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# **Instruction Manual**

## **Part 11**

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### **Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths Effective 2007**

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

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# **Instruction Manual**

## **Part 11**

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### **Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths Effective 2007**

**Vital Statistics**  
Data Preparation

U.S. DEPARTMENT of HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Center for Health Statistics  
Hyattsville, Maryland  
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## Acknowledgments

This instruction manual was prepared by the Division of Vital Statistics (DVS) under the general direction of Robert N. Anderson, Ph.D., Chief of the Mortality Statistics Branch (MSB) and Charles Rothwell, Director of DVS. Arialdi Minino (MSB) wrote the text and coordinated production of the manual. Donna Glenn, Chief of Mortality Medical Classification Branch (MMCB), Joyce Bius (ret.), Tanya Pitts (ret.), Julia Raynor, June Pearce, and Tyinga Ambrose (MMCB, DVS) provided expertise in creating the valid and invalid ICD-10 codes and the edits. Sherry L. Murphy, Donna L. Hoyert, Robert N. Anderson and Kenneth D. Kochanek provided review of the instruction manual. David Johnson and Charles E. Royer of the Systems, Programming, and Statistical Resources Branch, (DVS) provided review of the demographic edits.

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VITAL STATISTICS COMPUTER EDITS  
FOR  
MORTALITY DATA, EFFECTIVE **2007**

I. INTRODUCTION

A. Purpose of This Manual

This manual presents a comprehensive description of the mainframe computer edits used by the National Center for Health Statistics (NCHS) in processing mortality data beginning with data year **2007**. 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 three different applications 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. For this file, the data are tabulated and published annually.
- (2) the preliminary mortality file which is based on a continuous receipt of a large sample of death certificates that are processed and tabulated on a semi-annual basis for U.S. deaths occurring in the 12-month period January-December. The purpose of the preliminary mortality file is to produce data on an expedited basis compared with the final file.
- (3) 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 model to attain uniformity in the contents of documents used to collect fetal mortality information. The fetal death file is separate from the mortality files discussed above.

It should be noted that the final mortality file essentially consists of the January-December preliminary mortality file plus all additional and adjudicated death records received through nine months after the end of the calendar year.

Edits used for mainframe processing of the final mortality file are likely to be of greatest relevance and interest to the States, while edits used for the preliminary file are used by NCHS on a current flow to produce annual preliminary mortality statistics.

Both the final and the preliminary mortality files are 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 mainframe computer 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. The mainframe edits 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 the more comprehensive mainframe edits. This manual contains only the mainframe edits. Data entry edits are specified in Part 2d of this Vital Statistics Instruction Manual series.

The mainframe 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 passed key entry quality control standards and key entry edit criteria.



## B. Revisions from Previous Manual

Changes between this manual and the previous one (effective **2005**) are shown in **bold** print and following are the major changes:

1. **Detail has been added to and minor errors have been corrected for table B-2:**
  - A footnote reading “If age of decedent is not stated, age is derived by referring to date of birth and date of death” has been added concerning the variable “Decedent’s Age.”
  - The way edit failures are corrected for cases of foreign deaths has itself been corrected for variables City, County and State of Residence.
  - Edit failure criteria for “Marital Status” do not dismiss variable value “U” as was incorrectly done in previous version of the Manual.
  - Imputation procedures for Specified Hispanic Origin variables have been modified by taking into account decedent’s Country of Birth.
  - A footnote reading “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” has been added concerning Specified Hispanic Origin variables.
2. **The following ICD-10 codes have been deleted from the table of codes valid for both underlying and multiple cause-of-death classification (table C) effective 2006: I252, K85, R500 and R501. ICD-10 code X59 is also invalid effective 2007.**
3. **The following ICD-10 codes have been added to the table of codes valid for both underlying and multiple cause-of-death classification (table C) effective 2006: B334, G904, I150, I159, K227, K850, K851, K852, K853, K858, K859, M317, M797, P916, R296, R502, R508 and W46. ICD-10 codes J09, U049, X590 and X599 are also valid effective 2007.**
4. **New “created codes” are listed along their valid ICD-10 counterparts in table F. “Created code” G3500 has been dropped from the list and will no longer be in use (effective 2007). Created codes added since the last version of the manual are shown in bold.**

**5. The following changes were made to the table for age / cause and sex / cause consistency edits for ICD-10 codes valid for both underlying and multiple cause-of-death classification (table G):**

**- Overall change to table G**

The presentation of edits has changed to show age limitations separate from sex limitations. Furthermore, the values shown are invalid values for the respective codes (i.e., age exclusions; sex exclusion). In contrast, previous versions of this table showed expected, valid values for the ICD codes.

**- Added edits:**

E30 (added to table G as age-absolute)	Effective 2006;
F10-F66 (added to table G as age-absolute)	Effective 2006;
F68, F69 (added to table G as age-absolute)	Effective 2006;
H25 (added to table G as age-absolute)	Effective 2006;
K70 (added to table G as age-absolute)	Effective 2006;
M42.1 (added to table G as age-absolute)	Effective 2006;
Codes identifying the decedents as drivers of motor vehicles have been added to table G as age-absolute edits. See list below.	Effective 2006;

V20.0,V21.0,V22.0,V23.0,V24.0,V25.0,V26.0,V27.0,V28.0, V29.0 V30.0,V31.0,V32.0,V33.0,V34.0,V35.0,V36.0,V37.0,V38.0, V39.0 V40.0,V41.0,V42.0,V43.0,V44.0,V45.0,V46.0,V47.0,V48.0, V49.0 V50.0,V51.0,V52.0,V53.0,V54.0,V55.0,V56.0,V57.0,V58.0, V59.0 V60.0,V61.0,V62.0,V63.0,V64.0,V65.0,V66.0,V67.0,V68.0, V69.0 V70.0,V71.0,V72.0,V73.0,V74.0,V75.0,V76.0,V77.0,V78.0, V79.0 V83.0,V84.0,V85.0
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Y06.0 (added to table G as age-absolute)	Effective 2006;
Y07.0 (added to table G as age-absolute)	Effective 2006;
Y36 (added to table G as age-conditional)	Effective 2006;

**- Modified edits:**

**N91, N95-N96, as shown on Table G, Effective 2003;**  
(These edits needed clarification as some text was missing on the previous version of the manual. The intent of the edits is to indicate that each code is edited differently depending on decedent's age: The edit on females < 10 years old is absolute, whereas if the female decedent was older than 54 years the edit would be conditional. This modification has been in place since data year 2003, but was not documented until now.)

**O96, O97, as shown on Table G, Effective 2006;**  
(Edits for these codes had been have been corrected to match edits for similar codes on the manual. The intent of the edit is to indicate that each code is edited differently depending on decedent's age: The edit on females < 10 years old is absolute, whereas if the female decedent was older than 54 years the edit would be conditional.)

**6. The following changes were made to the table for infrequent and rare cause-of-death edits for underlying and multiple cause-of-death classification (table J):**

**- Added edits:**

**J09 Influenza due to identified avian influenza virus                      Effective 2007;**

**U04.9 Severe acute respiratory syndrome [SARS], unspecified  
Effective 2007;**

Codes and text that have been deleted from tables have been ~~struck out~~ and the text color appears lighter.

## II. FINAL 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 and processed separately. The demographic data are first key entered and sample verified with interactive key entry editing. 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 key entered and sample verified. The mainframe 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 (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 MICAR<sup>1</sup>, ACME<sup>2</sup>, and TRANSAX<sup>3</sup> automatic coding systems 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

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<sup>1</sup>Acronym for Mortality Medical Indexing, Classification, and Retrieval which is used to initially enter cause-of-death information.

<sup>2</sup>Acronym for Automated Classification of Medical Entities system which checks the condition codes for validity and automatically assigns the underlying cause of death from the condition codes.

<sup>3</sup>Acronym for Translation of Axis system which translates the condition codes from an entity axis of classification to a record axis of classification for purposes of general multiple cause tabulation and analysis.

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 variable category involved in the edit. Edits for unlikely occurrences (conditional edits) are always checked with the source document. When a data record is edit 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 all mainframe computer edits is provided below.

A. Demographic Items

Table B-1 provides, for each demographic variable, the edit criteria (if any) which are applied to each category of the variable. This table generally follows the variable structure and value criteria defined by the old (1989) version of the U.S. Standard Certificate of Death. Table B-2 provides edit criteria that are applicable to demographic variables modified in the revised U.S. Standard Certificate of Death. It is important to note, however, that some states that are still using the old Standard Certificate of Death are using the new Federal Information Processing Standard (FIPS) codes and / or are providing multiple race information in the revised race format (or some variation of it). That is, for some states, table B-2 applies to the geographic and / or race variables while table B-1 applies to the balance of the variables. Records that are received by NCHS from States that have implemented the new (2003) standard certificate must be processed following the guidelines indicated on table B-2.

Failed edits are identified in terms of whether the results are imputed or rejected for adjudication. 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 ACME and TRANSAX computer systems. 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 tape 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.

Detailed instructions for processing edit rejects are given in Part 2d of this Vital Statistics Instruction Manual series. 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 29 of the U.S. Standard Certificate of Death (1989 revision) or on item 37 of the 2003 revision of the same document. 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. The place-of-occurrence codes assigned are based on reported entries on State death

certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item "30e. Place of injury".

### III. PRELIMINARY MORTALITY FILE COMPUTER EDITS

The preliminary mortality file has less detailed tabulations of demographic and geographic data than the final mortality file and is restricted to tabulations of only the underlying cause of death. It includes death records received by NCHS about four months after the end of the 12-month period January-December. The preliminary mortality file consists of a substantial sample (usually, at least 75 percent for each State) of the death certificates included in the final mortality file.

The demographic and medical data are entered and processed separately. The demographic data are first key entered and sample verified with interactive key entry editing. The resultant demographic record is then established as a master control record in checks of file completeness and in subsequent edits of the geographic, demographic, and control variables. On a separate track, the medical data are key entered and sample verified. The mainframe 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.

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. However, at the cut point, the point at which records are no longer accepted for a preliminary mortality file (about four months after the January-December period), some records that failed the edits have not been adjudicated. Due to the need for timely release of the preliminary mortality data, there is not enough time to adjudicate all errors in the preliminary mortality file. Therefore, some of the edit procedures for the preliminary mortality file differ from those for the final mortality file. For example, for the demographic/medical consistency edits, records that fail the "absolute" edits are deleted from the preliminary mortality file. Records that fail the "conditional" edits are not reviewed, but are retained in the preliminary mortality file.

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 on the source document and/or with the State health department.



All the demographic items that fail the demographic edits (except place of death) and “residence of decedent” (county/city) are imputed and all records that fail the “absolute” demographic/medical edits are deleted from the file. The edits and their resulting actions are summarized in table A.

A detailed description of all mainframe computer edits is provided below.

A. Demographic Items

Tables B-1 and B-2 provide, for each demographic variable, the edit criteria (if any) which are applied to each category of the variable. Records that fail edits for demographic items other than “place of death” (occurrence) and “residence of decedent” (county/city) are imputed. At the cut point, if the edit for “place of death” (State of occurrence) fails, the record is deleted. The edits for “place of death” (county of occurrence) and “residence of decedent” (county/city) are not used. The edit for “residence of decedent” (State of residence), however, is used.

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. At the cut point, if a cause-of-death code is invalid, the record is deleted from the preliminary mortality file.

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.) At the cut point, if a cause-of-death code is invalid, the record is deleted from the preliminary mortality file.

### 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 ACME and TRANSAX computer systems. 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 tape 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. At the cut point, the conditional limitation edits, shown in tables G and H, are not used for the preliminary mortality file.

Detailed instructions for processing edit rejects are given in Part 2d of this Vital Statistics Instruction Manual series. In general, the source document is examined to determine if the medical and demographic data are accurately coded based on reporting. At the cut point, records that fail the "absolute" edits shown in tables G and H are deleted from the preliminary mortality file. The "conditional" edits shown in tables G and H are not used.

2. Edits on Manner of Death

Edits on variable “Manner of Death” are not used for the preliminary mortality file.

3. Infrequent and Rare Cause-of-Death Edits

The infrequent and rare cause-of-death edits shown in table J are not used for the preliminary mortality file.

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. The place-of-occurrence codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item “30e. Place of injury”.

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

Edit table	Edit	Final file		Preliminary file	
		Impute	Reject	Impute	Delete
<i>Demographic</i>					
B-1, B-2	All items, except Place of death and Residence of decedent	X		X	
B-1, B-2	Place of death (State)		X		X
B-1, B-2	Place of death (county)		X	Not used	
B-1, B-2	Residence of decedent (State)		X	X	
B-1, B-2	Residence of decedent (county/city)		X	Not used	
<i>Cause-of-death</i>					
C	ICD-10 codes valid for underlying and multiple causes		X		X
D	ICD-10 nature-of-injury codes valid for multiple causes only		X		X
E	ICD-10 codes valid for multiple causes only		X		X
G	Age/cause and sex/cause consistency edits for ICD-10 codes valid for both underlying and multiple causes (absolute)		X		X
G	Age/cause and sex/cause consistency edits for ICD-10 codes valid for both underlying and multiple causes (conditional)		X	Not used	
H	Age/cause and sex/cause consistency edits for ICD-10 codes valid for multiple causes only (absolute)		X		X
H	Age/cause and sex/cause consistency edits for ICD-10 codes valid for multiple causes only (conditional)		X	Not used	
I	Age and Cause Consistency Edits for "Manner of Death" Variable	X		Not used	
J	Infrequent and rare cause-of-death edits for underlying and multiple cause-of-death		X	Not used	
K	Place-of-occurrence edits for selected external causes of death	X		X	

Table B-1. Edits for Demographic Items

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Sex	Code must be valid and other than "not stated".	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.
Date of Death: Month	Code must be valid and other than "not stated".	Imputation: Date of death from last preceding record containing a valid date of death is substituted.
Day	Code must be valid (month is valid also).	Imputation: Assign to "not classifiable" code.
Age of Decedent: Number of Units	Both codes must be valid.	Imputation: Assign to "not classifiable" code (999).
Units	Combination of unit and number of units must be acceptable.	(See page 13.)

IF UNIT OF AGE IS:	AND NO. OF UNITS IS:	THEN FINAL EDITED AGE IS:
9 (not classifiable)	Anything -----	)
Codes 0, 2-6	00 -----	)
Code 1 (100 or more years)	Greater than 35 -----	)
Code 2 (months)	Greater than 23 -----	)
Code 3 (weeks)	Greater than 47 -----	) 999 (not
Code 4 (days)	Greater than 60 -----	) classifiable)
Code 5 (hours)	Greater than 72 -----	)
Code 6 (minutes)	Greater than 95 -----	)
Code 0 (years - less than 100)	01-99	001-099
Code 1 (100 or more years)	00-35	100-135
Code 2 (months)	01-11	201-211
Code 2 (months)	12-23	001 (1 year)
Code 3 (weeks)	01-03	301-303
Code 3 (weeks)	04-08	201 (1 month)
Code 3 (weeks)	09-12	202 (2 months)
" " "	13-17	203 (3 months)
" " "	18-21	204 (4 months)
" " "	22-25	205 (5 months)
" " "	26-29	206 (6 months)
" " "	30-34	207 (7 months)
" " "	35-38	208 (8 months)
" " "	39-42	209 (9 months)
" " "	43-47	210 (10 months)
Code 4 (days)	01-27	401-427
" " "	28-59	201 (1 month)
" " "	60	202 (2 months)
Code 5 (hours)	01-23	501-523
Code 5 (hours)	24-72	401-403 (days)
Code 6 (minutes)	01-59	601-659
Code 6 (minutes)	60-95	501 (1 hour)
Codes 2-6 (months-minutes)	99 (no. of units not classifiable)	2-6, 99*

\*In the age recoding process, unknown number of months is allocated to 1 month; unknown number of weeks is allocated to 1 week; 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.

Table B-1. Edits for Demographic Items

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Date of Birth: Month	Code must be valid.	Imputation: Assign to "not classifiable" code.
Day	Code must be valid.	Imputation: Assign to "not classifiable" code.
Year	Code must be valid. <b>1871-2006</b> are valid for <b>2006</b> . For subsequent data years, add 1 to the lower and upper limits of the range (e.g. for <b>2007</b> , the range is <b>1872-2007</b> ).	Imputation: Assign to "not classifiable" code.
State of Birth of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
Place of Death: State/County	State/county code combination must be valid.	For Final: Reject for correction. For Preliminary: State-Delete record. County-Edit not used.
Type of Place of Death	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
Marital Status of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	If age of decedent is less than 12 years, marital status must be "single."	Imputation: Convert to "single" code.
Occupation of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	Age under 14 years.	Imputation: Code to 917 (child).

Table B-1. Edits for Demographic Items

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Type of Industry	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	Age under 14 years.	Imputation: Code to 961 (own home).
Residence of Decedent	State, County/City code combination must be valid.	For Final: Reject for correction. For Preliminary: State-Impute to place of death (State). County/City-Edit not used.
Hispanic Origin of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	"Not classifiable" (code 9) and "Other and unknown Hispanic" (code 5).	Imputation: Use "State of birth" and if birthplace is Mexico (code 57), then code Mexican (code 1); if birthplace is Puerto Rico (code 52) then code to Puerto Rican (code 2); and if birthplace is Cuba (code 56), then code Cuban (code 3). Otherwise, keep the original code 5 or 9.
Race of Decedent	Code must be valid.	Imputation: Code record to the race of preceding record.
	If code is: "Not stated" (code 9) or "Other entries" (code 0) or "Multi-racial" (code F).	Imputation: Code record to the race of preceding record. NOTE: Race imputation flags are shown separately for "Not stated", "Other entries" and "Multi-racial".



Table B-1. Edits for Demographic Items

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Education of Decedent	Code must be valid.	Imputation: Assign to “not classifiable” code.
	Combination of education and age must be acceptable.	Imputation: If education is greater than the maximum shown for given age, assign education to “not classifiable” code.
	Age	Maximum Education
	Under 5 years	00
	5 years	01
	6 years	02
	7 years	03
	8 years	04
	9 years	05
	10 years	06
	11 years	07
	12 years	08
	13 years	09
	14 years	10
	15 years	11
	16 years	12
	17 years	13
	18 years	14
	19 years	15
Injury at work	Code must be valid.	Imputation: Convert invalid code to “not classifiable” code.

Table B-2. Edits for Demographic Items Under New U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
State of Death	Code must be valid FIPS value (section II, Part 8A manual).	For Final: Reject for correction  For Preliminary: Delete record
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-2. Edits for Demographic Items Under New 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 recoding process, unknown number of months is allocated to 1 month; unknown number of weeks is allocated to 1 week; 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-2. Edits for Demographic Items Under New U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit 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-2. Edits for Demographic Items Under New U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit 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 blank <b>'XX'</b>. <b>If Country of Residence is 'unknown,' then State of Residence must be 'ZZ.'</b></p>	<p>For Final: Reject for correction</p> <p>For Preliminary: Impute to State of Death</p> <p>Imputation: For foreign residents, convert invalid / blank code to <b>'XX'</b> (<b>'not applicable.'</b>) <del>'ZZ.'</del> <b>For unknown Country of Residence, convert invalid / blank code to 'ZZ.'</b></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 <del>'not classifiable'</del> 'unknown' code ('ZZ').</p>

Table B-2. Edits for Demographic Items Under New U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Marital Status	Code must be valid ('M', 'A', 'W', 'D', 'S', 'U') <del>and other than "Not Classifiable" ('U').</del>	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.
	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 <sup>1</sup> ," 5= "Hospice facility," 6= "Nursing home/Long term care facility," 9= "Unknown"	Imputation: Convert place of death code to "Unknown" ('9').

<sup>1</sup> This code extends to homes other than the decedent's own.

Table B-2. Edits for Demographic Items Under New U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit 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.	For Final: Reject for correction  For Preliminary: Not used
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'.

Table B-2. Edits for Demographic Items Under New U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>																			
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 differs for the given minimum age, then code education to "Unknown" (9).																			
	<table border="1"> <thead> <tr> <th>Minimum Age</th> <th>Education</th> </tr> </thead> <tbody> <tr><td>None</td><td>1</td></tr> <tr><td>9</td><td>2</td></tr> <tr><td>16</td><td>3</td></tr> <tr><td>17</td><td>4</td></tr> <tr><td>18</td><td>5</td></tr> <tr><td>20</td><td>6</td></tr> <tr><td>21</td><td>7</td></tr> <tr><td>23</td><td>8</td></tr> <tr><td>None</td><td>9</td></tr> </tbody> </table>	Minimum Age	Education	None	1	9	2	16	3	17	4	18	5	20	6	21	7	23	8	None	9
Minimum Age	Education																				
None	1																				
9	2																				
16	3																				
17	4																				
18	5																				
20	6																				
21	7																				
23	8																				
None	9																				
Decedent of Hispanic <sup>2</sup> (Mexican) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: <b>If Country of Birth is Mexico, code blank to "Yes, Mexican."</b> <b>Otherwise</b> , convert blank Mexican origin to "No, not Mexican" ('N').																			
Decedent of Hispanic <sup>2</sup> (Puerto Rican) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: <b>If Country of Birth is Puerto Rico, code blank to "Yes, Puerto Rican."</b> <b>Otherwise</b> , convert blank Puerto Rican origin to "No, not Puerto Rican" ('N').																			
Decedent of Hispanic <sup>2</sup> (Cuban) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: <b>If Country of Birth is Cuba, code blank to "Yes, Cuban."</b> <b>Otherwise</b> , convert blank Cuban origin to "No, not Cuban" ('N').																			
Decedent of Hispanic <sup>2</sup> (Other) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: Convert blank other Hispanic origin to "No, not other... Hispanic/Latino" ('N').																			

<sup>2</sup> 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-2. Edits for Demographic Items Under New 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-2. Edits for Demographic Items Under New U.S. Standard Certificate (2003) Format

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit 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, see Appendix I.

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

A000	A185	A360	A519	A772	A983	B211	B381	B529	B749	C022	C179	C403	C512	C716
A001	A186	A361	A520	A773	A984	B212	B382	B530	B75	C023	C180	C408	C518	C717
A009	A187	A362	A521	A778	A985	B213	B383	B531	B760	C024	C181	C409	C519	C718
A010	A188	A363	A522	A779	A988	B217	B384	B538	B761	C028	C182	C410	C52	C719
A011	A190	A368	A523	A78	A99	B218	B387	B54	B768	C029	C183	C411	C530	C720
A012	A191	A369	A527	A790	B000	B219	B388	B550	B769	C030	C184	C412	C531	C721
A013	A192	A370	A528	A791	B001	B220	B389	B551	B770	C031	C185	C413	C538	C722
A014	A198	A371	A529	A798	B002	B221	B390	B552	B778	C039	C186	C414	C539	C723
A020	A199	A378	A530	A799	B003	B222	B391	B559	B779	C040	C187	C418	C540	C724
A021	A200	A379	A539	A800	B004	B227	B392	B560	B780	C041	C188	C419	C541	C725
A022	A201	A38	A540	A801	B005	B230	B393	B561	B781	C048	C189	C430	C542	C728
A028	A202	A390	A541	A802	B007	B231	B394	B569	B787	C049	C19	C431	C543	C729
A029	A203	A391	A542	A803	B008	B232	B395	B570	B789	C050	C20	C432	C548	C73
A030	A207	A392	A543	A804	B009	B238	B399	B571	B79	C051	C210	C433	C549	C740
A031	A208	A393	A544	A809	B010	B24	B400	B572	B80	C052	C211	C434	C55	C741
A032	A209	A394	A545	A810	B011	B250	B401	B573	B810	C058	C212	C435	C56	C749
A033	A210	A395	A546	A811	B012	B251	B402	B574	B811	C059	C218	C436	C570	C750
A038	A211	A398	A548	A812	B018	B252	B403	B575	B812	C060	C220	C437	C571	C751
A039	A212	A399	A549	A818	B019	B258	B407	B580	B813	C061	C221	C438	C572	C752
A040	A213	A400	A55	A819	B020	B259	B408	B581	B814	C062	C222	C439	C573	C753
A041	A217	A401	A560	A820	B021	B260	B409	B582	B818	C068	C223	C440	C574	C754
A042	A218	A402	A561	A821	B022	B261	B410	B583	B820	C069	C224	C441	C577	C755
A043	A219	A403	A562	A829	B023	B262	B417	B588	B829	C07	C227	C442	C578	C758
A044	A220	A408	A563	A830	B027	B263	B418	B589	B830	C080	C229	C443	C579	C759
A045	A221	A409	A564	A831	B028	B268	B419	B59	B831	C081	C23	C444	C58	C760
A046	A222	A410	A568	A832	B029	B269	B420	B600	B832	C088	C240	C445	C600	C761
A047	A227	A411	A57	A833	B03	B270	B421	B601	B833	C089	C241	C446	C601	C762
A048	A228	A412	A58	A834	B04	B271	B427	B602	B834	C090	C248	C447	C602	C763
A049	A229	A413	A590	A835	B050	B278	B428	B608	B838	C091	C249	C448	C608	C764
A050	A230	A414	A598	A836	B051	B279	B429	B64	B839	C098	C250	C449	C609	C765
A051	A231	A415	A599	A838	B052	B300	B430	B650	B850	C099	C251	C450	C61	C767
A052	A232	A418	A600	A839	B053	B301	B431	B651	B851	C100	C252	C451	C620	C768
A053	A233	A419	A601	A840	B054	B302	B432	B652	B852	C101	C253	C452	C621	C770
A054	A238	A420	A609	A841	B058	B303	B438	B653	B853	C102	C254	C457	C629	C771
A058	A239	A421	A630	A848	B059	B308	B439	B658	B854	C103	C257	C459	C630	C772
A059	A240	A422	A638	A849	B060	B309	B440	B659	B86	C104	C258	C460	C631	C773
A060	A241	A427	A64	A850	B068	B330	B441	B660	B870	C108	C259	C461	C632	C774
A061	A242	A428	A65	A851	B069	B331	B442	B661	B871	C109	C260	C462	C637	C775
A062	A243	A429	A660	A852	B07	B332	B447	B662	B872	C110	C261	C463	C638	C778
A063	A244	A430	A661	A858	B080	B333	B448	B663	B873	C111	C268	C467	C639	C779
A064	A250	A431	A662	A86	B081	<b>B334</b>	B449	B664	B874	C112	C269	C468	C64	C780
A065	A251	A438	A663	A870	B082	B338	B450	B665	B878	C113	C300	C469	C65	C781
A066	A259	A439	A664	A871	B083	B340	B451	B668	B879	C118	C301	C470	C66	C782
A067	A260	A440	A665	A872	B084	B341	B452	B669	B880	C119	C310	C471	C670	C783
A068	A267	A441	A666	A878	B085	B342	B453	B670	B881	C12	C311	C472	C671	C784
A069	A268	A448	A667	A879	B088	B343	B457	B671	B882	C130	C312	C473	C672	C785
A070	A269	A449	A668	A880	B09	B344	B458	B672	B883	C131	C313	C474	C673	C786
A071	A270	A46	A669	A881	B150	B348	B459	B673	B888	C132	C318	C475	C674	C787
A072	A278	A480	A670	A888	B159	B349	B460	B674	B889	C138	C319	C476	C675	C788
A073	A279	A481	A671	A89	B160	B350	B461	B675	B89	C139	C320	C478	C676	C790
A078	A280	A482	A672	A90	B161	B351	B462	B676	B900	C140	C321	C479	C677	C791
A079	A281	A483	A673	A91	B162	B352	B463	B677	B901	C142	C322	C480	C678	C792
A080	A282	A484	A679	A920	B169	B353	B464	B678	B902	C148	C323	C481	C679	C793
A081	A288	A488	A680	A921	B170	B354	B465	B679	B908	C150	C328	C482	C680	C794
A082	A289	A490	A681	A922	B171	B355	B468	B680	B909	C151	C329	C488	C681	C795
A083	A300	A491	A689	A923	B172	B356	B469	B681	B91	C152	C33	C490	C688	C796
A084	A301	A492	A690	A924	B178	B358	B470	B689	B92	C153	C340	C491	C689	C797
A085	A302	A493	A691	A928	B180	B359	B471	B690	B940	C154	C341	C492	C690	C798
A09	A303	A498	A692	A929	B181	B360	B479	B691	B941	C155	C342	C493	C691	C80
A162	A304	A499	A698	A930	B182	B361	B480	B698	B942	C158	C343	C494	C692	C810
A163	A305	A500	A699	A931	B188	B362	B481	B699	B948	C159	C348	C495	C693	C811
A164	A308	A501	A70	A932	B189	B363	B482	B700	B949	C160	C349	C496	C694	
A165	A309	A502	A710	A938	B190	B368	B483	B701	B99	C161	C37	C498	C695	
A167	A310	A503	A711	A94	B199	B369	B484	B710	C000	C162	C380	C499	C696	
A168	A311	A504	A719	A950	B200	B370	B487	B711	C001	C163	C381	C500	C698	
A169	A318	A505	A740	A951	B201	B371	B488	B718	C002	C164	C382	C501	C699	
A170	A319	A506	A748	A959	B202	B372	B49	B719	C003	C165	C383	C502	C700	
A171	A320	A507	A749	A960	B203	B373	B500	B72	C004	C166	C384	C503	C701	
A178	A321	A509	A750	A961	B204	B374	B508	B73	C005	C168	C388	C504	C709	
A179	A327	A510	A751	A962	B205	B375	B509	B740	C006	C169	C390	C505	C710	
A180	A328	A511	A752	A968	B206	B376	B510	B741	C008	C170	C398	C506	C711	
A181	A329	A512	A753	A969	B207	B377	B518	B742	C009	C171	C399	C508	C712	
A182	A33	A513	A759	A980	B208	B378	B519	B743	C01	C172	C400	C509	C713	
A183	A34	A514	A770	A981	B209	B379	B520	B744	C020	C173	C401	C510	C714	
A184	A35	A515	A771	A982	B210	B380	B528	B748	C021	C178	C402	C511	C715	

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

C812	C967	D123	D235	D380	D519	D695	D898	E132	E290	E640	E798	F103	F178	F338
C813	C969	D124	D236	D381	D520	D696	D899	E133	E291	E641	E799	F104	F179	F339
C817	C97	D125	D237	D382	D521	D698	E000	E134	E298	E642	E800	F105	F180	F340
C819	D000	D126	D239	D383	D528	D699	E001	E135	E299	E643	E801	F106	F181	F341
C820	D001	D127	D24	D384	D529	D70	E002	E136	E300	E648	E802	F107	F182	F348
C821	D002	D128	D250	D385	D530	D71	E009	E137	E301	E649	E803	F108	F183	F349
C822	D010	D129	D251	D386	D531	D720	E010	E138	E308	E65	E804	F109	F184	F380
C827	D011	D130	D252	D390	D532	D721	E011	E139	E309	E660	E805	F110	F185	F381
C829	D012	D131	D259	D391	D538	D728	E012	E140	E310	E661	E806	F111	F186	F388
C830	D013	D132	D260	D392	D539	D729	E018	E141	E311	E662	E807	F112	F187	F39
C831	D014	D133	D261	D397	D550	D730	E02	E142	E318	E668	E830	F113	F188	F400
C832	D015	D134	D267	D399	D551	D731	E030	E143	E319	E669	E831	F114	F189	F401
C833	D017	D135	D269	D400	D552	D732	E031	E144	E320	E670	E832	F115	F190	F402
C834	D019	D136	D27	D401	D553	D733	E032	E145	E321	E671	E833	F116	F191	F408
C835	D020	D137	D280	D407	D558	D734	E033	E146	E328	E672	E834	F117	F192	F409
C836	D021	D139	D281	D409	D559	D735	E034	E147	E329	E673	E835	F118	F193	F410
C837	D022	D140	D282	D410	D560	D738	E035	E148	E340	E678	E838	F119	F194	F411
C838	D023	D141	D287	D411	D561	D739	E038	E149	E341	E68	E839	F120	F195	F412
C839	D024	D142	D289	D412	D562	D740	E039	E15	E342	E700	E840	F121	F196	F413
C840	D030	D143	D290	D413	D563	D748	E040	E160	E343	E701	E841	F122	F197	F418
C841	D031	D144	D291	D414	D564	D749	E041	E161	E344	E702	E848	F123	F198	F419
C842	D032	D150	D292	D417	D568	D750	E042	E162	E345	E703	E849	F124	F199	F420
C843	D033	D151	D293	D419	D569	D751	E048	E163	E348	E708	E850	F125	F200	F421
C844	D034	D152	D294	D420	D570	D752	E049	E164	E349	E709	E851	F126	F201	F422
C845	D035	D157	D297	D421	D571	D758	E050	E168	E40	E710	E852	F127	F202	F428
C850	D036	D159	D299	D429	D572	D759	E051	E169	E41	E711	E853	F128	F203	F429
C851	D037	D160	D300	D430	D573	D760	E052	E200	E42	E712	E854	F129	F204	F430
C857	D038	D161	D301	D431	D578	D761	E053	E201	E43	E713	E858	F130	F205	F431
C859	D039	D162	D302	D432	D580	D762	E054	E208	E440	E720	E859	F131	F206	F432
C880	D040	D163	D303	D433	D581	D763	E055	E209	E441	E721	E86	F132	F208	F438
C881	D041	D164	D304	D434	D582	D800	E058	E210	E45	E722	E870	F133	F209	F439
C882	D042	D165	D307	D437	D588	D801	E059	E211	E46	E723	E871	F134	F21	F440
C883	D043	D166	D309	D439	D589	D802	E060	E212	E500	E724	E872	F135	F220	F441
C887	D044	D167	D310	D440	D590	D803	E061	E213	E501	E725	E873	F136	F228	F442
C889	D045	D168	D311	D441	D591	D804	E062	E214	E502	E728	E874	F137	F229	F443
C900	D046	D169	D312	D442	D592	D805	E063	E215	E503	E729	E875	F138	F230	F444
C901	D047	D170	D313	D443	D593	D806	E064	E220	E504	E730	E876	F139	F231	F445
C902	D048	D171	D314	D444	D594	D807	E065	E221	E505	E731	E877	F140	F232	F446
C910	D049	D172	D315	D445	D595	D808	E069	E222	E506	E738	E878	F141	F233	F447
C911	D050	D173	D316	D446	D596	D809	E070	E228	E507	E739	E880	F142	F238	F448
C912	D051	D174	D319	D447	D598	D810	E071	E229	E508	E740	E881	F143	F239	F449
C913	D057	D175	D320	D448	D599	D811	E078	E230	E509	E741	E882	F144	F24	F450
C914	D059	D176	D321	D449	D600	D812	E079	E231	E511	E742	E888	F145	F250	F451
C915	D060	D177	D329	D45	D601	D813	E100	E232	E512	E743	E889	F146	F251	F452
C917	D061	D179	D330	D460	D608	D814	E101	E233	E518	E744	F010	F147	F252	F453
C919	D067	D180	D331	D461	D609	D815	E102	E236	E519	E748	F011	F148	F258	F454
C920	D069	D181	D332	D462	D610	D816	E103	E237	E52	E749	F012	F149	F259	F458
C921	D070	D190	D333	D463	D611	D817	E104	E240	E530	E750	F013	F150	F28	F459
C922	D071	D191	D334	D464	D612	D818	E105	E241	E531	E751	F018	F151	F29	F480
C923	D072	D197	D337	D467	D613	D819	E106	E242	E538	E752	F019	F152	F300	F481
C924	D073	D199	D339	D469	D618	D820	E107	E243	E539	E753	F03	F153	F301	F488
C925	D074	D200	D34	D470	D619	D821	E108	E244	E54	E754	F04	F154	F302	F489
C927	D075	D201	D350	D471	D62	D822	E109	E248	E550	E755	F050	F155	F308	F500
C929	D076	D210	D351	D472	D640	D823	E110	E249	E559	E756	F051	F156	F309	F501
C930	D090	D211	D352	D473	D641	D824	E111	E250	E560	E760	F058	F157	F310	F502
C931	D091	D212	D353	D477	D642	D828	E112	E258	E561	E761	F059	F158	F311	F503
C932	D092	D213	D354	D479	D643	D829	E113	E259	E568	E762	F060	F159	F312	F504
C937	D093	D214	D355	D480	D644	D830	E114	E260	E569	E763	F061	F160	F313	F505
C939	D097	D215	D356	D481	D648	D831	E115	E261	E58	E768	F062	F161	F314	F508
C940	D099	D216	D357	D482	D649	D832	E116	E268	E59	E769	F063	F162	F315	F509
C941	D100	D219	D358	D483	D65	D838	E117	E269	E60	E770	F064	F163	F316	F510
C942	D101	D220	D359	D484	D66	D839	E118	E270	E610	E771	F065	F164	F317	F511
C943	D102	D221	D360	D485	D67	D840	E119	E271	E611	E778	F066	F165	F318	F512
C944	D103	D222	D361	D486	D680	D841	E120	E272	E612	E779	F067	F166	F319	F513
C945	D104	D223	D367	D487	D681	D848	E121	E273	E613	E780	F068	F167	F320	F514
C947	D105	D224	D369	D489	D682	D849	E122	E274	E614	E781	F069	F168	F321	F515
C950	D106	D225	D370	D500	D683	D860	E123	E275	E615	E782	F070	F169	F322	F518
C951	D107	D226	D371	D501	D684	D861	E124	E278	E616	E783	F071	F170	F323	F519
C952	D109	D227	D372	D508	D688	D862	E125	E279	E617	E784	F072	F171	F328	F520
C957	D110	D229	D373	D509	D689	D863	E126	E280	E618	E785	F078	F172	F329	F521
C959	D117	D230	D374	D510	D690	D868	E127	E281	E619	E786	F079	F173	F330	F522
C960	D119	D231	D375	D511	D691	D869	E128	E282	E630	E788	F09	F174	F331	F523
C961	D120	D232	D376	D512	D692	D890	E129	E283	E631	E789	F100	F175	F332	F524
C962	D121	D233	D377	D513	D693	D891	E130	E288	E638	E790	F101	F176	F333	F525
C963	D122	D234	D379	D518	D694	D892	E131	E289	E639	E791	F102	F177	F334	F526

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

F527	F842	G120	G439	G611	G952	H185	H430	H600	H905	I228	I444	I672	I839	J152
F528	F843	G121	G440	G618	G958	H186	H431	H601	H906	I229	I445	I673	I840	J153
F529	F844	G122	G441	G619	G959	H187	H432	H602	H907	I241	I446	I674	I841	J154
F530	F845	G128	G442	G620	G960	H188	H433	H603	H908	I248	I447	I675	I842	J155
F531	F848	G129	G443	G621	G961	H189	H438	H604	H910	I249	I450	I676	I843	J156
F538	F849	G20	G444	G622	G968	H200	H439	H605	H911	I250	I451	I677	I844	J157
F539	F88	G210	G448	G628	G969	H201	H440	H608	H912	I251	I452	I678	I845	J158
F54	F89	G211	G450	G629	G98	H202	H441	H609	H913	I252	I453	I679	I846	J159
F55	F900	G212	G451	G64	H000	H208	H442	H610	H918	I253	I454	I690	I847	J160
F59	F901	G213	G452	G700	H001	H209	H443	H611	H919	I254	I455	I691	I848	J168
F600	F908	G218	G453	G701	H010	H210	H444	H612	H920	I255	I456	I692	I849	J180
F601	F909	G219	G454	G702	H011	H211	H445	H613	H921	I256	I458	I693	I850	J181
F602	F910	G230	G458	G708	H018	H212	H446	H618	H922	I258	I459	I694	I859	J182
F603	F911	G231	G459	G709	H019	H213	H447	H619	H930	I259	I460	I698	I860	J188
F604	F912	G232	G470	G710	H020	H214	H448	H650	H931	I260	I461	I700	I861	J189
F605	F913	G238	G471	G711	H021	H215	H449	H651	H932	I269	I469	I701	I862	J200
F606	F918	G239	G472	G712	H022	H218	H46	H652	H933	I270	I470	I702	I863	J201
F607	F919	G240	G473	G713	H023	H219	H470	H653	H938	I271	I471	I708	I864	J202
F608	F920	G241	G474	G718	H024	H250	H471	H654	H939	I272	I472	I709	I868	J203
F609	F928	G242	G478	G719	H025	H251	H472	H659	I00	I278	I479	I710	I870	J204
F61	F929	G243	G479	G720	H026	H252	H473	H660	I010	I279	I48	I711	I871	J205
F620	F930	G244	G500	G721	H027	H258	H474	H661	I011	I280	I490	I712	I872	J206
F621	F931	G245	G501	G722	H028	H259	H475	H662	I012	I281	I491	I713	I878	J207
F628	F932	G248	G508	G723	H029	H260	H476	H663	I018	I288	I492	I714	I879	J208
F629	F933	G249	G509	G724	H040	H261	H477	H664	I019	I289	I493	I715	I880	J209
F630	F938	G250	G510	G728	H041	H262	H490	H669	I020	I300	I494	I716	I881	J210
F631	F939	G251	G511	G729	H042	H263	H491	H680	I029	I301	I495	I718	I888	J218
F632	F940	G252	G512	G800	H043	H264	H492	H681	I050	I308	I498	I719	I889	J219
F633	F941	G253	G513	G801	H044	H268	H493	H690	I051	I309	I499	I720	I890	J22
F638	F942	G254	G514	G802	H045	H269	H494	H698	I052	I310	I500	I721	I891	J300
F639	F948	G255	G518	G803	H046	H270	H498	H699	I058	I311	I501	I722	I898	J301
F640	F949	G256	G519	G804	H048	H271	H499	H700	I059	I312	I509	I723	I899	J302
F641	F950	G258	G520	G808	H049	H278	H500	H701	I060	I313	I510	I724	I950	J303
F642	F951	G259	G521	G809	H050	H279	H501	H702	I061	I318	I511	I728	I951	J304
F648	F952	G300	G522	G810	H051	H300	H502	H708	I062	I319	I512	I729	I952	J310
F649	F958	G301	G523	G811	H052	H301	H503	H709	I068	I330	I513	I730	I958	J311
F650	F959	G308	G527	G819	H053	H302	H504	H71	I069	I339	I514	I731	I959	J312
F651	F980	G309	G528	G820	H054	H308	H505	H720	I070	I340	I515	I738	I99	J320
F652	F981	G310	G529	G821	H055	H309	H506	H721	I071	I341	I516	I739	J00	J321
F653	F982	G311	G540	G822	H058	H310	H508	H722	I072	I342	I517	I740	J010	J322
F654	F983	G312	G541	G823	H059	H311	H509	H728	I078	I348	I518	I741	J011	J323
F655	F984	G318	G542	G824	H100	H312	H510	H729	I079	I349	I519	I742	J012	J324
F656	F985	G319	G543	G825	H101	H313	H511	H730	I080	I350	I600	I743	J013	J328
F658	F986	G35	G544	G830	H102	H314	H512	H731	I081	I351	I601	I744	J014	J329
F659	F988	G360	G545	G831	H103	H318	H518	H738	I082	I352	I602	I745	J018	J330
F660	F989	G361	G546	G832	H104	H319	H519	H739	I083	I358	I603	I748	J019	J331
F661	F99	G368	G547	G833	H105	H330	H520	H740	I088	I359	I604	I749	J020	J338
F662	G000	G369	G548	G834	H108	H331	H521	H741	I089	I360	I605	I770	J028	J339
F668	G001	G370	G549	G838	H109	H332	H522	H742	I090	I361	I606	I771	J029	J340
F669	G002	G371	G560	G839	H110	H333	H523	H743	I091	I362	I607	I772	J030	J341
F680	G003	G372	G561	G900	H111	H334	H524	H744	I092	I368	I608	I773	J038	J342
F681	G008	G373	G562	G901	H112	H335	H525	H748	I098	I369	I609	I774	J039	J343
F688	G009	G374	G563	G902	H113	H340	H526	H749	I099	I370	I610	I775	J040	J348
F69	G030	G375	G564	G903	H114	H341	H527	H800	I10	I371	I611	I776	J041	J350
F70	G031	G378	G568	G904	H118	H342	H530	H801	I110	I372	I612	I778	J042	J351
F71	G032	G379	G569	G908	H119	H348	H531	H802	I119	I378	I613	I779	J050	J352
F72	G038	G400	G570	G909	H150	H349	H532	H808	I120	I379	I614	I780	J051	J353
F73	G039	G401	G571	G910	H151	H350	H533	H809	I129	I38	I615	I781	J060	J358
F78	G040	G402	G572	G911	H158	H351	H534	H810	I130	I400	I616	I788	J068	J359
F79	G041	G403	G573	G912	H159	H352	H535	H811	I131	I401	I618	I789	J069	J36
F800	G042	G404	G574	G913	H160	H353	H536	H812	I132	I408	I619	I800	J09	J370
F801	G048	G405	G575	G918	H161	H354	H538	H813	I139	I409	I620	I801	J100	J371
F802	G049	G406	G576	G919	H162	H355	H539	H814	I150	I420	I621	I802	J101	J380
F803	G060	G407	G578	G92	H163	H356	H540	H818	I159	I421	I629	I803	J108	J381
F808	G061	G408	G579	G930	H164	H357	H541	H819	I200	I422	I630	I808	J110	J382
F809	G062	G409	G580	G931	H168	H358	H542	H830	I201	I423	I631	I809	J111	
F810	G08	G410	G587	G932	H169	H359	H543	H831	I208	I424	I632	I81	J118	
F811	G09	G411	G588	G933	H170	H400	H544	H832	I209	I425	I633	I820	J120	
F812	G10	G412	G589	G934	H171	H401	H545	H833	I210	I426	I634	I821	J121	
F813	G110	G418	G600	G935	H178	H402	H546	H838	I211	I427	I635	I822	J122	
F818	G111	G419	G601	G936	H179	H403	H547	H839	I212	I428	I636	I823	J128	
F819	G112	G430	G602	G937	H180	H404	H55	H900	I213	I429	I638	I828	J129	
F82	G113	G431	G603	G938	H181	H405	H570	H901	I214	I440	I639	I829	J13	
F83	G114	G432	G608	G939	H182	H406	H571	H902	I219	I441	I64	I830	J14	
F840	G118	G433	G609	G950	H183	H408	H578	H903	I220	I442	I670	I831	J150	
F841	G119	G438	G610	G951	H184	H409	H579	H904	I221	I443	I671	I832	J151	

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

J383	J81	K051	K226	K404	K610	K768	L059	L298	L573	L748	L988	M175	M314	M489
J384	J82	K052	<b>K227</b>	K409	K611	K769	L080	L299	L574	L749	L989	M179	M315	M500
J385	J840	K053	K228	K410	K612	K800	L081	L300	L575	L750	M000	M180	M316	M501
J386	J841	K054	K229	K411	K613	K801	L088	L301	L578	L751	M001	M181	<b>M317</b>	M502
J387	J848	K055	K250	K412	K614	K802	L089	L302	L579	L752	M002	M182	M318	M503
J390	J849	K056	K251	K413	K620	K803	L100	L303	L580	L758	M008	M183	M319	M508
J391	J850	K060	K252	K414	K621	K804	L101	L304	L581	L759	M009	M184	M320	M509
J392	J851	K061	K253	K419	K622	K805	L102	L305	L589	L80	M020	M185	M321	M510
J393	J852	K062	K254	K420	K623	K808	L103	L308	L590	L810	M021	M189	M328	M511
J398	J853	K068	K255	K421	K624	K810	L104	L309	L598	L811	M022	M190	M329	M512
J399	J860	K069	K256	K429	K625	K811	L105	L400	L599	L812	M023	M191	M330	M513
J40	J869	K070	K257	K430	K626	K818	L108	L401	L600	L813	M028	M192	M331	M514
J410	J90	K071	K259	K431	K627	K819	L109	L402	L601	L814	M029	M198	M332	M518
J411	J920	K072	K260	K439	K628	K820	L110	L403	L602	L815	M050	M199	M339	M519
J418	J929	K073	K261	K440	K629	K821	L111	L404	L603	L816	M051	M200	M340	M530
J42	J930	K074	K262	K441	K630	K822	L118	L405	L604	L817	M052	M201	M341	M531
J430	J931	K075	K263	K449	K631	K823	L119	L408	L605	L818	M053	M202	M342	M532
J431	J938	K076	K264	K450	K632	K824	L120	L409	L608	L819	M058	M203	M348	M533
J432	J939	K078	K265	K451	K633	K828	L121	L410	L609	L82	M059	M204	M349	M538
J438	J940	K079	K266	K458	K634	K829	L122	L411	L630	L83	M060	M205	M350	M539
J439	J941	K080	K267	K460	K635	K830	L123	L412	L631	L84	M061	M206	M351	M540
J440	J942	K081	K269	K461	K638	K831	L128	L413	L632	L850	M062	M210	M352	M541
J441	J948	K082	K270	K469	K639	K832	L129	L414	L638	L851	M063	M211	M353	M542
J448	J949	K083	K271	K500	K650	K833	L130	L415	L639	L852	M064	M212	M354	M543
J449	J960	K088	K272	K501	K658	K834	L131	L418	L640	L853	M068	M213	M355	M544
J450	J961	K089	K273	K508	K659	K835	L138	L419	L648	L858	M069	M214	M356	M545
J451	J969	K090	K274	K509	K660	K838	L139	L42	L649	L859	M080	M215	M357	M546
J458	J980	K091	K275	K510	K661	K839	L200	L430	L650	L870	M081	M216	M358	M548
J459	J981	K092	K276	K511	K668	<del>K885</del>	L208	L431	L651	L871	M082	M217	M359	M549
J46	J982	K098	K277	K512	K669	<b>K850</b>	L209	L432	L652	L872	M083	M218	M400	M600
J47	J983	K099	K279	K513	K700	<b>K851</b>	L210	L433	L658	L878	M084	M219	M401	M601
J60	J984	K100	K280	K514	K701	<b>K852</b>	L211	L438	L659	L879	M088	M220	M402	M602
J61	J985	K101	K281	K515	K702	<b>K853</b>	L218	L439	L660	L88	M089	M221	M403	M608
J620	J986	K102	K282	K518	K703	<b>K858</b>	L219	L440	L661	L89	M100	M222	M404	M609
J628	J988	K103	K283	K519	K704	<b>K859</b>	L22	L441	L662	L900	M101	M223	M405	M610
J630	J989	K108	K284	K520	K709	K860	L230	L442	L663	L901	M102	M224	M410	M611
J631	K000	K109	K285	K521	K710	K861	L231	L443	L664	L902	M103	M228	M411	M612
J632	K001	K110	K286	K522	K711	K862	L232	L444	L668	L903	M104	M229	M412	M613
J633	K002	K111	K287	K528	K712	K863	L233	L448	L669	L904	M109	M230	M413	M614
J634	K003	K112	K289	K529	K713	K868	L234	L449	L670	L905	M110	M231	M414	M615
J635	K004	K113	K290	K550	K714	K869	L235	L500	L671	L906	M111	M232	M415	M619
J638	K005	K114	K291	K551	K715	K900	L236	L501	L678	L908	M112	M233	M418	M620
J64	K006	K115	K292	K552	K716	K901	L237	L502	L679	L909	M118	M234	M419	M621
J65	K007	K116	K293	K558	K717	K902	L238	L503	L680	L910	M119	M235	M420	M622
J660	K008	K117	K294	K559	K718	K903	L239	L504	L681	L918	M120	M236	M421	M623
J661	K009	K118	K295	K560	K719	K904	L240	L505	L682	L919	M121	M238	M429	M624
J662	K010	K119	K296	K561	K720	K908	L241	L506	L683	L920	M122	M239	M430	M625
J668	K011	K120	K297	K562	K721	K909	L242	L508	L688	L921	M123	M240	M431	M626
J670	K020	K121	K298	K563	K729	K920	L243	L509	L689	L922	M124	M241	M432	M628
J671	K021	K122	K299	K564	K730	K921	L244	L510	L700	L923	M125	M242	M433	M629
J672	K022	K130	K30	K565	K731	K922	L245	L511	L701	L928	M128	M243	M434	M650
J673	K023	K131	K310	K566	K732	K928	L246	L512	L702	L929	M130	M244	M435	M651
J674	K024	K132	K311	K567	K738	K929	L247	L518	L703	L930	M131	M245	M436	M652
J675	K028	K133	K312	K570	K739	L00	L248	L519	L704	L931	M138	M246	M438	M653
J676	K029	K134	K313	K571	K740	L010	L249	L52	L705	L932	M139	M247	M439	M654
J677	K030	K135	K314	K572	K741	L011	L250	L530	L708	L940	M150	M248	M45	M658
J678	K031	K136	K315	K573	K742	L020	L251	L531	L709	L941	M151	M249	M460	M659
J679	K032	K137	K316	K574	K743	L021	L252	L532	L710	L942	M152	M250	M461	M660
J680	K033	K140	K317	K575	K744	L022	L253	L533	L711	L943	M153	M251	M462	M661
J681	K034	K141	K318	K578	K745	L023	L254	L538	L718	L944	M154	M252	M463	M662
J682	K035	K142	K319	K579	K746	L024	L255	L539	L719	L945	M158	M253	M464	M663
J683	K036	K143	K350	K580	K750	L028	L258	L550	L720	L946	M159	M254	M465	M664
J684	K037	K144	K351	K589	K751	L029	L259	L551	L721	L948	M160	M255	M468	M665
J688	K038	K145	K359	K590	K752	L030	L26	L552	L722	L949	M161	M256	M469	M670
J689	K039	K146	K36	K591	K753	L031	L270	L558	L728	L950	M162	M257	M470	M671
J690	K040	K148	K37	K592	K754	L032	L271	L559	L729	L951	M163	M258	M471	M672
J691	K041	K149	K380	K593	K758	L033	L272	L560	L730	L958	M164	M259	M472	M673
J698	K042	K20	K381	K594	K759	L038	L278	L561	L731	L959	M165	M300	M478	M674
J700	K043	K210	K382	K598	K760	L039	L279	L562	L732	L97	M166	M301	M479	M678
J701	K044	K219	K383	K599	K761	L040	L280	L563	L738	L980	M167	M302	M480	
J702	K045	K220	K388	K600	K762	L041	L281	L564	L739	L981	M169	M303	M481	
J703	K046	K221	K389	K601	K763	L042	L282	L568	L740	L982	M170	M308	M482	
J704	K047	K222	K400	K602	K764	L043	L290	L569	L741	L983	M171	M310	M483	
J708	K048	K223	K401	K603	K765	L048	L291	L570	L742	L984	M172	M311	M484	
J709	K049	K224	K402	K604	K766	L049	L292	L571	L743	L985	M173	M312	M485	
J80	K050	K225	K403	K605	K767	L050	L293	L572	L744	L986	M174	M313	M488	

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

M679	M816	M941	N053	N271	N489	N822	N926	O061	O268	O369	O691	O901	P038	P231
M700	M818	M942	N054	N279	N490	N823	N930	O062	O269	O40	O692	O902	P039	P232
M701	M819	M943	N055	N280	N491	N824	N938	O063	O280	O410	O693	O903	P040	P233
M702	M830	M948	N056	N281	N492	N825	N939	O064	O281	O411	O694	O904	P041	P234
M703	M831	M949	N057	N288	N498	N828	N940	O065	O282	O418	O695	O905	P042	P235
M704	M832	M950	N058	N289	N499	N829	N941	O066	O283	O419	O698	O908	P043	P236
M705	M833	M951	N059	N300	N500	N830	N942	O067	O284	O420	O699	O909	P044	P238
M706	M834	M952	N060	N301	N501	N831	N943	O068	O285	O421	O700	O910	P045	P239
M707	M835	M953	N061	N302	N508	N832	N944	O069	O288	O422	O701	O911	P046	P240
M708	M838	M954	N062	N303	N509	N833	N945	O070	O289	O429	O702	O912	P048	P241
M709	M839	M955	N063	N304	N600	N834	N946	O071	O290	O430	O703	O920	P049	P242
M710	M840	M958	N064	N308	N601	N835	N948	O072	O291	O431	O709	O921	P050	P243
M711	M841	M959	N065	N309	N602	N836	N949	O073	O292	O438	O710	O922	P051	P248
M712	M842	M990	N066	N310	N603	N837	N950	O074	O293	O439	O711	O923	P052	P249
M713	M843	M991	N067	N311	N604	N838	N951	O075	O294	O440	O712	O924	P059	P250
M714	M844	M992	N068	N312	N608	N839	N952	O076	O295	O441	O713	O925	P070	P251
M715	M848	M993	N069	N318	N609	N840	N953	O077	O296	O450	O714	O926	P071	P252
M718	M849	M994	N070	N319	N61	N841	N958	O078	O298	O458	O715	O927	P072	P253
M719	M850	M995	N071	N320	N62	N842	N959	O079	O299	O459	O716	O95	P073	P258
M720	M851	M996	N072	N321	N63	N843	N96	O100	O300	O460	O717	O96	P080	P260
M721	M852	M997	N073	N322	N640	N848	N970	O101	O301	O468	O718	O97	P081	P261
M722	M853	M998	N074	N323	N641	N849	N971	O102	O302	O469	O719	O980	P082	P268
M724	M854	M999	N075	N324	N642	N850	N972	O103	O308	O470	O720	O981	P100	P269
M726	M855	N000	N076	N328	N643	N851	N973	O104	O309	O471	O721	O982	P101	P270
M728	M856	N001	N077	N329	N644	N852	N974	O109	O310	O479	O722	O983	P102	P271
M729	M858	N002	N078	N340	N645	N853	N978	O11	O311	O48	O723	O984	P103	P278
M750	M859	N003	N079	N341	N648	N854	N979	O120	O312	O60	O730	O985	P104	P279
M751	M860	N004	N10	N342	N649	N855	N980	O121	O318	O610	O731	O986	P108	P280
M752	M861	N005	N110	N343	N700	N856	N981	O122	O320	O611	O740	O988	P109	P281
M753	M862	N006	N111	N350	N701	N857	N982	O13	O321	O618	O741	O989	P110	P282
M754	M863	N007	N118	N351	N709	N858	N983	O140	O322	O619	O742	O990	P111	P283
M755	M864	N008	N119	N358	N710	N859	N988	O141	O323	O620	O743	O991	P112	P284
M758	M865	N009	N12	N359	N711	N86	N989	O149	O324	O621	O744	O992	P113	P285
M759	M866	N010	N130	N360	N719	N870	O000	O150	O325	O622	O745	O993	P114	P288
M760	M868	N011	N131	N361	N72	N871	O001	O151	O326	O623	O746	O994	P115	P289
M761	M869	N012	N132	N362	N730	N872	O002	O152	O328	O624	O747	O995	P119	P290
M762	M870	N013	N133	N363	N731	N879	O008	O159	O329	O628	O748	O996	P120	P291
M763	M871	N014	N134	N368	N732	N880	O009	O16	O330	O629	O749	O997	P121	P292
M764	M872	N015	N135	N369	N733	N881	O010	O200	O331	O630	O750	O998	P122	P293
M765	M873	N016	N136	N390	N734	N882	O011	O208	O332	O631	O751	P000	P123	P294
M766	M878	N017	N137	N391	N735	N883	O019	O209	O333	O632	O752	P001	P124	P298
M767	M879	N018	N138	N392	N736	N884	O020	O210	O334	O639	O753	P002	P128	P299
M768	M880	N019	N139	N393	N738	N888	O021	O211	O335	O640	O754	P003	P129	P350
M769	M888	N020	N140	N394	N739	N889	O028	O212	O336	O641	O755	P004	P130	P351
M770	M889	N021	N141	N398	N750	N890	O029	O218	O337	O642	O756	P005	P131	P352
M771	M890	N022	N142	N399	N751	N891	O030	O219	O338	O643	O757	P006	P132	P353
M772	M891	N023	N143	N40	N758	N892	O031	O220	O339	O644	O758	P007	P133	P358
M773	M892	N024	N144	N410	N759	N893	O032	O221	O340	O645	O759	P008	P134	P359
M774	M893	N025	N150	N411	N760	N894	O033	O222	O341	O648	O85	P009	P138	P360
M775	M894	N026	N151	N412	N761	N895	O034	O223	O342	O649	O860	P010	P139	P361
M778	M895	N027	N158	N413	N762	N896	O035	O224	O343	O650	O861	P011	P140	P362
M779	M896	N028	N159	N418	N763	N897	O036	O225	O344	O651	O862	P012	P141	P363
M790	M898	N029	N170	N419	N764	N898	O037	O228	O345	O652	O863	P013	P142	P364
M791	M899	N030	N171	N420	N765	N899	O038	O229	O346	O653	O864	P014	P143	P365
M792	M910	N031	N172	N421	N766	N900	O039	O230	O347	O654	O868	P015	P148	P368
M793	M911	N032	N178	N422	N768	N901	O040	O231	O348	O655	O870	P016	P149	P369
M794	M912	N033	N179	N428	N800	N902	O041	O232	O349	O658	O871	P017	P150	P370
M795	M913	N034	N180	N429	N801	N903	O042	O233	O350	O659	O872	P018	P151	P371
M796	M918	N035	N188	N430	N802	N904	O043	O234	O351	O660	O873	P019	P152	P372
<b>M797</b>	M919	N036	N189	N431	N803	N905	O044	O235	O352	O661	O878	P020	P153	P373
M798	M920	N037	N19	N432	N804	N906	O045	O239	O353	O662	O879	P021	P154	P374
M799	M921	N038	N200	N433	N805	N907	O046	O240	O354	O663	O880	P022	P155	P375
M800	M922	N039	N201	N434	N806	N908	O047	O241	O355	O664	O881	P023	P156	
M801	M923	N040	N202	N44	N808	N909	O048	O242	O356	O665	O882	P024	P158	
M802	M924	N041	N209	N450	N809	N910	O049	O243	O357	O668	O883	P025	P159	
M803	M925	N042	N210	N459	N810	N911	O050	O244	O358	O669	O888	P026	P200	
M804	M926	N043	N211	N46	N811	N912	O051	O249	O359	O670	O890	P027	P201	
M805	M927	N044	N218	N47	N812	N913	O052	O25	O360	O678	O891	P028	P209	
M808	M928	N045	N219	N480	N813	N914	O053	O260	O361	O679	O892	P029	P210	
M809	M929	N046	N23	N481	N814	N915	O054	O261	O362	O680	O893	P030	P211	
M810	M930	N047	N250	N482	N815	N920	O055	O262	O363	O681	O894	P031	P219	
M811	M931	N048	N251	N483	N816	N921	O056	O263	O364	O682	O895	P032	P220	
M812	M932	N049	N258	N484	N818	N922	O057	O264	O365	O683	O896	P033	P221	
M813	M938	N050	N259	N485	N819	N923	O058	O265	O366	O688	O898	P034	P228	
M814	M939	N051	N26	N486	N820	N924	O059	O266	O367	O689	O899	P035	P229	
M815	M940	N052	N270	N488	N821	N925	O060	O267	O368	O690	O900	P036	P230	





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

V030	V185	V294	V381	V467	V554	V641	V727	V813	V900	W09	W99	X78	Y364	Y481
V031	V189	V295	V382	V469	V555	V642	V729	V814	V901	W10	X00	X79	Y365	Y482
V039	V190	V296	V383	V470	V556	V643	V730	V815	V902	W11	X01	X80	Y366	Y483
V040	V191	V298	V384	V471	V557	V644	V731	V816	V903	W12	X02	X81	Y367	Y484
V041	V192	V299	V385	V472	V559	V645	V732	V817	V904	W13	X03	X82	Y368	Y485
V049	V193	V300	V386	V473	V560	V646	V733	V818	V905	W14	X04	X83	Y369	Y490
V050	V194	V301	V387	V474	V561	V647	V734	V819	V906	W15	X05	X84	Y400	Y491
V051	V195	V302	V389	V475	V562	V649	V735	V820	V907	W16	X06	X85	Y401	Y492
V059	V196	V303	V390	V476	V563	V650	V736	V821	V908	W17	X08	X86	Y402	Y493
V060	V198	V304	V391	V477	V564	V651	V737	V822	V909	W18	X09	X87	Y403	Y494
V061	V199	V305	V392	V479	V565	V652	V739	V823	V910	W19	X10	X88	Y404	Y495
V069	V200	V306	V393	V480	V566	V653	V740	V824	V911	W20	X11	X89	Y405	Y496
V090	V201	V307	V394	V481	V567	V654	V741	V825	V912	W21	X12	X90	Y406	Y497
V091	V202	V309	V395	V482	V569	V655	V742	V826	V913	W22	X13	X91	Y407	Y498
V092	V203	V310	V396	V483	V570	V656	V743	V827	V914	W23	X14	X92	Y408	Y499
V093	V204	V311	V398	V484	V571	V657	V744	V828	V915	W24	X15	X93	Y409	Y500
V099	V205	V312	V399	V485	V572	V659	V745	V829	V916	W25	X16	X94	Y410	Y501
V100	V209	V313	V400	V486	V573	V660	V746	V830	V917	W26	X17	X95	Y411	Y502
V101	V210	V314	V401	V487	V574	V661	V747	V831	V918	W27	X18	X96	Y412	Y508
V102	V211	V315	V402	V489	V575	V662	V749	V832	V919	W28	X19	X97	Y413	Y509
V103	V212	V316	V403	V490	V576	V663	V750	V833	V920	W29	X20	X98	Y414	Y510
V104	V213	V317	V404	V491	V577	V664	V751	V834	V921	W30	X21	X99	Y415	Y511
V105	V214	V319	V405	V492	V579	V665	V752	V835	V922	W31	X22	Y00	Y418	Y512
V109	V215	V320	V406	V493	V580	V666	V753	V836	V923	W32	X23	Y01	Y419	Y513
V110	V219	V321	V407	V494	V581	V667	V754	V837	V924	W33	X24	Y02	Y420	Y514
V111	V220	V322	V409	V495	V582	V669	V755	V839	V925	W34	X25	Y03	Y421	Y515
V112	V221	V323	V410	V496	V583	V670	V756	V840	V926	W35	X26	Y04	Y422	Y516
V113	V222	V324	V411	V498	V584	V671	V757	V841	V927	W36	X27	Y05	Y423	Y517
V114	V223	V325	V412	V499	V585	V672	V759	V842	V928	W37	X28	Y060	Y424	Y518
V115	V224	V326	V413	V500	V586	V673	V760	V843	V929	W38	X29	Y061	Y425	Y519
V119	V225	V327	V414	V501	V587	V674	V761	V844	V930	W39	X30	Y062	Y426	Y520
V120	V229	V329	V415	V502	V589	V675	V762	V845	V931	W40	X31	Y068	Y427	Y521
V121	V230	V330	V416	V503	V590	V676	V763	V846	V932	W41	X32	Y069	Y428	Y522
V122	V231	V331	V417	V504	V591	V677	V764	V847	V933	W42	X33	Y070	Y429	Y523
V123	V232	V332	V419	V505	V592	V679	V765	V849	V934	W43	X34	Y071	Y430	Y524
V124	V233	V333	V420	V506	V593	V680	V766	V850	V935	W44	X35	Y072	Y431	Y525
V125	V234	V334	V421	V507	V594	V681	V767	V851	V936	W45	X36	Y073	Y432	Y526
V129	V235	V335	V422	V509	V595	V682	V769	V852	V937	<b>W46</b>	X37	Y078	Y433	Y527
V130	V239	V336	V423	V510	V596	V683	V770	V853	V938	W49	X38	Y079	Y434	Y528
V131	V240	V337	V424	V511	V598	V684	V771	V854	V939	W50	X39	Y08	Y435	Y529
V132	V241	V339	V425	V512	V599	V685	V772	V855	V940	W51	X40	Y09	Y436	Y530
V133	V242	V340	V426	V513	V600	V686	V773	V856	V941	W52	X41	Y10	Y438	Y531
V134	V243	V341	V427	V514	V601	V687	V774	V857	V942	W53	X42	Y11	Y439	Y532
V135	V244	V342	V429	V515	V602	V689	V775	V859	V943	W54	X43	Y12	Y440	Y533
V139	V245	V343	V430	V516	V603	V690	V776	V860	V944	W55	X44	Y13	Y441	Y534
V140	V249	V344	V431	V517	V604	V691	V777	V861	V945	W56	X45	Y14	Y442	Y535
V141	V250	V345	V432	V519	V605	V692	V779	V862	V946	W57	X46	Y15	Y443	Y536
V142	V251	V346	V433	V520	V606	V693	V780	V863	V947	W58	X47	Y16	Y444	Y537
V143	V252	V347	V434	V521	V607	V694	V781	V864	V948	W59	X48	Y17	Y445	Y538
V144	V253	V349	V435	V522	V609	V695	V782	V865	V949	W60	X49	Y18	Y446	Y539
V145	V254	V350	V436	V523	V610	V696	V783	V866	V950	W64	X50	Y19	Y447	Y540
V149	V255	V351	V437	V524	V611	V698	V784	V867	V951	W65	X51	Y20	Y449	Y541
V150	V259	V352	V439	V525	V612	V699	V785	V869	V952	W66	X52	Y21	Y450	Y542
V151	V260	V353	V440	V526	V613	V700	V786	V870	V953	W67	X53	Y22	Y451	Y543
V152	V261	V354	V441	V527	V614	V701	V787	V871	V954	W68	X54	Y23	Y452	Y544
V153	V262	V355	V442	V529	V615	V702	V789	V872	V958	W69	X57	Y24	Y453	Y545
V154	V263	V356	V443	V530	V616	V703	V790	V873	V959	W70	X58	Y25	Y454	Y546
V155	V264	V357	V444	V531	V617	V704	V791	V874	V960	W73	<del>X59</del>	Y26	Y455	Y547
V159	V265	V359	V445	V532	V619	V705	V792	V875	V961	W74	<b>X590</b>	Y27	Y458	Y548
V160	V269	V360	V446	V533	V620	V706	V793	V876	V962	W75	<b>X599</b>	Y28	Y459	Y549
V161	V270	V361	V447	V534	V621	V707	V794	V877	V968	W76	X60	Y29	Y460	Y550
V162	V271	V362	V449	V535	V622	V709	V795	V878	V969	W77	X61	Y30	Y461	Y551
V163	V272	V363	V450	V536	V623	V710	V796	V879	V970	W78	X62	Y31	Y462	Y552
V164	V273	V364	V451	V537	V624	V711	V798	V880	V971	W79	X63	Y32	Y463	Y553
V165	V274	V365	V452	V539	V625	V712	V799	V881	V972	W80	X64	Y33	Y464	Y554
V169	V275	V366	V453	V540	V626	V713	V800	V882	V973	W81	X65	Y34	Y465	Y555
V170	V279	V367	V454	V541	V627	V714	V801	V883	V978	W83	X66	Y350	Y466	Y556
V171	V280	V369	V455	V542	V629	V715	V802	V884	V98	W84	X67	Y351	Y467	Y557
V172	V281	V370	V456	V543	V630	V716	V803	V885	V99	W85	X68	Y352	Y468	Y560
V173	V282	V371	V457	V544	V631	V717	V804	V886	W00	W86	X69	Y353	Y470	Y561
V174	V283	V372	V459	V545	V632	V719	V805	V887	W01	W87	X70	Y354	Y471	Y562
V175	V284	V373	V460	V546	V633	V720	V806	V888	W02	W88	X71	Y355	Y472	Y563
V179	V285	V374	V461	V547	V634	V721	V807	V889	W03	W89	X72	Y356	Y473	Y564
V180	V289	V375	V462	V549	V635	V722	V808	V890	W04	W90	X73	Y357	Y474	Y565
V181	V290	V376	V463	V550	V636	V723	V809	V891	W05	W91	X74	Y360	Y475	Y566
V182	V291	V377	V464	V551	V637	V724	V810	V892	W06	W92	X75	Y361	Y478	Y567
V183	V292	V379	V465	V552	V639	V725	V811	V893	W07	W93	X76	Y362	Y479	Y568
V184	V293	V380	V466	V553	V640	V726	V812	V899	W08	W94	X77	Y363	Y480	Y569

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

Y570	Y582	Y599	Y611	Y623	Y636	Y655	Y713	Y740	Y762	Y788	Y811	Y833	Y846	Y882
Y571	Y583	Y600	Y612	Y624	Y638	Y658	Y718	Y741	Y763	Y790	Y812	Y834	Y847	Y883
Y572	Y584	Y601	Y613	Y625	Y639	Y66	Y720	Y742	Y768	Y791	Y813	Y835	Y848	Y890
Y573	Y585	Y602	Y614	Y626	Y640	Y69	Y721	Y743	Y770	Y792	Y818	Y836	Y849	Y891
Y574	Y586	Y603	Y615	Y628	Y641	Y700	Y722	Y748	Y771	Y793	Y820	Y838	Y850	Y899
Y575	Y588	Y604	Y616	Y629	Y648	Y701	Y723	Y750	Y772	Y798	Y821	Y839	Y859	
Y576	Y589	Y605	Y617	Y630	Y649	Y702	Y728	Y751	Y773	Y800	Y822	Y840	Y86	
Y577	Y590	Y606	Y618	Y631	Y650	Y703	Y730	Y752	Y778	Y801	Y823	Y841	Y870	
Y578	Y591	Y607	Y619	Y632	Y651	Y708	Y731	Y753	Y780	Y802	Y828	Y842	Y871	
Y579	Y592	Y608	Y620	Y633	Y652	Y710	Y732	Y758	Y781	Y803	Y830	Y843	Y872	
Y580	Y593	Y609	Y621	Y634	Y653	Y711	Y733	Y760	Y782	Y808	Y831	Y844	Y880	
Y581	Y598	Y610	Y622	Y635	Y654	Y712	Y738	Y761	Y783	Y810	Y832	Y845	Y881	

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)

S000	S069	S202	S307	S379	S499	S617	S709	S832	S940	T065	T190	T269	T346	T420
S001	S070	S203	S308	S380	S500	S618	S710	S833	S941	T07	T191	T270	T347	T421
S002	S071	S204	S309	S381	S501	S619	S711	S834	S942	T08	T192	T271	T348	T422
S003	S078	S207	S310	S382	S507	S620	S717	S835	S943	T090	T193	T272	T349	T423
S004	S079	S208	S311	S383	S508	S621	S718	S836	S947	T091	T198	T273	T350	T424
S005	S080	S210	S312	S390	S509	S622	S720	S837	S948	T092	T199	T274	T351	T425
S007	S081	S211	S313	S396	S510	S623	S721	S840	S949	T093	T200	T275	T352	T426
S008	S088	S212	S314	S397	S517	S624	S722	S841	S950	T094	T201	T276	T353	T427
S009	S089	S217	S315	S398	S518	S625	S723	S842	S951	T095	T202	T277	T354	T428
S010	S090	S218	S317	S399	S519	S626	S724	S847	S952	T096	T203	T280	T355	T430
S011	S091	S219	S318	S400	S520	S627	S727	S848	S957	T098	T204	T281	T356	T431
S012	S092	S220	S320	S407	S521	S628	S728	S849	S958	T099	T205	T282	T357	T432
S013	S097	S221	S321	S408	S522	S630	S729	S850	S959	T10	T206	T283	T360	T433
S014	S098	S222	S322	S409	S523	S631	S730	S851	S960	T110	T207	T284	T361	T434
S015	S099	S223	S323	S410	S524	S632	S731	S852	S961	T111	T210	T285	T362	T435
S017	S100	S224	S324	S411	S525	S633	S740	S853	S962	T112	T211	T286	T363	T436
S018	S101	S225	S325	S417	S526	S634	S741	S854	S967	T113	T212	T287	T364	T438
S019	S107	S228	S327	S418	S527	S635	S742	S855	S968	T114	T213	T288	T365	T439
S020	S108	S229	S328	S420	S528	S636	S747	S857	S969	T115	T214	T289	T366	T440
S021	S109	S230	S330	S421	S529	S637	S748	S858	S970	T116	T215	T300	T367	T441
S022	S110	S231	S331	S422	S530	S640	S749	S859	S971	T118	T216	T301	T368	T442
S023	S111	S232	S332	S423	S531	S641	S750	S860	S978	T119	T217	T302	T369	T443
S024	S112	S233	S333	S424	S532	S642	S751	S861	S980	T12	T220	T303	T370	T444
S025	S117	S234	S334	S427	S533	S643	S752	S862	S981	T130	T221	T304	T371	T445
S026	S118	S235	S335	S428	S534	S644	S757	S863	S982	T131	T222	T305	T372	T446
S027	S119	S240	S336	S429	S540	S647	S758	S867	S983	T132	T223	T306	T373	T447
S028	S120	S241	S337	S430	S541	S648	S759	S868	S984	T133	T224	T307	T374	T448
S029	S121	S242	S340	S431	S542	S649	S760	S869	S997	T134	T225	T310	T375	T449
S030	S122	S243	S341	S432	S543	S650	S761	S870	S998	T135	T226	T311	T378	T450
S031	S127	S244	S342	S433	S547	S651	S762	S878	S999	T136	T227	T312	T379	T451
S032	S128	S245	S343	S434	S548	S652	S763	S880	T002	T138	T230	T313	T380	T452
S033	S129	S246	S344	S435	S549	S653	S764	S881	T003	T139	T231	T314	T381	T453
S034	S130	S250	S345	S436	S550	S654	S767	S889	T008	T140	T232	T315	T382	T454
S035	S131	S251	S346	S437	S551	S655	S770	S897	T009	T141	T233	T316	T383	T455
S040	S132	S252	S348	S440	S552	S657	S771	S898	T012	T142	T234	T317	T384	T456
S041	S133	S253	S350	S441	S557	S658	S772	S899	T013	T143	T235	T318	T385	T457
S042	S134	S254	S351	S442	S558	S659	S780	S900	T019	T144	T236	T319	T386	T458
S043	S135	S255	S352	S443	S559	S660	S781	S901	T021	T145	T237	T320	T387	T459
S044	S136	S257	S353	S444	S560	S661	S789	S902	T022	T146	T240	T321	T388	T460
S045	S140	S258	S354	S445	S561	S662	S797	S903	T023	T147	T241	T322	T389	T461
S046	S141	S259	S355	S447	S562	S663	S798	S907	T024	T148	T242	T323	T390	T462
S047	S142	S260	S357	S448	S563	S664	S799	S908	T025	T149	T243	T324	T391	T463
S048	S143	S268	S358	S449	S564	S665	S800	S909	T028	T150	T244	T325	T392	T464
S049	S144	S269	S359	S450	S565	S666	S801	S910	T029	T151	T245	T326	T393	T465
S050	S145	S270	S360	S451	S567	S667	S807	S911	T031	T158	T246	T327	T394	T466
S051	S146	S271	S361	S452	S568	S668	S808	S912	T032	T159	T247	T328	T398	T467
S052	S150	S272	S362	S453	S570	S669	S809	S913	T033	T16	T250	T329	T399	T468
S053	S151	S273	S363	S457	S578	S670	S810	S917	T038	T170	T251	T330	T400	T469
S054	S152	S274	S364	S458	S579	S678	S817	S920	T039	T171	T252	T331	T401	T470
S055	S153	S275	S365	S459	S580	S680	S818	S921	T041	T172	T253	T332	T402	T471
S056	S157	S276	S366	S460	S581	S681	S819	S922	T042	T173	T254	T333	T403	T472
S057	S158	S277	S367	S461	S589	S682	S820	S923	T043	T174	T255	T334	T404	T473
S058	S159	S278	S368	S462	S597	S683	S821	S924	T048	T175	T256	T335	T405	T474
S059	S16	S279	S369	S463	S598	S684	S822	S925	T049	T178	T257	T336	T406	T475
S060	S170	S280	S370	S467	S599	S688	S823	S927	T050	T179	T260	T337	T407	T476
S061	S178	S281	S371	S468	S600	S689	S824	S929	T052	T180	T261	T338	T408	T477
S062	S179	S290	S372	S469	S601	S697	S825	S930	T053	T181	T262	T339	T409	T478
S063	S18	S297	S373	S47	S602	S698	S826	S931	T055	T182	T263	T340	T410	T479
S064	S197	S298	S374	S480	S607	S699	S827	S932	T058	T183	T264	T341	T411	T480
S065	S198	S299	S375	S481	S608	S700	S828	S933	T059	T184	T265	T342	T412	T481
S066	S199	S300	S376	S489	S609	S701	S829	S934	T062	T185	T266	T343	T413	T482
S067	S200	S301	S377	S497	S610	S707	S830	S935	T063	T188	T267	T344	T414	T483
S068	S201	S302	S378	S498	S611	S708	S831	S936	T064	T189	T268	T345	T415	T484

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	
E895	
E896	
E898	
E899	
G970	
G971	
G972	
G978	
G979	
H590	
H598	
H599	
H950	
H951	
H958	
H959	
I970	
I971	
I972	
I978	
I979	
J950	
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K910	
K911	
K912	
K913	
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K918	
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M960	
M961	
M962	
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O080	
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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
G3090	G309
<del>G3500</del>	<del>G35</del>
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
<b>I6100</b>	<b>I610</b>
<b>I6110</b>	<b>I611</b>
<b>I6120</b>	<b>I612</b>
<b>I6130</b>	<b>I613</b>
<b>I6140</b>	<b>I614</b>
<b>I6150</b>	<b>I615</b>
<b>I6180</b>	<b>I618</b>
<b>I6190</b>	<b>I619</b>
<b>I6300</b>	<b>I630</b>
<b>I6310</b>	<b>I631</b>
<b>I6320</b>	<b>I632</b>
<b>I6330</b>	<b>I633</b>
<b>I6340</b>	<b>I634</b>
<b>I6350</b>	<b>I635</b>
<b>I6360</b>	<b>I636</b>
<b>I6380</b>	<b>I638</b>
<b>I6390</b>	<b>I639</b>
<b>I6400</b>	<b>I64</b>
<b>I6910</b>	<b>I691</b>
<b>I6930</b>	<b>I693</b>
<b>I6940</b>	<b>I694</b>
J1010	J101
J1110	J111
J8410	J841
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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion		
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	4
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
C56	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		Edit code <sup>1</sup>
		Age	Sex exclusion	Age	Sex	
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
E14	Under 28 days	1	No	2		3
E16.2	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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion		
E28	No	2	Male	1	11
E29	No	2	Female	1	10
<b>E30</b>	<b>Under 5 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>6</b>
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	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F11	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F12	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F13	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F14	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F15	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F16	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F17	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F18	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
F19	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F20</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F21</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F22</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F23</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F24</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F25</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F28</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F29</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F30</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F31</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F32</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F33</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F34</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F38</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F39</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F40</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>

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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion		
		1 - Absolute			
		2 - Not Applicable			
<b>F41</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F42</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F43</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F44</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F45</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F48</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F50</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F51</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F52.0</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>20</b>
<b>F52.1</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>20</b>
<b>F52.2</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>20</b>
<b>F52.3</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>20</b>
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	4
<b>F54</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F55</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F59</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F60</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F61</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F62</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F63</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F64</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F65</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F66</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
<b>F68</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>20</b>
<b>F69</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>20</b>
G09	Under 1 year	0	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
G47.3	Under 28 days	1	No	2	3
G70.0	Under 28 days	1	No	2	3
<b>H25</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>20</b>
I48	Under 28 days	1	No	2	3
I49	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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion		
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
<b>K70</b>	<b>Under 1 year</b>	<b>0</b>	<b>No</b>	<b>2</b>	<b>4</b>
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
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

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		Edit code <sup>1</sup>
		Age	Sex exclusion	Age	Sex	
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
<b>M42.1</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>	<b>2</b>		<b>20</b>
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		4
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
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

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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion	Age	Sex exclusion		
N82	No	2	Male	1		1	11
N83	No	2	Male	1		1	11
N84	No	2	Male	1		1	11
N85	No	2	Male	1		1	11
N86	No	2	Male	1		1	11
N87	No	2	Male	1		1	11
N88	No	2	Male	1		1	11
N89	No	2	Male	1		1	11
N90	No	2	Male	1		1	11
N91	Under 10 years	1	Male	1		1	18
N91	55 years and over	0	Male	1		1	<b>26</b>
N92	Under 10 years or 55 years and over	0	Male	1		1	<b>14</b>
N93	No	2	Male	1		1	11
N94	Under 10 years or 55 years and over	0	Male	1		1	<b>14</b>
N95	Under 10 years	1	Male	1		1	18
N95	55 years and over	0	Male	1		1	<b>26</b>
N96	Under 10 years	1	Male	1		1	18
N96	55 years and over	0	Male	1		1	<b>26</b>
N97	Under 10 years	1	Male	1		1	18
N97	55 years and over	0	Male	1		1	<b>26</b>
N98	Under 10 years	1	Male	1		1	18
N98	55 years and over	0	Male	1		1	<b>26</b>
O00	Under 10 years	1	Male	1		1	18
O00	55 years and over	0	Male	1		1	<b>26</b>
O01	Under 10 years	1	Male	1		1	18
O01	55 years and over	0	Male	1		1	<b>26</b>
O02	Under 10 years	1	Male	1		1	18
O02	55 years and over	0	Male	1		1	<b>26</b>
O03	Under 10 years	1	Male	1		1	18
O03	55 years and over	0	Male	1		1	<b>26</b>
O04	Under 10 years	1	Male	1		1	18
O04	55 years and over	0	Male	1		1	<b>26</b>
O05	Under 10 years	1	Male	1		1	18
O05	55 years and over	0	Male	1		1	<b>26</b>
O06	Under 10 years	1	Male	1		1	18
O06	55 years and over	0	Male	1		1	<b>26</b>
O07	Under 10 years	1	Male	1		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 <b>exclusion</b>	0 - Conditional		Sex <b>exclusion</b>	Sex	Edit code <sup>1</sup>
		Age	Sex			
		1 - Absolute				
		2 - Not Applicable				
O07	55 years and over	0	Male		1	<b>26</b>
O10	Under 10 years	1	Male		1	18
O10	55 years and over	0	Male		1	<b>26</b>
O11	Under 10 years	1	Male		1	18
O11	55 years and over	0	Male		1	<b>26</b>
O12	Under 10 years	1	Male		1	18
O12	55 years and over	0	Male		1	<b>26</b>
O13	Under 10 years	1	Male		1	18
O13	55 years and over	0	Male		1	<b>26</b>
O14	Under 10 years	1	Male		1	18
O14	55 years and over	0	Male		1	<b>26</b>
O15	Under 10 years	1	Male		1	18
O15	55 years and over	0	Male		1	<b>26</b>
O16	Under 10 years	1	Male		1	18
O16	55 years and over	0	Male		1	<b>26</b>
O20	Under 10 years	1	Male		1	18
O20	55 years and over	0	Male		1	<b>26</b>
O21	Under 10 years	1	Male		1	18
O21	55 years and over	0	Male		1	<b>26</b>
O22	Under 10 years	1	Male		1	18
O22	55 years and over	0	Male		1	<b>26</b>
O23	Under 10 years	1	Male		1	18
O23	55 years and over	0	Male		1	<b>26</b>
O24	Under 10 years	1	Male		1	18
O24	55 years and over	0	Male		1	<b>26</b>
O25	Under 10 years	1	Male		1	18
O25	55 years and over	0	Male		1	<b>26</b>
O26	Under 10 years	1	Male		1	18
O26	55 years and over	0	Male		1	<b>26</b>
O27	Under 10 years	1	Male		1	18
O27	55 years and over	0	Male		1	<b>26</b>
O28	Under 10 years	1	Male		1	18
O28	55 years and over	0	Male		1	<b>26</b>
O29	Under 10 years	1	Male		1	18
O29	55 years and over	0	Male		1	<b>26</b>
O30	Under 10 years	1	Male		1	18
O30	55 years and over	0	Male		1	<b>26</b>
O31	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 <b>exclusion</b>	0 - Conditional		1 - Absolute		Sex	Edit code <sup>1</sup>
		Age	Sex <b>exclusion</b>	Age	Sex <b>exclusion</b>		
O31	55 years and over	0	Male	1		1	<b>26</b>
O32	Under 10 years	1	Male	1		1	18
O32	55 years and over	0	Male	1		1	<b>26</b>
O33	Under 10 years	1	Male	1		1	18
O33	55 years and over	0	Male	1		1	<b>26</b>
O34	Under 10 years	1	Male	1		1	18
O34	55 years and over	0	Male	1		1	<b>26</b>
O35	Under 10 years	1	Male	1		1	18
O35	55 years and over	0	Male	1		1	<b>26</b>
O36	Under 10 years	1	Male	1		1	18
O36	55 years and over	0	Male	1		1	<b>26</b>
O40	Under 10 years	1	Male	1		1	18
O40	55 years and over	0	Male	1		1	<b>26</b>
O41	Under 10 years	1	Male	1		1	18
O41	55 years and over	0	Male	1		1	<b>26</b>
O42	Under 10 years	1	Male	1		1	18
O42	55 years and over	0	Male	1		1	<b>26</b>
O43	Under 10 years	1	Male	1		1	18
O43	55 years and over	0	Male	1		1	<b>26</b>
O44	Under 10 years	1	Male	1		1	18
O44	55 years and over	0	Male	1		1	<b>26</b>
O45	Under 10 years	1	Male	1		1	18
O45	55 years and over	0	Male	1		1	<b>26</b>
O46	Under 10 years	1	Male	1		1	18
O46	55 years and over	0	Male	1		1	<b>26</b>
O47	Under 10 years	1	Male	1		1	18
O47	55 years and over	0	Male	1		1	<b>26</b>
O48	Under 10 years	1	Male	1		1	18
O48	55 years and over	0	Male	1		1	<b>26</b>
O60	Under 10 years	1	Male	1		1	18
O60	55 years and over	0	Male	1		1	<b>26</b>
O61	Under 10 years	1	Male	1		1	18
O61	55 years and over	0	Male	1		1	<b>26</b>
O62	Under 10 years	1	Male	1		1	18
O62	55 years and over	0	Male	1		1	<b>26</b>
O63	Under 10 years	1	Male	1		1	18
O63	55 years and over	0	Male	1		1	<b>26</b>
O64	Under 10 years	1	Male	1		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 <b>exclusion</b>	0 - Conditional		1 - Absolute		Sex	Edit code <sup>1</sup>
		Age	Sex <b>exclusion</b>	Age	Sex <b>exclusion</b>		
O64	55 years and over	0	Male	1		1	<b>26</b>
O65	Under 10 years	1	Male	1		1	18
O65	55 years and over	0	Male	1		1	<b>26</b>
O66	Under 10 years	1	Male	1		1	18
O66	55 years and over	0	Male	1		1	<b>26</b>
O67	Under 10 years	1	Male	1		1	18
O67	55 years and over	0	Male	1		1	<b>26</b>
O68	Under 10 years	1	Male	1		1	18
O68	55 years and over	0	Male	1		1	<b>26</b>
O69	Under 10 years	1	Male	1		1	18
O69	55 years and over	0	Male	1		1	<b>26</b>
O70	Under 10 years	1	Male	1		1	18
O70	55 years and over	0	Male	1		1	<b>26</b>
O71	Under 10 years	1	Male	1		1	18
O71	55 years and over	0	Male	1		1	<b>26</b>
O72	Under 10 years	1	Male	1		1	18
O72	55 years and over	0	Male	1		1	<b>26</b>
O73	Under 10 years	1	Male	1		1	18
O73	55 years and over	0	Male	1		1	<b>26</b>
O74	Under 10 years	1	Male	1		1	18
O74	55 years and over	0	Male	1		1	<b>26</b>
O75	Under 10 years	1	Male	1		1	18
O75	55 years and over	0	Male	1		1	<b>26</b>
O85	Under 10 years	1	Male	1		1	18
O85	55 years and over	0	Male	1		1	<b>26</b>
O86	Under 10 years	1	Male	1		1	18
O86	55 years and over	0	Male	1		1	<b>26</b>
O87	Under 10 years	1	Male	1		1	18
O87	55 years and over	0	Male	1		1	<b>26</b>
O88	Under 10 years	1	Male	1		1	18
O88	55 years and over	0	Male	1		1	<b>26</b>
O89	Under 10 years	1	Male	1		1	18
O89	55 years and over	0	Male	1		1	<b>26</b>
O90	Under 10 years	1	Male	1		1	18
O90	55 years and over	0	Male	1		1	<b>26</b>
O91	Under 10 years	1	Male	1		1	18
O91	55 years and over	0	Male	1		1	<b>26</b>
O92	Under 10 years	1	Male	1		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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion	Age	Sex exclusion		
O92	55 years and over	0	Male	1		1	<b>26</b>
O95	Under 10 years	1	Male	1		1	18
O95	55 years and over	0	Male	1		1	<b>26</b>
O96	Under 10 years	1	Male	1		1	18
O96	55 years and over	0	Male	1		1	<b>26</b>
O97	Under 10 years	1	Male	1		1	18
O97	55 years and over	0	Male	1		1	<b>26</b>
O98	Under 10 years	1	Male	1		1	18
O98	55 years and over	0	Male	1		1	<b>26</b>
O99	Under 10 years	1	Male	1		1	18
O99	55 years and over	0	Male	1		1	<b>26</b>
P00	1 year and over	0	No	2		2	2
P01	1 year and over	0	No	2		2	2
P02	1 year and over	0	No	2		2	2
P03	1 year and over	0	No	2		2	2
P04	1 year and over	0	No	2		2	2
P05	1 year and over	0	No	2		2	2
P07	1 year and over	0	No	2		2	2
P08	1 year and over	0	No	2		2	2
P10	1 year and over	0	No	2		2	2
P11	1 year and over	0	No	2		2	2
P12	1 year and over	0	No	2		2	2
P13	1 year and over	0	No	2		2	2
P14	1 year and over	0	No	2		2	2
P15	1 year and over	0	No	2		2	2
P20	1 year and over	0	No	2		2	2
P21	1 year and over	0	No	2		2	2
P22	1 year and over	0	No	2		2	2
P23	1 year and over	0	No	2		2	2
P24	1 year and over	0	No	2		2	2
P25	1 year and over	0	No	2		2	2
P26	1 year and over	0	No	2		2	2
P27	1 year and over	0	No	2		2	2
P28	1 year and over	0	No	2		2	2
P29	1 year and over	0	No	2		2	2
P35	1 year and over	0	No	2		2	2
P36	1 year and over	0	No	2		2	2
P37	1 year and over	0	No	2		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		1 - Absolute		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion	Age	Sex exclusion		
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	2
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
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

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		Edit code <sup>1</sup>
		Age	Sex exclusion	Age	Sex	
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	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
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		3
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

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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion		
V20.0	Under 1 year	0	No	2	4
V21.0	Under 1 year	0	No	2	4
V22.0	Under 1 year	0	No	2	4
V23.0	Under 1 year	0	No	2	4
V24.0	Under 1 year	0	No	2	4
V25.0	Under 1 year	0	No	2	4
V26.0	Under 1 year	0	No	2	4
V27.0	Under 1 year	0	No	2	4
V28.0	Under 1 year	0	No	2	4
V29.0	Under 1 year	0	No	2	4
V30.0	Under 1 year	0	No	2	4
V31.0	Under 1 year	0	No	2	4
V32.0	Under 1 year	0	No	2	4
V33.0	Under 1 year	0	No	2	4
V34.0	Under 1 year	0	No	2	4
V35.0	Under 1 year	0	No	2	4
V36.0	Under 1 year	0	No	2	4
V37.0	Under 1 year	0	No	2	4
V38.0	Under 1 year	0	No	2	4
V39.0	Under 1 year	0	No	2	4
V40.0	Under 1 year	0	No	2	4
V41.0	Under 1 year	0	No	2	4
V42.0	Under 1 year	0	No	2	4
V43.0	Under 1 year	0	No	2	4
V44.0	Under 1 year	0	No	2	4
V45.0	Under 1 year	0	No	2	4
V46.0	Under 1 year	0	No	2	4
V47.0	Under 1 year	0	No	2	4
V48.0	Under 1 year	0	No	2	4
V49.0	Under 1 year	0	No	2	4
V50.0	Under 1 year	0	No	2	4
V51.0	Under 1 year	0	No	2	4
V52.0	Under 1 year	0	No	2	4
V53.0	Under 1 year	0	No	2	4
V54.0	Under 1 year	0	No	2	4
V55.0	Under 1 year	0	No	2	4
V56.0	Under 1 year	0	No	2	4
V57.0	Under 1 year	0	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		Sex	Edit code <sup>1</sup>
		Age	Sex exclusion		
V58.0	Under 1 year	0	No	2	4
V59.0	Under 1 year	0	No	2	4
V60.0	Under 1 year	0	No	2	4
V61.0	Under 1 year	0	No	2	4
V62.0	Under 1 year	0	No	2	4
V63.0	Under 1 year	0	No	2	4
V64.0	Under 1 year	0	No	2	4
V65.0	Under 1 year	0	No	2	4
V66.0	Under 1 year	0	No	2	4
V67.0	Under 1 year	0	No	2	4
V68.0	Under 1 year	0	No	2	4
V69.0	Under 1 year	0	No	2	4
V70.0	Under 1 year	0	No	2	4
V71.0	Under 1 year	0	No	2	4
V72.0	Under 1 year	0	No	2	4
V73.0	Under 1 year	0	No	2	4
V74.0	Under 1 year	0	No	2	4
V75.0	Under 1 year	0	No	2	4
V76.0	Under 1 year	0	No	2	4
V77.0	Under 1 year	0	No	2	4
V78.0	Under 1 year	0	No	2	4
V79.0	Under 1 year	0	No	2	4
V83.0	Under 1 year	0	No	2	4
V84.0	Under 1 year	0	No	2	4
V85.0	Under 1 year	0	No	2	4
X60	Under 5 years	0	No	2	6
X61	Under 5 years	0	No	2	6
X62	Under 5 years	0	No	2	6
X63	Under 5 years	0	No	2	6
X64	Under 5 years	0	No	2	6
X65	Under 5 years	0	No	2	6
X66	Under 5 years	0	No	2	6
X67	Under 5 years	0	No	2	6
X68	Under 5 years	0	No	2	6
X69	Under 5 years	0	No	2	6
X70	Under 5 years	0	No	2	6
X71	Under 5 years	0	No	2	6
X72	Under 5 years	0	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		Sex	Edit code <sup>1</sup>
		Age	Sex	exclusion	Sex		
X73	Under 5 years	0	No			2	6
X74	Under 5 years	0	No			2	6
X75	Under 5 years	0	No			2	6
X76	Under 5 years	0	No			2	6
X77	Under 5 years	0	No			2	6
X78	Under 5 years	0	No			2	6
X79	Under 5 years	0	No			2	6
X80	Under 5 years	0	No			2	6
X81	Under 5 years	0	No			2	6
X82	Under 5 years	0	No			2	6
X83	Under 5 years	0	No			2	6
X84	Under 5 years	0	No			2	6
<b>Y06.0</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>			<b>2</b>	<b>20</b>
Y06.1	18 years and over	0	No			2	17
<b>Y07.0</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>			<b>2</b>	<b>20</b>
Y07.1	18 years and over	0	No			2	17
<b>Y36</b>	<b>Under 10 years</b>	<b>0</b>	<b>No</b>			<b>2</b>	<b>20</b>
Y42.4	Under 10 years or 55 years and over	1	Male			1	14
Y42.5	No	2	Male			1	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

<sup>1</sup> 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	<b>26</b>	<b>Female under 55 years</b>
14	Female, 10-54 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

ICD-10 code	Age/sex limitation	0 - Conditional 1 - Absolute 2 - Not Applicable		
		Age	Sex	Edit code <sup>1</sup>
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

<sup>1</sup> 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**

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

Note: For queries of infrequent or rare causes of death, exclude any records with mention of Human immunodeficiency infection in combination with any of the conditions listed in table J.

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

<u>ICD-10 code</u>	<u>Cause</u>
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)
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
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)
B50-B54	Malaria
B55	Leishmaniasis
B56	African trypanosomiasis
B57	Chagas' disease (including American trypanosomiasis)
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)
<b>J09</b>	<b>Influenza due to identified avian influenza virus</b>
P35.0	Congenital rubella syndrome
<b>U04.9</b>	<b>Severe acute respiratory syndrome [SARS], unspecified</b>
W88-W91	Exposure to radiation
Y36.5	War operation involving nuclear weapons
	Causing adverse effects in therapeutic use:
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.

NOTE 3: The place-of-occurrence codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item "30e. Place of injury".

## 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 underlying 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 L. ICD-10 Codes Valid for Causes of Fetal Death

A000	A165	A267	A448	A752	A921	B080	B340	B461	B651
A001	A167	A268	A449	A753	A922	B150	B341	B462	B652
A009	A168	A269	A46	A759	A923	B159	B342	B463	B653
A010	A169	A270	A480	A770	A924	B160	B343	B464	B658
A011	A170	A278	A482	A771	A928	B161	B344	B465	B659
A012	A171	A279	A483	A772	A929	B162	B348	B468	B660
A013	A178	A280	A484	A773	A930	B169	B349	B469	B661
A014	A179	A281	A488	A778	A931	B170	B380	B470	B662
A020	A180	A282	A490	A779	A932	B171	B381	B471	B663
A021	A181	A288	A491	A78	A938	B178	B382	B479	B664
A022	A182	A289	A492	A790	A94	B180	B383	B480	B665
A028	A183	A300	A493	A791	A950	B181	B384	B481	B668
A029	A184	A301	A498	A798	A951	B182	B387	B482	B669
A030	A185	A303	A499	A799	A959	B188	B388	B483	B670
A031	A186	A305	A500	A800	A960	B189	B389	B484	B671
A032	A187	A308	A502	A802	A961	B190	B390	B487	B672
A033	A188	A309	A503	A803	A962	B199	B391	B488	B673
A038	A190	A310	A504	A804	A968	B200	B392	B49	B674
A039	A191	A311	A505	A809	A969	B201	B393	B500	B675
A040	A192	A318	A509	A810	A980	B202	B394	B508	B676
A041	A198	A319	A540	A811	A981	B203	B395	B509	B677
A042	A199	A320	A541	A812	A982	B204	B399	B510	B678
A043	A200	A321	A542	A818	A983	B205	B400	B518	B679
A044	A201	A327	A543	A819	A984	B206	B401	B519	B680
A045	A202	A328	A544	A820	A985	B208	B402	B520	B681
A046	A203	A329	A545	A821	A988	B209	B403	B528	B689
A047	A207	A360	A546	A829	A99	B210	B407	B529	B690
A048	A208	A361	A548	A830	B000	B211	B408	B530	B691
A049	A209	A362	A549	A831	B001	B212	B409	B531	B698
A050	A210	A363	A600	A832	B002	B220	B410	B538	B699
A051	A211	A368	A601	A833	B003	B221	B417	B54	B700
A052	A212	A369	A609	A834	B004	B222	B418	B550	B701
A053	A213	A370	A65	A835	B005	B230	B419	B551	B710
A058	A217	A371	A660	A836	B007	B231	B420	B552	B711
A059	A218	A378	A661	A838	B008	B232	B421	B559	B718
A060	A219	A379	A662	A839	B009	B238	B427	B560	B719
A061	A220	A38	A663	A840	B010	B24	B428	B561	B72
A062	A221	A390	A664	A841	B011	B250	B429	B569	B73
A063	A222	A391	A665	A848	B012	B251	B430	B570	B740
A064	A227	A392	A666	A849	B018	B252	B431	B571	B741
A065	A228	A393	A667	A850	B019	B258	B432	B572	B743
A066	A229	A394	A669	A851	B020	B259	B438	B573	B744
A067	A230	A395	A670	A852	B021	B260	B439	B574	B748
A068	A231	A398	A671	A858	B022	B261	B440	B575	B749
A069	A232	A399	A673	A86	B023	B262	B441	B580	B75
A072	A233	A420	A679	A870	B027	B263	B442	B581	B760
A073	A238	A421	A680	A871	B028	B268	B447	B582	B761
A078	A239	A422	A681	A872	B029	B269	B448	B583	B768
A079	A240	A427	A689	A878	B03	B270	B449	B588	B769
A082	A241	A428	A690	A879	B04	B271	B450	B589	B770
A083	A242	A429	A691	A880	B050	B278	B451	B59	B778
A084	A243	A430	A692	A881	B051	B279	B452	B600	B779
A085	A244	A431	A698	A888	B052	B330	B453	B601	B780
A09	A250	A438	A699	A89	B053	B331	B457	B602	B781
A162	A251	A439	A70	A90	B054	B332	B458	B608	B787
A163	A259	A440	A750	A91	B058	B333	B459	B64	B789
A164	A260	A441	A751	A920	B059	B338	B460	B650	B79

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

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
C049	C168	C323	C460	C571	C716	C843	D002	D102	D180
C050	C169	C328	C461	C572	C717	C844	D010	D103	D181
C051	C170	C329	C462	C573	C718	C845	D011	D104	D190



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

D191	D304	D401	D511	D641	D808	E209	E725	E850	G803
D197	D307	D407	D512	D642	D809	E210	E728	E851	G804
D199	D309	D409	D513	D643	D810	E213	E729	E852	G808
D200	D310	D410	D518	D644	D811	E214	E740	E853	G809
D201	D311	D411	D519	D648	D812	E215	E741	E854	G900
D210	D312	D412	D520	D649	D813	E221	E742	E858	G901
D211	D313	D413	D521	D66	D814	E228	E743	E859	G902
D212	D314	D414	D528	D67	D815	E229	E744	E880	G903
D213	D315	D417	D529	D680	D816	E230	E748	E881	G908
D214	D316	D419	D530	D681	D817	E233	E749	E882	G909
D215	D319	D420	D531	D682	D818	E236	E750	E888	G910
D216	D320	D421	D532	D683	D819	E237	E751	E889	G911
D219	D321	D429	D538	D684	D820	E240	E752	G000	G912
D220	D329	D430	D539	D688	D821	E241	E753	G001	G913
D221	D330	D431	D550	D689	D822	E243	E754	G002	G918
D222	D331	D432	D551	D690	D823	E248	E755	G003	G919
D223	D332	D433	D552	D691	D824	E249	E756	G008	G935
D224	D333	D434	D553	D692	D828	E250	E760	G009	G950
D225	D334	D437	D558	D693	D829	E258	E761	G030	G951
D226	D337	D439	D559	D694	D830	E259	E762	G038	G952
D227	D339	D440	D560	D695	D831	E260	E763	G039	G958
D229	D34	D441	D561	D696	D832	E268	E768	G040	G959
D230	D350	D442	D562	D698	D838	E269	E769	G041	I210
D231	D351	D443	D563	D699	D839	E270	E770	G042	I211
D232	D352	D444	D564	D70	D840	E271	E771	G048	I212
D233	D353	D445	D568	D71	D841	E272	E778	G120	I213
D234	D354	D446	D569	D720	D848	E274	E779	G121	I214
D235	D355	D447	D570	D721	D849	E275	E780	G122	I219
D236	D356	D448	D571	D728	D860	E278	E781	G128	I220
D237	D357	D449	D572	D729	D861	E279	E782	G129	I221
D239	D358	D45	D573	D730	D862	E310	E783	G318	I228
D24	D359	D460	D578	D731	D863	E311	E784	G319	I229
D250	D360	D461	D580	D732	D868	E318	E785	G361	I241
D251	D361	D462	D581	D733	D869	E319	E786	G368	I248
D252	D367	D463	D582	D734	D890	E320	E788	G369	I249
D259	D369	D464	D588	D735	D891	E321	E789	G370	I251
D260	D370	D467	D589	D738	D892	E328	E791	G371	I255
D261	D371	D469	D590	D739	D898	E329	E798	G372	I300
D267	D372	D470	D591	D740	D899	E341	E799	G373	I301
D269	D373	D471	D592	D748	E000	E345	E800	G374	I308
D27	D374	D472	D593	D749	E001	E348	E801	G375	I309
D280	D375	D473	D594	D750	E002	E349	E802	G378	I319
D281	D376	D477	D595	D752	E009	E700	E803	G379	I330
D282	D377	D479	D596	D758	E030	E701	E804	G403	I339
D287	D379	D480	D598	D759	E031	E702	E805	G404	I400
D289	D380	D481	D599	D760	E071	E703	E806	G600	I409
D290	D381	D482	D600	D761	E079	E708	E807	G601	I424
D291	D382	D483	D601	D762	E15	E709	E830	G608	I460
D292	D383	D484	D608	D763	E160	E710	E831	G609	I461
D293	D384	D485	D609	D800	E161	E711	E832	G710	I469
D294	D385	D486	D610	D801	E163	E712	E833	G711	I600
D297	D386	D487	D611	D802	E164	E713	E838	G712	I601
D299	D390	D489	D612	D803	E168	E720	E839	G719	I602
D300	D391	D501	D613	D804	E169	E721	E840	G723	I603
D301	D397	D508	D618	D805	E200	E722	E841	G800	I604
D302	D399	D509	D619	D806	E201	E723	E848	G801	I605
D303	D400	D510	D640	D807	E208	E724	E849	G802	I606

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

I607	M009	P022	P129	P280	P540	P760	Q052	Q164	Q245
I608	M329	P023	P130	P281	P541	P768	Q053	Q165	Q246
I609	M359	P024	P131	P285	P542	P769	Q054	Q169	Q248
I630	M600	P025	P132	P288	P543	P77	Q055	Q170	Q249
I631	M898	P026	P133	P289	P544	P780	Q056	Q171	Q250
I632	N040	P027	P134	P290	P545	P781	Q057	Q172	Q251
I633	N041	P028	P138	P291	P546	P782	Q058	Q173	Q252
I634	N042	P029	P139	P292	P548	P783	Q059	Q174	Q253
I635	N043	P030	P140	P294	P549	P788	Q060	Q175	Q254
I636	N044	P031	P141	P298	P550	P789	Q061	Q178	Q255
I638	N045	P032	P142	P299	P551	P830	Q062	Q179	Q256
I639	N046	P033	P143	P350	P558	P831	Q063	Q180	Q257
I780	N047	P034	P148	P351	P559	P832	Q064	Q181	Q258
I789	N048	P035	P149	P352	P560	P833	Q068	Q182	Q259
J100	N049	P036	P150	P353	P569	P910	Q069	Q183	Q260
J101	N050	P038	P151	P358	P570	P911	Q070	Q184	Q261
J108	N051	P039	P152	P359	P578	P912	Q078	Q185	Q262
J110	N052	P040	P153	P360	P579	P914	Q079	Q186	Q263
J111	N053	P041	P154	P361	P580	P915	Q100	Q187	Q264
J118	N054	P042	P155	P362	P581	P918	Q101	Q188	Q265
K400	N055	P043	P156	P363	P582	P919	Q102	Q189	Q266
K401	N056	P044	P158	P364	P583	P940	Q103	Q200	Q268
K402	N057	P045	P159	P365	P584	P941	Q104	Q201	Q269
K403	N058	P046	P200	P368	P585	P942	Q105	Q202	Q270
K404	N059	P048	P201	P369	P588	P948	Q106	Q203	Q271
K409	N070	P049	P209	P370	P589	P949	Q107	Q204	Q272
K410	N071	P050	P219	P371	P591	P95	Q110	Q205	Q273
K411	N072	P051	P228	P372	P60	P960	Q111	Q206	Q274
K412	N073	P052	P229	P373	P612	P961	Q112	Q208	Q278
K413	N074	P059	P230	P374	P613	P962	Q113	Q210	Q279
K414	N075	P070	P231	P375	P614	P963	Q120	Q211	Q280
K419	N076	P071	P232	P378	P619	P965	Q121	Q212	Q281
K420	N077	P072	P233	P379	P700	P968	Q122	Q213	Q282
K421	N078	P073	P234	P38	P701	P969	Q123	Q214	Q283
K429	N079	P080	P235	P392	P702	Q000	Q124	Q218	Q288
K430	P000	P081	P236	P393	P703	Q001	Q128	Q219	Q289
K431	P001	P082	P238	P394	P704	Q002	Q129	Q220	Q300
K439	P002	P100	P239	P398	P708	Q010	Q130	Q221	Q301
K450	P003	P101	P240	P399	P709	Q011	Q131	Q222	Q302
K451	P004	P102	P241	P500	P711	Q012	Q132	Q223	Q303
K458	P005	P103	P242	P501	P712	Q018	Q133	Q224	Q308
K460	P006	P104	P243	P502	P713	Q019	Q134	Q225	Q309
K461	P007	P108	P248	P503	P714	Q02	Q135	Q226	Q310
K469	P008	P109	P249	P504	P718	Q030	Q138	Q228	Q311
K550	P009	P110	P250	P505	P719	Q031	Q139	Q229	Q312
K740	P010	P111	P251	P508	P720	Q038	Q140	Q230	Q313
K741	P011	P112	P252	P509	P721	Q039	Q141	Q231	Q315
K742	P012	P113	P253	P519	P722	Q040	Q142	Q232	Q318
K743	P013	P114	P258	P520	P728	Q041	Q143	Q233	Q319
K745	P014	P115	P260	P521	P729	Q042	Q148	Q234	Q320
K768	P015	P119	P261	P522	P741	Q043	Q150	Q238	Q321
K828	P016	P120	P268	P523	P742	Q045	Q158	Q239	Q322
K838	P017	P121	P269	P524	P743	Q046	Q159	Q240	Q323
M000	P018	P122	P270	P525	P744	Q048	Q160	Q241	Q324
M001	P019	P123	P271	P526	P745	Q049	Q161	Q242	Q330
M002	P020	P124	P278	P528	P748	Q050	Q162	Q243	Q331
M008	P021	P128	P279	P529	P749	Q051	Q163	Q244	Q332

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

Q333	Q422	Q532	Q644	Q724	Q796	Q894	Q982	*U014	V825
Q334	Q423	Q539	Q645	Q725	Q798	Q897	Q984	*U015	V826
Q335	Q428	Q540	Q646	Q726	Q799	Q898	Q985	*U016	V827
Q336	Q429	Q541	Q647	Q727	Q800	Q899	Q987	*U017	V828
Q338	Q430	Q542	Q648	Q728	Q801	Q900	Q988	*U018	V829
Q339	Q431	Q543	Q649	Q729	Q802	Q901	Q989	*U019	V839
Q340	Q432	Q544	Q652	Q730	Q803	Q902	Q990	V060	V849
Q341	Q433	Q548	Q658	Q731	Q804	Q909	Q991	V061	V859
Q348	Q434	Q549	Q659	Q738	Q808	Q910	Q992	V069	V869
Q349	Q435	Q550	Q660	Q740	Q809	Q911	Q998	V090	V870
Q351	Q436	Q551	Q661	Q741	Q810	Q912	Q999	V091	V871
Q353	Q437	Q552	Q662	Q742	Q811	Q913	R75	V092	V872
Q355	Q438	Q553	Q663	Q743	Q812	Q914	R780	V093	V873
Q357	Q439	Q554	Q664	Q748	Q818	Q915	R781	V099	V874
Q359	Q440	Q555	Q665	Q749	Q819	Q916	R782	V190	V875
Q360	Q441	Q556	Q666	Q750	Q820	Q917	R783	V191	V876
Q361	Q442	Q558	Q667	Q751	Q821	Q920	R784	V192	V877
Q369	Q443	Q559	Q668	Q752	Q822	Q921	R785	V193	V878
Q370	Q444	Q560	Q669	Q753	Q823	Q922	R786	V194	V879
Q371	Q445	Q561	Q670	Q754	Q824	Q923	R787	V195	V880
Q372	Q446	Q562	Q671	Q755	Q825	Q924	R788	V196	V881
Q373	Q447	Q563	Q672	Q758	Q828	Q925	R789	V198	V882
Q374	Q450	Q564	Q673	Q759	Q829	Q926	R830	V199	V883
Q375	Q451	Q600	Q674	Q760	Q830	Q927	R831	V201	V884
Q378	Q452	Q601	Q675	Q761	Q831	Q928	R832	V205	V885
Q379	Q453	Q602	Q676	Q762	Q832	Q929	R833	V215	V886
Q380	Q458	Q603	Q677	Q763	Q833	Q930	R834	V225	V887
Q381	Q459	Q604	Q678	Q764	Q838	Q931	R835	V255	V888
Q382	Q500	Q605	Q680	Q765	Q839	Q932	R836	V271	V889
Q383	Q501	Q606	Q681	Q766	Q840	Q933	R837	V299	V890
Q384	Q502	Q610	Q682	Q767	Q841	Q934	R838	V304	V891
Q385	Q503	Q611	Q683	Q769	Q842	Q935	R839	V399	V892
Q386	Q504	Q612	Q684	Q770	Q843	Q936	R840	V456	V899
Q387	Q505	Q613	Q685	Q771	Q844	Q937	R841	V471	V900
Q388	Q506	Q614	Q688	Q772	Q845	Q938	R842	V499	V901
Q390	Q510	Q615	Q690	Q773	Q846	Q939	R843	V599	V902
Q391	Q511	Q618	Q691	Q774	Q848	Q951	R844	V699	V903
Q392	Q512	Q619	Q692	Q775	Q849	Q952	R845	V799	V904
Q393	Q513	Q620	Q699	Q776	Q850	Q954	R846	V800	V905
Q394	Q514	Q621	Q700	Q777	Q851	Q955	R847	V803	V906
Q395	Q515	Q622	Q701	Q778	Q858	Q958	R848	V807	V907
Q396	Q516	Q623	Q702	Q779	Q859	Q959	R849	V809	V908
Q398	Q517	Q624	Q703	Q780	Q860	Q960	R850	V810	V909
Q399	Q518	Q625	Q704	Q781	Q861	Q961	R851	V811	V910
Q400	Q519	Q626	Q709	Q782	Q862	Q962	R852	V812	V911
Q401	Q520	Q627	Q710	Q783	Q868	Q963	R853	V813	V912
Q402	Q521	Q628	Q711	Q784	Q870	Q964	R854	V814	V913
Q403	Q522	Q630	Q712	Q785	Q871	Q968	R855	V815	V914
Q408	Q523	Q631	Q713	Q786	Q872	Q969	R856	V816	V915
Q409	Q524	Q632	Q714	Q788	Q873	Q970	R857	V817	V916
Q410	Q525	Q633	Q715	Q789	Q874	Q971	R858	V818	V917
Q411	Q526	Q638	Q718	Q790	Q875	Q972	R859	V819	V918
Q412	Q527	Q639	Q719	Q791	Q878	Q973	R99	V820	V919
Q418	Q528	Q640	Q720	Q792	Q890	Q978	*U010	V821	V920
Q419	Q529	Q641	Q721	Q793	Q891	Q979	*U011	V822	V921
Q420	Q530	Q642	Q722	Q794	Q892	Q980	*U012	V823	V922
Q421	Q531	Q643	Q723	Q795	Q893	Q981	*U013	V824	V923

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

V924	W31	X38	Y33
V925	W32	X39	Y34
V926	W33	X40	Y350
V927	W34	X41	Y351
V928	W35	X42	Y353
V929	W36	X43	Y354
V930	W37	X44	Y356
V931	W38	X45	Y357
V932	W39	X46	Y360
V933	W40	X47	Y361
V934	W41	X48	Y362
V935	W42	X49	Y364
V936	W43	X53	Y365
V937	W44	X54	Y366
V938	W45	X57	Y367
V939	W49	X58	Y368
V940	W50	<del>X59</del>	Y369
V941	W51	<b>X590</b>	
V942	W52	<b>X599</b>	
V943	W53	X85	
V944	W58	X88	
V945	W59	X89	
V946	W60	X90	
V947	W64	X99	
V948	W74	X93	
V949	W83	X94	
V950	W84	X95	
V951	W85	X96	
V952	W86	X97	
V953	W87	X98	
V954	W88	Y00	
V958	W89	Y01	
V959	W90	Y02	
V960	W91	Y03	
V961	W92	Y04	
V962	W93	Y05	
V968	W99	Y08	
V969	X09	Y09	
V970	X19	Y10	
V971	X20	Y11	
V972	X21	Y12	
V973	X22	Y13	
V978	X23	Y14	
V98	X24	Y15	
V99	X25	Y16	
W19	X26	Y17	
W20	X27	Y18	
W21	X28	Y19	
W22	X29	Y22	
W23	X30	Y23	
W24	X31	Y24	
W25	X32	Y25	
W26	X33	Y26	
W27	X34	Y27	
W28	X35	Y28	
W29	X36	Y29	
W30	X37	Y32	

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

ICD-10 code	Sex/plurality limitation	Sex	Plurality	0 - Conditional
				1 - Absolute
				2 - Not Applicable
				_____
				Edit code <sup>1</sup>
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 M. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Cause of Fetal Death

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code <sup>1</sup>	
				0 - Conditional	1 - Absolute
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 M. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Cause of Fetal Death

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code <sup>1</sup>	
				0 - Conditional	1 - Absolute
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 M. Sex/Cause and Plurality/Cause Consistency Edits for ICD-10 Codes Valid for Cause of Fetal Death

ICD-10 code	Sex/plurality limitation	Sex	Plurality	0 - Conditional
				1 - Absolute
				2 - Not Applicable
				_____
				Edit code <sup>1</sup>
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
Q96.3	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

<sup>1</sup> 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. It is anticipated that "bridged" population data will be used over the next few years for computing population-based rates.

Beginning with deaths occurring in 2003, a few States started to collect multiple race data on the death certificate. Once all States begin collecting data on race according to the new OMB standards, it is expected that the use of "bridged" populations will be discontinued. Until such time, however, death certificates that are received with multiple race data must also be "bridged" back to single race categories to ensure the compatibility between numerator and denominator data that is needed to produce race-specific death rates. For the purposes of the mortality data file, this single race data value is now called the Bridged Race field.

### *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"<sup>1</sup>. 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.

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<sup>1</sup> 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"