C57.1	Female	1	2	11
C57.2	Female	1	2	11
C57.3	Female	1	2	11
C57.4	Female	1	2	11
C57.7	Female	1	2	11
C57.8	Female	1	2	11
C57.9	Female	1	2	11
C60.0	Male	1	2	10
C60.1	Male	1	2	10
C60.2	Male	1	2	10
C60.8	Male	1	2	10
C60.9	Male	1	2	10
C61	Male	1	2	10
C62.0	Male	1	2	10
C62.1	Male	1	2	10
C62.9	Male	1	2	10
C63.0	Male	1	2	10
C63.1	Male	1	2	10
C63.2	Male	1	2	10
C63.7	Male	1	2	10
C63.8	Male	1	2	10
C63.9	Male	1	2	10

Table N. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Cause of Fetal Death

0 - Conditional
1 - Absolute
2 - Not Applicable

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code ¹
D06.0	Female	1	2	11
D06.1	Female	1	2	11
D06.7	Female	1	2	11
D06.9	Female	1	2	11
D07.0	Female	1	2	11
D07.1	Female	1	2	11
D07.2	Female	1	2	11
D07.3	Female	1	2	11
D07.4	Male	1	2	10
D07.5	Male	1	2	10
D07.6	Male	1	2	10
D17.6	Male	1	2	10
D25.0	Female	1	2	11
D25.1	Female	1	2	11
D25.2	Female	1	2	11
D25.9	Female	1	2	11
D26.0	Female	1	2	11
D26.1	Female	1	2	11
D26.7	Female	1	2	11
D26.9	Female	1	2	11
D27	Female	1	2	11
D28.0	Female	1	2	11
D28.1	Female	1	2	11
D28.2	Female	1	2	11
D28.7	Female	1	2	11
D28.9	Female	1	2	11
D29.0	Male	1	2	10
D29.1	Male	1	2	10
D29.2	Male	1	2	10
D29.3	Male	1	2	10
D29.4	Male	1	2	10
D29.7	Male	1	2	10
D29.9	Male	1	2	10
D39.0	Female	1	2	11
D39.1	Female	1	2	11
D39.7	Female	1	2	11
D39.9	Female	1	2	11
D40.0	Male	1	2	10
D40.1	Male	1	2	10
D40.7	Male	1	2	10
D40.9	Male	1	2	10
P01.5	Plural	2	1	24

Table N. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Cause of Fetal Death

0 - Conditional
1 - Absolute
2 - Not Applicable

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code ¹
P54.6	Female	1	2	11
Q50.0	Female	1	2	11
Q50.1	Female	1	2	11
Q50.2	Female	1	2	11
Q50.3	Female	1	2	11
Q50.4	Female	1	2	11
Q50.5	Female	1	2	11
Q50.6	Female	1	2	11
Q51.0	Female	1	2	11
Q51.1	Female	1	2	11
Q51.2	Female	1	2	11
Q51.3	Female	1	2	11
Q51.4	Female	1	2	11
Q51.5	Female	1	2	11
Q51.6	Female	1	2	11
Q51.7	Female	1	2	11
Q51.8	Female	1	2	11
Q51.9	Female	1	2	11
Q52.0	Female	1	2	11
Q52.1	Female	1	2	11
Q52.2	Female	1	2	11
Q52.3	Female	1	2	11
Q52.4	Female	1	2	11
Q52.5	Female	1	2	11
Q52.6	Female	1	2	11
Q52.7	Female	1	2	11
Q52.8	Female	1	2	11
Q52.9	Female	1	2	11
Q53.0	Male	1	2	10
Q53.1	Male	1	2	10
Q53.2	Male	1	2	10
Q53.9	Male	1	2	10
Q54.0	Male	1	2	10
Q54.1	Male	1	2	10
Q54.2	Male	1	2	10
Q54.3	Male	1	2	10
Q54.4	Male	1	2	10
Q54.8	Male	1	2	10
Q54.9	Male	1	2	10
Q55.0	Male	1	2	10
Q55.1	Male	1	2	10
Q55.2	Male	1	2	10

Table N. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Cause of Fetal Death

<u>ICD-10 code</u>	<u>Sex/plurality limitation</u>	<u>Sex</u>	<u>Plurality</u>	<u>Edit code¹</u>
Q55.3	Male	1	2	10
Q55.4	Male	1	2	10
Q55.5	Male	1	2	10
Q55.6	Male	1	2	10
Q55.8	Male	1	2	10
Q55.9	Male	1	2	10
Q89.4	Plural	2	1	24
Q96.0	Female	1	2	11
Q96.1	Female	1	2	11
Q96.2	Female	1	2	11
Q96.4	Female	1	2	11
Q96.8	Female	1	2	11
Q96.9	Female	1	2	11
Q97.0	Female	1	2	11
Q97.1	Female	1	2	11
Q97.2	Female	1	2	11
Q97.3	Female	1	2	11
Q97.8	Female	1	2	11
Q97.9	Female	1	2	11
Q98.0	Male	1	2	10
Q98.1	Male	1	2	10
Q98.2	Male	1	2	10
Q98.4	Male	1	2	10
Q98.5	Male	1	2	10
Q98.6	Male	1	2	10
Q98.7	Male	1	2	10
Q98.8	Male	1	2	10
Q98.9	Male	1	2	10

¹ Edit codes may be useful for programming the sex/plurality limitations as follows:

<u>Edit code</u>	<u>Limited to</u>
10	Male
11	Female
24	Plural

APPENDIX I

Bridging of Multiple Race Data into a Single Race Category

Background

Population data used to calculate death rates are routinely produced under a collaborative arrangement with the U.S. Census Bureau. The 2000 Census allowed respondents to report more than one race, in accordance with the new standards for the classification of race and ethnicity issued in 1997 by the U.S. Office of Management and Budget (OMB). In addition, the standards specified five minimum race categories to be used for tabulation (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White). This is a modification of the previous 1977 OMB standards in which only four race categories were specified (Asian and Pacific Islander persons were treated as a single group) and respondents reported only one of the four.

The death certificates that were then received from the States collected only one race for the decedent, according to the 1977 OMB guidelines, and were incompatible with population data based on the 2000 Census for calculating death rates.

In order to produce 2000 populations with race categories comparable to those used on the death certificate, the enumerated population data with multiple race categories was "bridged" back to single race categories. In addition, the 2000 census counts were modified to be consistent with the old OMB racial categories, i.e., data for Asian persons and Native Hawaiians or other Pacific Islanders were combined into a single category, Asian or Pacific Islanders. These "bridged" population data have been in use for several years for computing population-based rates.

Beginning in 2003, a few States started to collect multiple race data on the death certificate. The number of states adopting the (2003) U.S. Standard Certificate that allows for collection of multiple races slowly grew until all states reached this milestone in 2018. Throughout that period (before all states reported multiple races), death certificates that were received with multiple race data were "bridged" back to single race categories to ensure the compatibility between numerator and denominator data that was needed to produce race-specific death rates. For the purposes of the mortality data file, we call this single race data value the Bridged Race field.

Even though bridged-race data will not be used to produce official numbers of deaths and death rates beginning with data year 2018, bridged-race data will still be provided for the sole purpose of facilitating trend analyses until 2020.

Bridging of multiple race data discussed

The Bridged Race field is an overloaded variable combining reported single race and a single selected race (when multiple races are reported).

When one race is mentioned, the codes assigned to this field include values "01" through "15"¹. These single race codes are also used when more than one checkbox / literal entry is reported and they all equate to the same delineated race group.

¹ The race values corresponding to these codes are: 1=White, 2=Black or African American, 3=American Indian or Alaska Native, 4=Asian Indian, 5=Chinese, 6=Filipino, 7=Japanese, 8=Korean, 9=Vietnamese, 10=Other Asian, 11=Native Hawaiian, 12=Guamanian or Chamorro, 13=Samoan, 14=Other Pacific Islander and 15=Other.

Examples:

- “White” checkbox is checked and write-in is “Irish,” then code as White, “01”.
- “Black” checkbox is checked and write-in is “Nigerian,” then code as Black, “02”.
- Multiple American Indian tribes or Alaskan Natives are mentioned, then code as AIAN, “03”.
- “Chinese” checkbox is checked and write-in is “Taiwanese,” then code as Chinese, “05”.

When multiple race codes are reported and they all are Asian and/or Pacific Islanders, code as Bridged API, “24”.

Example:

- “Chinese” and “Japanese” check boxes checked, then code is “24”.

When one delineated group is reported with one or more “Some Other Race”, the former code is used.

Example:

- “White” checkbox is checked and “Bolivian” is a literal write-in, then code as White, “01”.

When more than one basic race group is reported (White, Black, AIAN, API), a “bridging probability matrix” is applied. The current probability matrix is indexed by five variables:

- Residence (FIPS State and county),
- Age (<1, single years 1 through 69 and 70+),
- Sex,
- Ethnicity (Non-Hispanic/Hispanic), and
- Basic race combination
 - (White/Black, White/AIAN, White/API, Black/AIAN, Black/API, AIAN/API,
 - White/Black/AIAN, White/Black/API, Black/AIAN/API, White/Black/AIAN/API).

Each event with multiple reported races is assigned a pseudo-probability that is generated using the last three digits of the certificate number; the order of the digits is then reversed, and the resulting value is divided by 1000. When the assigned pseudo-probability is less than or equal to the cut point (a probability) dictated by the bridging probability matrix, the assigned code is that of the first basic race. If the assigned pseudo-probability is greater than the matrix’s cut point, then the second basic race is selected as the bridged code. The bridging probability matrix includes two cut points for three-race combinations. The bridging code for the latter basic race is used when the pseudo-probability is greater than the second critical value indicated by the bridging matrix. Similarly, three cut points are included for the matrix consisting of the combination of the four basic races (White/Black/AIAN/API).

Examples:

Certificate number: 023001.

Assigned pseudo-probability: 0.100

White/Black matrix probability cut point: 0.200

Assigned bridged race: White, "21"

Certificate number: 023003.

Assigned pseudo-probability: 0.300

White/Black matrix probability cut point: 0.200

Assigned bridged race: Black, "22"

Certificate number: 023302.

Assigned pseudo-probability: 0.203

White/Black/API matrix probability cut points: 0.100 and 0.300

Assigned bridged race: Black, "22"