Instruction Manual

Part 11

Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths Effective 2004

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

Instruction Manual

Part 11

Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths Effective 2004

Vital Statistics
Data Preparation

Acknowledgments

Questions regarding this manual and related processing problems should be directed as follows:

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Questions concerning interpretation of mortality data should be referred to the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics, **3311 Toledo Road, Room 7318**, Hyattsville, Maryland 20782.

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FOR

MORTALITY DATA, EFFECTIVE **2004**

I. <u>INTRODUCTION</u>

A. <u>Purpose of This Manual</u>

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 **2004**. 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 biannual 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 **2003**) are shown in **bold** print and following are the major changes:

1. **The following code has been removed from the table of created codes and their complementary valid ICD-10 codes (table F) effective 2003: F0300.**

2. **The following codes have been added to the table of created codes and their complementary valid ICD-10 codes (table F) effective 2003: I4200, I4210, I4220, I4250, I4280, I4290, J8410, and J8490.**

3. **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):**

       - Removed edits:
        L26 (removed from table G)   **Effective 2004;**
       - Added edits:
        I48 (added to table G as age-absolute)   **Effective 2004;**
        I49 (added to table G as age-absolute)   **Effective 2004;**
        I50 (added to table G as age-absolute)   **Effective 2004;**
        J12 (added to table G as age-absolute)   **Effective 2004;**
        J13 (added to table G as age-absolute)   **Effective 2004;**
        J14 (added to table G as age-absolute)   **Effective 2004;**
        J15 (added to table G as age-absolute)   **Effective 2004;**
        J16 (added to table G as age-absolute)   **Effective 2004;**

       - Modified edits:
        R54 (absolute edit for age added to existing conditional edit)
                        Effective 2004;
        K56 (substituted by K56.6; changed from age-absolute to age-conditional)   **Effective 2004;**

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

       - Added edits:
        T83.3 (added to table H as sex-absolute)   **Effective 2004;**

5. **The following condition was deleted from the list of infrequent and rare cause-of death edits for underlying and multiple cause-of-death classification (table I):**
        E16.4 Abnormal secretion of gastrin (hypergastrinaemia) Effective 2004;

Codes and text that has been deleted from tables has 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[1], ACME[2], and TRANSAX[3] 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

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[1]Acronym for Mortality Medical Indexing, Classification, and Retrieval which is used to initially enter cause-of-death information.

[2]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.

[3]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.

situations, the record is rejected and listed for adjudication of the codes with the information in the source document and/or with the State health department.

The kind of action is dependent on the 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.   Infrequent and Rare Cause-of-Death Edits

Table I 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.

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

Table J 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 the12-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. <u>Demographic Items</u>

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. <u>Medical items</u>

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

1. <u>Codes Valid for Both Underlying and Multiple Causes of Death</u>

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. <u>Codes Valid for Multiple Cause Only</u>

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.   <u>Infrequent and Rare Cause-of-Death Edits</u>

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

3.   <u>Place-of-Occurrence Edits for Selected External Causes of Death</u>

Table J 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
	Demographic				
B-1, 2	All items, except Place of death and Residence of decedent	X		X	
B-1, 2	Place of death (State)		X		X
B-1, 2	Place of death (county)		X	Not used	
B-1, 2	Residence of decedent (State)		X	X	
B-1, 2	Residence of decedent (county/city)		X	Not used	
	Cause-of-death				
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	Infrequent and rare cause-of-death edits for underlying and multiple cause-of-death		X	Not used	
J	Place-of-occurrence edits for selected external causes of death	X		X	
K	Activity code edits for selected external causes of death	X		X	

NOTE: Table F does not show edits and, therefore, is not shown in this table.

Table B-1. Edits for Demographic Items

Variable	Edit Criterion	Fail Edit Corrected By
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 14.)

Table B-1. Edits for Demographic Items - Continued

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 <u>recoding</u> 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 - Continued

Variable	Edit Criterion	Fail Edit Corrected By
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. **1869-2004** are valid for **2004**. For subsequent data years, add 1 to the lower and upper limits of the range (e.g. for **2005**, the range is **1870-2005**).	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.

Table B-1. Edits for Demographic Items - Continued

Variable	Edit Criterion	Fail Edit Corrected By
Occupation of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	Age under 14 years.	Imputation: Code to 917 (child).
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.

Table B-1. Edits for Demographic Items - Continued

Variable	Edit Criterion	Fail Edit Corrected By
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".
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

Variable	Edit Criterion	Fail Edit Corrected By
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

Variable	Edit Criterion	Fail Edit Corrected By
State of Death	Code must be valid FIPS value (section III, Part 8 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.

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

Variable	Edit Criterion	Fail Edit Corrected By
Country of Birth	Code must be valid FIPS value (Section V, Part 8 manual).	Imputation: Convert invalid / blank code to "not classifiable" code ('ZZ').
State of Birth	Code must be valid FIPS value (Section III, Part 8 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').

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

Variable	Edit Criterion	Fail Edit Corrected By
County of Residence	Code must be valid FIPS value (Section IV, Part 8 manual). 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, County of Residence must be blank.	Imputation: Convert invalid / blank code to "not classifiable" code ('999').
State of Residence	Code must be valid FIPS value (Section III, Part 8 manual). 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, State of Residence must be blank.	For Final: Reject for correction For Preliminary: Impute to State of Death
Country of Residence	Code must be valid FIPS value (Section V, Part 8 manual) and not be blank. Code combination for Country, State, County, and City of residence must be valid.	Imputation: Convert invalid / blank code to "not classifiable" code ('ZZ').

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

Variable	Edit Criterion	Fail Edit Corrected By
Marital Status	Code must be valid ('M', 'A', 'W', 'D', 'S') and other than "Not Classifiable" ('U').	Imputation: Code record to the marital status of preceding record of same 5-year age group and sex. Initial marital status (as set by programmers) should be established by modal value for the given age group of most recent data year.
	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," 5= "Hospice facility," 6= "Nursing home/Long term care facility," 9= "Unknown"	Imputation: Convert place of death code to "Unknown" ('9').
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').

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

Variable	Edit Criterion	Fail Edit Corrected By
Time of Death	Code must be valid (0000-2400, 9999).	Imputation: Convert '2400' to '0000'. Convert invalid / blank Time of Death to '9999'.
Education of Decedent	Code must be valid (1-9).	Imputation: Code invalid / blank education to "Unknown" ('9').
	Combination of education and age of decedent must be acceptable. Minimum Age Education None 1 9 2 16 3 17 4 18 5 20 6 21 7 23 8 None 9	Imputation: If education differs for the given minimum age, then code education to "Unknown" (9).

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

Variable	Edit Criterion	Fail Edit Corrected By
Decedent of Hispanic (Mexican) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: Convert blank Mexican origin to "No, not Mexican" ('N').
Decedent of Hispanic (Puerto Rican) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: Convert blank Puerto Rican origin to "No, not Puerto Rican" ('N').
Decedent of Hispanic (Cuban) Origin	Code must be valid ('N', 'H', 'U') and not be blank.	Imputation: Convert blank Cuban origin to "No, not Cuban" ('N').
Decedent of Hispanic (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').
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).

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

Variable	Edit Criterion	Fail Edit Corrected By
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).
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).

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

Variable	Edit Criterion	Fail Edit Corrected By
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.

A000	A185	A360	A519	A772	A983	B211	B382	B530	B75	C023	C180	C408	C518	C717
A001	A186	A361	A520	A773	A984	B212	B383	B531	B760	C024	C181	C409	C519	C718
A009	A187	A362	A521	A778	A985	B213	B384	B538	B761	C028	C182	C410	C52	C719
A010	A188	A363	A522	A779	A988	B217	B387	B54	B768	C029	C183	C411	C530	C720
A011	A190	A368	A523	A78	A99	B218	B388	B550	B769	C030	C184	C412	C531	C721
A012	A191	A369	A527	A790	B000	B219	B389	B551	B770	C031	C185	C413	C538	C722
A013	A192	A370	A528	A791	B001	B220	B390	B552	B778	C039	C186	C414	C539	C723
A014	A198	A371	A529	A798	B002	B221	B391	B559	B779	C040	C187	C418	C540	C724
A020	A199	A378	A530	A799	B003	B222	B392	B560	B780	C041	C188	C419	C541	C725
A021	A200	A379	A539	A800	B004	B227	B393	B561	B781	C048	C189	C430	C542	C728
A022	A201	A38	A540	A801	B005	B230	B394	B569	B787	C049	C19	C431	C543	C729
A028	A202	A390	A541	A802	B007	B231	B395	B570	B789	C050	C20	C432	C548	C73
A029	A203	A391	A542	A803	B008	B232	B399	B571	B79	C051	C210	C433	C549	C740
A030	A207	A392	A543	A804	B009	B238	B400	B572	B80	C052	C211	C434	C55	C741
A031	A208	A393	A544	A809	B010	B24	B401	B573	B810	C058	C212	C435	C56	C749
A032	A209	A394	A545	A810	B011	B250	B402	B574	B811	C059	C218	C436	C570	C750
A033	A210	A395	A546	A811	B012	B251	B403	B575	B812	C060	C220	C437	C571	C751
A038	A211	A398	A548	A812	B018	B252	B407	B580	B813	C061	C221	C438	C572	C752
A039	A212	A399	A549	A818	B019	B258	B408	B581	B814	C062	C222	C439	C573	C753
A040	A213	A400	A55	A819	B020	B259	B409	B582	B818	C068	C223	C440	C574	C754
A041	A217	A401	A560	A820	B021	B260	B410	B583	B820	C069	C224	C441	C577	C755
A042	A218	A402	A561	A821	B022	B261	B417	B588	B829	C07	C227	C442	C578	C758
A043	A219	A403	A562	A829	B023	B262	B418	B589	B830	C080	C229	C443	C579	C759
A044	A220	A408	A563	A830	B027	B263	B419	B59	B831	C081	C23	C444	C58	C760
A045	A221	A409	A564	A831	B028	B268	B420	B600	B832	C088	C240	C445	C600	C761
A046	A222	A410	A568	A832	B029	B269	B421	B601	B833	C089	C241	C446	C601	C762
A047	A227	A411	A57	A833	B03	B270	B427	B602	B834	C090	C248	C447	C602	C763
A048	A228	A412	A58	A834	B04	B271	B428	B608	B838	C091	C249	C448	C608	C764
A049	A229	A413	A590	A835	B050	B278	B429	B64	B839	C098	C250	C449	C609	C765
A050	A230	A414	A598	A836	B051	B279	B430	B650	B850	C099	C251	C450	C61	C767
A051	A231	A415	A599	A838	B052	B300	B431	B651	B851	C100	C252	C451	C620	C768
A052	A232	A418	A600	A839	B053	B301	B432	B652	B852	C101	C253	C452	C621	C770
A053	A233	A419	A601	A840	B054	B302	B438	B653	B853	C102	C254	C457	C629	C771
A054	A238	A420	A609	A841	B058	B303	B439	B658	B854	C103	C257	C459	C630	C772
A058	A239	A421	A630	A848	B059	B308	B440	B659	B86	C104	C258	C460	C631	C773
A059	A240	A422	A638	A849	B060	B309	B441	B660	B870	C108	C259	C461	C632	C774
A060	A241	A427	A64	A850	B068	B330	B442	B661	B871	C109	C260	C462	C637	C775
A061	A242	A428	A65	A851	B069	B331	B448	B662	B872	C110	C261	C463	C638	C778
A062	A243	A429	A660	A852	B07	B332	B449	B663	B873	C111	C268	C467	C639	C779
A063	A244	A430	A661	A858	B080	B333	B450	B664	B874	C112	C269	C468	C64	C780
A064	A250	A431	A662	A86	B081	B338	B451	B665	B878	C113	C300	C469	C65	C781
A065	A251	A438	A663	A870	B082	B340	B452	B668	B879	C118	C301	C470	C66	C782
A066	A259	A439	A664	A871	B083	B341	B453	B669	B880	C119	C310	C471	C670	C783
A067	A260	A440	A665	A872	B084	B342	B457	B670	B881	C12	C311	C472	C671	C784
A068	A267	A441	A666	A878	B085	B343	B458	B671	B882	C130	C312	C473	C672	C785
A069	A268	A448	A667	A879	B088	B344	B459	B672	B883	C131	C313	C474	C673	C786
A070	A269	A449	A668	A880	B09	B348	B460	B673	B888	C132	C318	C475	C674	C787
A071	A270	A46	A669	A881	B150	B349	B461	B674	B889	C138	C319	C476	C675	C788
A072	A278	A480	A670	A888	B159	B350	B462	B675	B89	C139	C320	C478	C676	C790
A073	A279	A481	A671	A89	B160	B351	B463	B676	B900	C140	C321	C479	C677	C791
A078	A280	A482	A672	A90	B161	B352	B465	B677	B901	C142	C322	C480	C678	C792
A079	A281	A483	A673	A91	B162	B353	B468	B679	B902	C148	C323	C481	C679	C793
A080	A282	A484	A679	A920	B169	B354	B469	B680	B908	C150	C328	C482	C680	C794
A081	A288	A488	A680	A921	B170	B355	B470	B681	B909	C151	C329	C488	C681	C795
A082	A289	A490	A681	A922	B171	B356	B471	B689	B91	C152	C33	C490	C688	C796
A083	A300	A491	A689	A923	B172	B358	B479	B690	B92	C153	C340	C491	C689	C797
A084	A301	A492	A690	A924	B178	B359	B480	B691	B940	C154	C341	C492	C690	C798
A085	A302	A493	A691	A928	B180	B360	B481	B698	B941	C155	C342	C493	C691	C80
A09	A303	A498	A692	A929	B181	B361	B482	B699	B942	C158	C343	C494	C692	C810
A162	A304	A499	A698	A930	B182	B362	B483	B700	B948	C159	C348	C495	C693	C811
A163	A305	A500	A699	A931	B188	B363	B484	B701	B949	C160	C349	C496	C694	C812
A164	A308	A501	A70	A932	B189	B368	B487	B710	B99	C161	C37	C498	C695	C813
A165	A309	A502	A710	A938	B190	B369	B488	B711	C000	C162	C380	C499	C696	C817
A167	A310	A503	A711	A94	B199	B370	B49	B718	C001	C163	C381	C500	C698	C819
A168	A311	A504	A719	A950	B200	B371	B500	B719	C002	C164	C382	C501	C699	C820
A169	A318	A505	A740	A951	B201	B372	B508	B72	C003	C165	C383	C502	C700	C821
A170	A319	A506	A748	A959	B202	B373	B509	B73	C004	C166	C384	C503	C701	C822
A171	A320	A507	A749	A960	B203	B374	B510	B740	C005	C168	C388	C504	C709	C827
A178	A321	A509	A750	A961	B204	B375	B518	B741	C006	C169	C390	C505	C710	C829
A179	A327	A510	A751	A962	B205	B376	B519	B742	C008	C170	C398	C506	C711	C830
A180	A328	A511	A752	A968	B206	B377	B520	B743	C009	C171	C399	C508	C712	C831
A181	A329	A512	A753	A969	B207	B378	B528	B744	C01	C172	C400	C509	C713	C832
A182	A33	A513	A759	A980	B208	B379	B529	B748	C020	C173	C401	C510	C714	C833
A183	A34	A514	A770	A981	B209	B380		B749	C021	C178	C402	C511	C715	C834
A184	A35	A515	A771	A982	B210	B381			C022	C179	C403	C512	C716	C835

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

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
C967	D123	D235	D380	D519	D695	D893	E132	E290	E640	E798	F103	F178	F338	F527
C969	D124	D236	D381	D520	D696	D898	E133	E291	E641	E799	F104	F179	F339	F528
C97	D125	D237	D382	D521	D698	D899	E134	E298	E642	E800	F105	F180	F340	F529
D000	D126	D239	D383	D528	D699	E001	E135	E299	E643	E801	F106	F181	F341	F530
D001	D127	D24	D384	D529	D70	E002	E136	E300	E648	E802	F107	F182	F348	F531
D002	D128	D250	D385	D530	D71	E009	E137	E301	E649	E803	F108	F183	F349	F538
D010	D129	D251	D386	D531	D720	E010	E138	E308	E65	E804	F109	F184	F380	F539
D011	D130	D252	D390	D532	D721	E011	E139	E309	E660	E805	F110	F185	F381	F54
D012	D131	D259	D391	D538	D728	E012	E140	E310	E661	E806	F111	F186	F388	F55
D013	D132	D260	D392	D539	D729	E018	E141	E311	E662	E807	F112	F187	F39	F59
D014	D133	D261	D397	D550	D730	E02	E142	E318	E668	E830	F113	F188	F400	F600
D015	D134	D267	D399	D551	D731	E030	E143	E319	E669	E831	F114	F189	F401	F601
D017	D135	D269	D400	D552	D732	E031	E144	E320	E670	E832	F115	F190	F402	F602
D019	D136	D27	D401	D553	D733	E032	E145	E321	E671	E833	F116	F191	F408	F603
D020	D137	D280	D407	D558	D734	E033	E146	E328	E672	E834	F117	F192	F409	F604

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

F605	F912	G231	G458	G702	H011	H210	H443	H610	H913	I253	I453	I678	I844	J157
F606	F913	G232	G459	G708	H018	H211	H444	H611	H918	I254	I454	I679	I845	J158
F607	F918	G238	G470	G709	H019	H212	H445	H612	H919	I255	I455	I690	I846	J159
F608	F919	G239	G471	G710	H020	H213	H446	H613	H920	I256	I456	I691	I847	J160
F609	F920	G240	G472	G711	H021	H214	H447	H618	H921	I258	I458	I692	I848	J168
F61	F928	G241	G473	G712	H022	H215	H448	H619	H922	I259	I459	I693	I849	J180
F620	F929	G242	G474	G713	H023	H218	H449	H650	H930	I260	I460	I694	I850	J181
F621	F930	G243	G478	G718	H024	H219	H46	H651	H931	I269	I461	I698	I859	J182
F628	F931	G244	G479	G719	H025	H250	H470	H652	H932	I270	I469	I700	I860	J188
F629	F932	G245	G500	G720	H026	H251	H471	H653	H933	I271	I470	I701	I861	J189
F630	F933	G248	G501	G721	H027	H252	H472	H654	H938	I272	I471	I702	I862	J200
F631	F938	G249	G508	G722	H028	H258	H473	H659	H939	I278	I472	I708	I863	J201
F632	F939	G250	G509	G723	H029	H259	H474	H660	I00	I279	I479	I709	I864	J202
F633	F940	G251	G510	G724	H040	H260	H475	H661	I010	I280	I48	I710	I868	J203
F638	F941	G252	G511	G728	H041	H261	H476	H662	I011	I281	I490	I711	I870	J204
F639	F942	G253	G512	G729	H042	H262	H477	H663	I012	I288	I491	I712	I871	J205
F640	F948	G254	G513	G800	H043	H263	H490	H664	I018	I289	I492	I713	I872	J206
F641	F949	G255	G514	G801	H044	H264	H491	H669	I019	I300	I493	I714	I878	J207
F642	F950	G256	G518	G802	H045	H268	H492	H680	I020	I301	I494	I715	I879	J208
F648	F951	G258	G519	G803	H046	H269	H493	H681	I029	I308	I495	I716	I880	J209
F649	F952	G259	G520	G804	H048	H270	H494	H690	I050	I309	I498	I718	I881	J210
F650	F958	G300	G521	G808	H049	H271	H498	H698	I051	I310	I499	I719	I888	J218
F651	F959	G301	G522	G809	H050	H278	H499	H699	I052	I311	I500	I720	I889	J219
F652	F980	G308	G523	G810	H051	H279	H500	H700	I058	I312	I501	I721	I890	J22
F653	F981	G309	G527	G811	H052	H300	H501	H701	I059	I313	I509	I722	I891	J300
F654	F982	G310	G528	G819	H053	H301	H502	H702	I060	I318	I510	I723	I898	J301
F655	F983	G311	G529	G820	H054	H302	H503	H708	I061	I319	I511	I724	I899	J302
F656	F984	G312	G540	G821	H055	H308	H504	H709	I062	I330	I512	I728	I950	J303
F658	F985	G318	G541	G822	H058	H309	H505	H71	I068	I339	I513	I729	I951	J304
F659	F986	G319	G542	G823	H059	H310	H506	H720	I069	I340	I514	I730	I952	J310
F660	F988	G35	G543	G824	H100	H311	H508	H721	I070	I341	I515	I731	I958	J311
F661	F989	G360	G544	G825	H101	H312	H509	H722	I071	I342	I516	I738	I959	J312
F662	F99	G361	G545	G830	H102	H313	H510	H728	I072	I348	I517	I739	I99	J320
F668	G000	G368	G546	G831	H103	H314	H511	H729	I078	I349	I518	I740	J00	J321
F669	G001	G369	G547	G832	H104	H318	H512	H730	I079	I350	I519	I741	J010	J322
F680	G002	G370	G548	G833	H105	H319	H518	H731	I080	I351	I600	I742	J011	J323
F681	G003	G371	G549	G834	H108	H330	H519	H738	I081	I352	I601	I743	J012	J324
F688	G008	G372	G560	G838	H109	H331	H520	H739	I082	I358	I602	I744	J013	J328
F69	G009	G373	G561	G839	H110	H332	H521	H740	I083	I359	I603	I745	J014	J329
F70	G030	G374	G562	G900	H111	H333	H522	H741	I088	I360	I604	I748	J018	J330
F71	G031	G375	G563	G901	H112	H334	H523	H742	I089	I361	I605	I749	J019	J331
F72	G032	G378	G564	G902	H113	H335	H524	H743	I090	I362	I606	I770	J020	J338
F73	G038	G379	G568	G903	H114	H340	H525	H744	I091	I368	I607	I771	J028	J339
F78	G039	G400	G569	G908	H118	H341	H526	H748	I092	I369	I608	I772	J029	J340
F79	G040	G401	G570	G909	H119	H342	H527	H749	I098	I370	I609	I773	J030	J341
F800	G041	G402	G571	G910	H150	H348	H530	H800	I099	I371	I610	I774	J038	J342
F801	G042	G403	G572	G911	H151	H349	H531	H801	I10	I372	I611	I775	J039	J343
F802	G048	G404	G573	G912	H158	H350	H532	H802	I110	I378	I612	I776	J040	J348
F803	G049	G405	G574	G913	H159	H351	H533	H808	I119	I379	I613	I778	J041	J350
F808	G060	G406	G575	G918	H160	H352	H534	H809	I120	I38	I614	I779	J042	J351
F809	G061	G407	G576	G919	H161	H353	H535	H810	I129	I400	I615	I780	J050	J352
F810	G062	G408	G578	G92	H162	H354	H536	H811	I130	I401	I616	I781	J051	J353
F811	G08	G409	G579	G930	H163	H355	H538	H812	I131	I408	I618	I788	J060	J358
F812	G09	G410	G580	G931	H164	H356	H539	H813	I132	I409	I619	I789	J068	J359
F813	G10	G411	G587	G932	H168	H357	H540	H814	I139	I420	I620	I800	J069	J36
F818	G110	G412	G588	G933	H169	H358	H541	H818	I200	I421	I621	I801	J100	J370
F819	G111	G418	G589	G934	H170	H359	H542	H819	I201	I422	I629	I802	J101	J371
F82	G112	G419	G600	G935	H171	H400	H543	H830	I208	I423	I630	I803	J108	J380
F83	G113	G430	G601	G936	H178	H401	H544	H831	I209	I424	I631	I808	J110	J381
F840	G114	G431	G602	G937	H179	H402	H545	H832	I210	I425	I632	I809	J111	J382
F841	G118	G432	G603	G938	H180	H403	H546	H833	I211	I426	I633	I81	J118	J383
F842	G119	G433	G608	G939	H181	H404	H547	H838	I212	I427	I634	I820	J120	J384
F843	G120	G438	G609	G950	H182	H405	H55	H839	I213	I428	I635	I821	J121	J385
F844	G121	G439	G610	G951	H183	H406	H570	H900	I214	I429	I636	I822	J122	J386
F845	G122	G440	G611	G952	H184	H408	H571	H901	I219	I440	I638	I823	J128	J387
F848	G128	G441	G618	G958	H185	H409	H578	H902	I220	I441	I639	I828	J129	J390
F849	G129	G442	G619	G959	H186	H430	H579	H903	I221	I442	I64	I829	J13	J391
F88	G20	G443	G620	G960	H187	H431	H600	H904	I228	I443	I670	I830	J14	J392
F89	G210	G444	G621	G961	H188	H432	H601	H905	I229	I444	I671	I831	J150	J393
F900	G211	G448	G622	G968	H189	H433	H602	H906	I241	I445	I672	I832	J151	J398
F901	G212	G450	G628	G969	H200	H438	H603	H907	I248	I446	I673	I839	J152	J399
F908	G213	G451	G629	G98	H201	H439	H604	H908	I249	I447	I674	I840	J153	J40
F909	G218	G452	G64	H000	H202	H440	H605	H910	I250	I450	I675	I841	J154	J410
F910	G219	G453	G700	H001	H208	H441	H608	H911	I251	I451	I676	I842	J155	J411
F911	G230	G454	G701	H010	H209	H442	H609	H912	I252	I452	I677	I843	J156	J418

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

J42	J929	K072	K260	K431	K626	K811	L118	L404	L602	L814	M028	M191	M330	M512
J430	J930	K073	K261	K439	K627	K818	L119	L405	L603	L815	M029	M192	M331	M513
J431	J931	K074	K262	K440	K628	K819	L120	L408	L604	L816	M050	M198	M332	M514
J432	J938	K075	K263	K441	K629	K820	L121	L409	L605	L817	M051	M199	M339	M518
J438	J939	K076	K264	K449	K630	K821	L122	L410	L608	L818	M052	M200	M340	M519
J439	J940	K078	K265	K450	K631	K822	L123	L411	L609	L819	M053	M201	M341	M530
J440	J941	K079	K266	K451	K632	K823	L128	L412	L630	L82	M058	M202	M342	M531
J441	J942	K080	K267	K458	K633	K824	L129	L413	L631	L83	M059	M203	M348	M532
J448	J948	K081	K269	K460	K634	K828	L130	L414	L632	L84	M060	M204	M349	M533
J449	J949	K082	K270	K461	K635	K829	L131	L415	L638	L850	M061	M205	M350	M538
J450	J960	K083	K271	K469	K638	K830	L138	L418	L639	L851	M062	M206	M351	M539
J451	J961	K088	K272	K500	K639	K831	L139	L419	L640	L852	M063	M210	M352	M540
J458	J969	K089	K273	K501	K650	K832	L200	L42	L648	L853	M064	M211	M353	M541
J459	J980	K090	K274	K508	K658	K833	L208	L430	L649	L858	M068	M212	M354	M542
J46	J981	K091	K275	K509	K659	K834	L209	L431	L650	L859	M069	M213	M355	M543
J47	J982	K092	K276	K510	K660	K835	L210	L432	L651	L870	M080	M214	M356	M544
J60	J983	K098	K277	K511	K661	K838	L211	L433	L652	L871	M081	M215	M357	M545
J61	J984	K099	K279	K512	K668	K839	L218	L438	L658	L872	M082	M216	M358	M546
J620	J985	K100	K280	K513	K669	K85	L219	L439	L659	L878	M083	M217	M359	M548
J628	J986	K101	K281	K514	K700	K860	L22	L440	L660	L879	M084	M218	M400	M549
J630	J988	K102	K282	K515	K701	K861	L230	L441	L661	L88	M088	M219	M401	M600
J631	J989	K103	K283	K518	K702	K862	L231	L442	L662	L89	M089	M220	M402	M601
J632	K000	K108	K284	K519	K703	K863	L232	L443	L663	L900	M100	M221	M403	M602
J633	K001	K109	K285	K520	K704	K868	L233	L444	L664	L901	M101	M222	M404	M608
J634	K002	K110	K286	K521	K709	K869	L234	L448	L668	L902	M102	M223	M405	M609
J635	K003	K111	K287	K522	K710	K900	L235	L449	L669	L903	M103	M224	M410	M610
J638	K004	K112	K289	K528	K711	K901	L236	L500	L670	L904	M104	M228	M411	M611
J64	K005	K113	K290	K529	K712	K902	L237	L501	L671	L905	M109	M229	M412	M612
J65	K006	K114	K291	K550	K713	K903	L238	L502	L678	L906	M110	M230	M413	M613
J660	K007	K115	K292	K551	K714	K904	L239	L503	L679	L908	M111	M231	M414	M614
J661	K008	K116	K293	K552	K715	K908	L240	L504	L680	L909	M112	M232	M415	M615
J662	K009	K117	K294	K558	K716	K909	L241	L505	L681	L910	M118	M233	M418	M619
J668	K010	K118	K295	K559	K717	K920	L242	L506	L682	L918	M119	M234	M419	M620
J670	K011	K119	K296	K560	K718	K921	L243	L508	L683	L919	M120	M235	M420	M621
J671	K020	K120	K297	K561	K719	K922	L244	L509	L688	L920	M121	M236	M421	M622
J672	K021	K121	K298	K562	K720	K928	L245	L510	L689	L921	M122	M238	M429	M623
J673	K022	K122	K299	K563	K721	K929	L246	L511	L700	L922	M123	M239	M430	M624
J674	K023	K130	K30	K564	K729	L00	L247	L512	L701	L923	M124	M240	M431	M625
J675	K024	K131	K310	K565	K730	L010	L248	L518	L702	L928	M125	M241	M432	M626
J676	K028	K132	K311	K566	K731	L011	L249	L519	L703	L929	M128	M242	M433	M628
J677	K029	K133	K312	K567	K732	L020	L250	L52	L704	L930	M130	M243	M434	M629
J678	K030	K134	K313	K570	K738	L021	L251	L530	L705	L931	M131	M244	M435	M650
J679	K031	K135	K314	K571	K739	L022	L252	L531	L708	L932	M138	M245	M436	M651
J680	K032	K136	K315	K572	K740	L023	L253	L532	L709	L940	M139	M246	M438	M652
J681	K033	K137	K316	K573	K741	L024	L254	L533	L710	L941	M150	M247	M439	M653
J682	K034	K140	K317	K574	K742	L028	L255	L538	L711	L942	M151	M248	M45	M654
J683	K035	K141	K318	K575	K743	L029	L258	L539	L718	L943	M152	M249	M460	M658
J684	K036	K142	K319	K578	K744	L030	L259	L550	L719	L944	M153	M250	M461	M659
J688	K037	K143	K350	K579	K745	L031	L26	L551	L720	L945	M154	M251	M462	M660
J689	K038	K144	K351	K580	K746	L032	L270	L552	L721	L946	M158	M252	M463	M661
J690	K039	K145	K359	K589	K750	L033	L271	L558	L722	L948	M159	M253	M464	M662
J691	K040	K146	K36	K590	K751	L038	L272	L559	L728	L949	M160	M254	M465	M663
J698	K041	K148	K37	K591	K752	L039	L278	L560	L729	L950	M161	M255	M468	M664
J700	K042	K149	K380	K592	K753	L040	L279	L561	L730	L951	M162	M256	M469	M665
J701	K043	K20	K381	K593	K754	L041	L280	L562	L731	L958	M163	M257	M470	M670
J702	K044	K210	K382	K594	K758	L042	L281	L563	L732	L959	M164	M258	M471	M671
J703	K045	K219	K383	K598	K759	L043	L282	L564	L738	L97	M165	M259	M472	M672
J704	K046	K220	K388	K599	K760	L044	L290	L568	L739	L980	M166	M300	M478	M673
J708	K047	K221	K389	K600	K761	L048	L291	L569	L740	L981	M167	M301	M479	M674
J709	K048	K222	K400	K601	K762	L049	L292	L570	L741	L982	M169	M302	M480	M678
J80	K049	K223	K401	K602	K763	L050	L293	L571	L742	L983	M170	M303	M481	M679
J81	K050	K224	K402	K603	K764	L059	L298	L572	L743	L984	M171	M308	M482	M700
J82	K051	K225	K403	K604	K765	L080	L299	L573	L744	L985	M172	M310	M483	M701
J840	K052	K226	K404	K605	K766	L088	L300	L574	L748	L986	M173	M311	M484	M702
J841	K053	K228	K409	K610	K767	L089	L301	L575	L749	L988	M174	M312	M485	M703
J848	K054	K229	K410	K611	K768	L100	L302	L578	L750	L989	M175	M313	M488	M704
J849	K055	K250	K411	K612	K769	L101	L303	L579	L751	M000	M179	M314	M489	M705
J850	K056	K251	K412	K613	K800	L102	L304	L580	L752	M001	M180	M315	M500	M706
J851	K060	K252	K413	K614	K801	L103	L305	L581	L758	M002	M181	M316	M501	M707
J852	K061	K253	K414	K620	K802	L104	L308	L589	L759	M008	M182	M318	M502	M708
J853	K062	K254	K419	K621	K803	L105	L309	L590	L80	M009	M183	M319	M503	M709
J860	K068	K255	K420	K622	K804	L108	L400	L598	L810	M020	M184	M320	M508	M710
J869	K069	K256	K421	K623	K805	L109	L401	L599	L811	M021	M185	M321	M509	M711
J90	K070	K257	K429	K624	K808	L110	L402	L600	L812	M022	M189	M328	M510	M712
J920	K071	K259	K430	K625	K810	L111	L403	L601	L813	M023	M190	M329	M511	M713

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

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

P378	P702	P960	Q138	Q248	Q372	Q513	Q643	Q741	Q838	Q961	R17	R443	R701	R861
P379	P703	P961	Q139	Q249	Q373	Q514	Q644	Q742	Q839	Q962	R18	R448	R71	R862
P38	P704	P962	Q140	Q250	Q374	Q515	Q645	Q743	Q840	Q963	R190	R450	R72	R863
P390	P708	P963	Q141	Q251	Q375	Q516	Q646	Q748	Q841	Q964	R191	R451	R730	R864
P391	P709	P964	Q142	Q252	Q378	Q517	Q647	Q749	Q842	Q968	R192	R452	R739	R865
P392	P710	P965	Q143	Q253	Q379	Q518	Q648	Q750	Q843	Q969	R193	R453	R740	R866
P393	P711	P968	Q148	Q254	Q380	Q519	Q649	Q751	Q844	Q970	R194	R454	R748	R867
P394	P712	P969	Q149	Q255	Q381	Q520	Q650	Q752	Q845	Q971	R195	R455	R749	R868
P398	P713	Q000	Q150	Q256	Q382	Q521	Q651	Q753	Q846	Q972	R196	R456	R75	R869
P399	P714	Q001	Q158	Q257	Q383	Q522	Q652	Q754	Q848	Q973	R198	R457	R760	R870
P500	P718	Q002	Q159	Q258	Q384	Q523	Q653	Q755	Q849	Q978	R200	R458	R761	R871
P501	P719	Q010	Q160	Q259	Q385	Q524	Q654	Q758	Q850	Q979	R201	R460	R762	R872
P502	P720	Q011	Q161	Q260	Q386	Q525	Q655	Q759	Q851	Q980	R202	R461	R768	R873
P503	P721	Q012	Q162	Q261	Q387	Q526	Q656	Q760	Q858	Q981	R203	R462	R769	R874
P504	P722	Q018	Q163	Q262	Q388	Q527	Q658	Q761	Q859	Q982	R208	R463	R770	R875
P505	P728	Q019	Q164	Q263	Q390	Q528	Q659	Q762	Q860	Q983	R21	R464	R771	R876
P508	P729	Q02	Q165	Q264	Q391	Q529	Q660	Q763	Q861	Q984	R220	R465	R772	R877
P509	P740	Q030	Q169	Q265	Q392	Q530	Q661	Q764	Q862	Q985	R221	R466	R778	R878
P510	P741	Q031	Q170	Q266	Q393	Q531	Q662	Q765	Q868	Q986	R222	R467	R779	R879
P518	P742	Q038	Q171	Q268	Q394	Q532	Q663	Q766	Q870	Q987	R223	R468	R780	R890
P519	P743	Q039	Q172	Q269	Q395	Q539	Q664	Q767	Q871	Q988	R224	R470	R781	R891
P520	P744	Q040	Q173	Q270	Q396	Q540	Q665	Q768	Q872	Q989	R227	R471	R782	R892
P521	P745	Q041	Q174	Q271	Q398	Q541	Q666	Q769	Q873	Q990	R229	R478	R783	R893
P522	P748	Q042	Q175	Q272	Q399	Q542	Q667	Q770	Q874	Q991	R230	R480	R784	R894
P523	P749	Q043	Q178	Q273	Q400	Q543	Q668	Q771	Q875	Q992	R231	R481	R785	R895
P524	P760	Q044	Q179	Q274	Q401	Q544	Q669	Q772	Q878	Q998	R232	R482	R786	R896
P525	P761	Q045	Q180	Q278	Q402	Q548	Q670	Q773	Q890	Q999	R233	R488	R787	R897
P526	P762	Q046	Q181	Q279	Q403	Q549	Q671	Q774	Q891	R000	R234	R490	R788	R898
P528	P768	Q048	Q182	Q280	Q408	Q550	Q672	Q775	Q892	R001	R238	R491	R789	R899
P529	P769	Q049	Q183	Q281	Q409	Q551	Q674	Q776	Q893	R002	R250	R492	R790	R900
P53	P77	Q050	Q184	Q282	Q410	Q552	Q675	Q777	Q894	R008	R251	R498	R798	R908
P540	P780	Q051	Q185	Q283	Q411	Q553	Q676	Q778	Q897	R010	R252	R500	R799	R91
P541	P781	Q052	Q186	Q288	Q412	Q554	Q677	Q779	Q898	R011	R253	R501	R80	R92
P542	P782	Q053	Q187	Q289	Q418	Q555	Q678	Q780	Q899	R012	R258	R509	R81	R930
P543	P783	Q054	Q188	Q300	Q419	Q556	Q680	Q781	Q900	R02	R260	R51	R820	R931
P544	P788	Q055	Q189	Q301	Q420	Q558	Q681	Q782	Q901	R030	R261	R520	R821	R932
P545	P789	Q056	Q200	Q302	Q421	Q559	Q682	Q783	Q902	R031	R262	R521	R822	R933
P546	P800	Q057	Q201	Q303	Q422	Q560	Q683	Q784	Q909	R040	R268	R522	R823	R934
P548	P808	Q058	Q202	Q308	Q423	Q561	Q684	Q785	Q910	R041	R270	R529	R824	R935
P549	P809	Q059	Q203	Q309	Q428	Q562	Q685	Q786	Q911	R042	R278	R53	R825	R936
P550	P810	Q060	Q204	Q310	Q429	Q563	Q688	Q788	Q912	R048	R290	R54	R826	R937
P551	P818	Q061	Q205	Q311	Q430	Q564	Q690	Q789	Q913	R049	R291	R55	R827	R938
P558	P819	Q062	Q206	Q312	Q431	Q600	Q691	Q790	Q914	R05	R292	R560	R828	R940
P559	P830	Q063	Q208	Q313	Q432	Q601	Q692	Q791	Q915	R060	R293	R568	R829	R941
P560	P831	Q064	Q209	Q315	Q433	Q602	Q699	Q792	Q916	R061	R294	R570	R830	R942
P569	P832	Q068	Q210	Q318	Q434	Q603	Q700	Q793	Q917	R062	R298	R571	R831	R943
P570	P833	Q069	Q211	Q319	Q435	Q604	Q701	Q794	Q920	R063	R300	R578	R832	R944
P578	P834	Q070	Q212	Q320	Q436	Q605	Q702	Q795	Q921	R064	R301	R579	R833	R945
P579	P835	Q078	Q213	Q321	Q437	Q606	Q703	Q796	Q922	R065	R309	R58	R834	R946
P580	P836	Q079	Q214	Q322	Q438	Q610	Q704	Q798	Q923	R066	R31	R590	R835	R947
P581	P838	Q100	Q218	Q323	Q439	Q611	Q709	Q799	Q924	R067	R32	R591	R836	R948
P582	P839	Q101	Q219	Q324	Q440	Q612	Q710	Q800	Q925	R068	R33	R599	R837	R95
P583	P90	Q102	Q220	Q330	Q441	Q613	Q711	Q801	Q926	R070	R34	R600	R838	R960
P584	P910	Q103	Q221	Q331	Q442	Q614	Q712	Q802	Q927	R071	R35	R601	R839	R961
P585	P911	Q104	Q222	Q332	Q443	Q615	Q713	Q803	Q928	R072	R36	R609	R840	R98
P588	P912	Q105	Q223	Q333	Q444	Q618	Q714	Q804	Q929	R073	R390	R610	R841	R99
P589	P913	Q106	Q224	Q334	Q445	Q619	Q715	Q808	Q930	R074	R391	R611	R842	*U010
P590	P914	Q107	Q225	Q335	Q446	Q620	Q716	Q810	Q931	R090	R392	R619	R843	*U011
P591	P915	Q110	Q226	Q336	Q447	Q621	Q718	Q811	Q932	R091	R398	R620	R844	*U012
P592	P918	Q111	Q228	Q338	Q450	Q622	Q719	Q812	Q933	R092	R400	R628	R845	*U013
P593	P919	Q112	Q229	Q339	Q451	Q623	Q720	Q818	Q934	R093	R401	R629	R846	*U014
P598	P920	Q113	Q230	Q340	Q452	Q624	Q721	Q820	Q935	R098	R402	R630	R847	*U015
P599	P921	Q120	Q231	Q341	Q453	Q625	Q722	Q821	Q936	R100	R410	R631	R848	*U016
P60	P922	Q121	Q232	Q348	Q458	Q626	Q723	Q822	Q937	R101	R411	R632	R849	*U017
P610	P923	Q122	Q233	Q349	Q459	Q627	Q724	Q823	Q938	R102	R412	R633	R850	*U018
P611	P924	Q123	Q234	Q351	Q500	Q628	Q725	Q823	Q939	R103	R413	R634	R851	*U019
P612	P925	Q124	Q238	Q353	Q501	Q630	Q726	Q824	Q950	R104	R418	R635	R852	*U02
P613	P928	Q128	Q239	Q355	Q502	Q631	Q727	Q825	Q951	R11	R42	R638	R853	*U030
P614	P929	Q129	Q240	Q357	Q503	Q632	Q728	Q828	Q952	R12	R430	R64	R854	*U039
P615	P93	Q130	Q241	Q359	Q504	Q633	Q729	Q829	Q953	R13	R431	R680	R855	V010
P616	P940	Q131	Q242	Q360	Q505	Q638	Q730	Q830	Q954	R14	R432	R681	R856	V011
P618	P941	Q132	Q243	Q361	Q506	Q639	Q730	Q831	Q955	R15	R438	R682	R857	V019
P619	P942	Q133	Q244	Q369	Q510	Q640	Q731	Q832	Q958	R160	R440	R683	R858	V020
P700	P948	Q134	Q245	Q370	Q511	Q641	Q738	Q832	Q959	R161	R441	R688	R859	V021
P701	P949	Q135	Q246	Q371	Q512	Q642	Q740	Q833	Q960	R162	R442	R700	R860	V029

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

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

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

Y526	Y608	Y762
Y527	Y609	Y763
Y528	Y610	Y768
Y529	Y611	Y770
Y530	Y612	Y771
Y531	Y613	Y772
Y532	Y614	Y773
Y533	Y615	Y778
Y534	Y616	Y780
Y535	Y617	Y781
Y536	Y618	Y782
Y537	Y619	Y783
Y538	Y620	Y788
Y539	Y621	Y790
Y540	Y622	Y791
Y541	Y623	Y792
Y542	Y624	Y793
Y543	Y625	Y798
Y544	Y626	Y800
Y545	Y628	Y801
Y546	Y629	Y802
Y547	Y630	Y803
Y548	Y631	Y808
Y549	Y632	Y810
Y550	Y633	Y811
Y551	Y634	Y812
Y552	Y635	Y813
Y553	Y636	Y818
Y554	Y638	Y820
Y555	Y639	Y821
Y556	Y640	Y822
Y557	Y641	Y823
Y560	Y648	Y828
Y561	Y649	Y830
Y562	Y650	Y831
Y563	Y651	Y832
Y564	Y652	Y833
Y565	Y653	Y834
Y566	Y654	Y835
Y567	Y655	Y836
Y568	Y658	Y838
Y569	Y66	Y839
Y570	Y69	Y840
Y571	Y700	Y841
Y572	Y701	Y842
Y573	Y702	Y843
Y574	Y703	Y844
Y575	Y708	Y845
Y576	Y710	Y846
Y577	Y711	Y847
Y578	Y712	Y848
Y579	Y713	Y849
Y580	Y718	Y850
Y581	Y720	Y859
Y582	Y721	Y86
Y583	Y722	Y870
Y584	Y723	Y871
Y585	Y728	Y872
Y586	Y730	Y880
Y588	Y731	Y881
Y589	Y732	Y882
Y590	Y733	Y883
Y591	Y738	Y890
Y592	Y740	Y891
Y593	Y741	Y899
Y598	Y742	
Y599	Y743	
Y600	Y748	
Y601	Y750	
Y602	Y751	
Y603	Y752	
Y604	Y753	
Y605	Y758	
Y606	Y760	
Y607	Y761	

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

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

T455	T522	T622	T753	T843	T924
T456	T523	T628	T754	T844	T925
T457	T524	T629	T758	T845	T926
T458	T528	T630	T780	T846	T928
T459	T529	T631	T781	T847	T929
T460	T530	T632	T782	T848	T930
T461	T531	T633	T783	T849	T931
T462	T532	T634	T784	T850	T932
T463	T533	T635	T788	T851	T933
T464	T534	T636	T789	T852	T934
T465	T535	T638	T790	T853	T935
T466	T536	T639	T791	T854	T936
T467	T537	T64	T792	T855	T938
T468	T539	T650	T793	T856	T939
T469	T540	T651	T794	T857	T940
T470	T541	T652	T795	T858	T941
T471	T542	T653	T796	T859	T950
T472	T543	T654	T797	T860	T951
T473	T549	T655	T798	T861	T952
T474	T55	T656	T799	T862	T953
T475	T560	T658	T800	T863	T954
T476	T561	T659	T801	T864	T958
T477	T562	T66	T802	T868	T959
T478	T563	T670	T803	T869	T96
T479	T564	T671	T804	T870	T97
T480	T565	T672	T805	T871	T980
T481	T566	T673	T806	T872	T981
T482	T567	T674	T808	T873	T982
T483	T568	T675	T809	T874	T983
T484	T569	T676	T810	T875	
T485	T570	T677	T811	T876	
T486	T571	T678	T812	T880	
T487	T572	T679	T813	T881	
T490	T573	T68	T814	T882	
T491	T578	T690	T815	T883	
T492	T579	T691	T816	T884	
T493	T58	T698	T817	T885	
T494	T590	T699	T818	T886	
T495	T591	T700	T819	T887	
T496	T592	T701	T820	T888	
T497	T593	T702	T821	T889	
T498	T594	T703	T822	T900	
T499	T595	T704	T823	T901	
T500	T596	T708	T824	T902	
T501	T597	T709	T825	T903	
T502	T598	T71	T826	T904	
T503	T599	T730	T827	T905	
T504	T600	T731	T828	T908	
T505	T601	T732	T829	T909	
T506	T602	T733	T830	T910	
T507	T603	T738	T831	T911	
T508	T604	T739	T832	T912	
T509	T608	T740	T833	T913	
T510	T609	T741	T834	T914	
T511	T610	T742	T835	T915	
T512	T611	T743	T836	T918	
T513	T612	T748	T838	T919	
T518	T618	T749	T839	T920	
T519	T619	T750	T840	T921	
T520	T620	T751	T841	T922	
T521	T621	T752	T842	T923	

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

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

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

Created code	Valid ICD-10 code
A1690	A16.9
E0390	E03.9
~~F0300~~	~~F03~~
G1220	G12.2
G2000	G20
G3090	G30.9
G3500	G35
I4200	**I42.0**
I4210	**I42.1**
I4220	**I42.2**
I4250	**I42.5**
I4280	**I42.8**
I4290	**I42.9**
I5000	I50.0
I5140	I51.4
I5150	I51.5
I6000	I60.0
I6060	I60.6
I6070	I60.7
I6080	I60.8
I6090	I60.9
J1010	J10.1
J1110	J11.1
J8410	**J84.1**
J8490	**J84.9**
J9840	J98.4
K3190	K31.9
K5500	K55.0
K6310	K63.1
K7200	K72.0
K7210	K72.1
K7290	K72.9
M1990	M19.9
Q2780	Q27.8
Q2820	Q28.2
Q2830	Q28.3
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/sex limitation	Age	Sex	Edit code[1]
	0 - Conditional 1 - Absolute 2 - Not Applicable			
A32	28 days and over	1	2	03
A33	Under 1 year	1	2	02
A34	Female, 10-54 years	0	1	14
A35	28 days and over	1	2	03
A40	28 days and over	1	2	03
A41	28 days and over	1	2	03
A50.3	2 years and over	0	2	05
A50.4	2 years and over	0	2	05
A50.5	2 years and over	0	2	05
A50.6	2 years and over	0	2	05
A50.7	2 years and over	0	2	05
A52	2 years and over	0	2	05
A53.9	2 years and over	0	2	05
A56	28 days and over	1	2	03
A74	28 days and over	1	2	03
B26.0	Male	2	1	10
B30	28 days and over	1	2	03
B37.0	28 days and over	1	2	03
B37.1	28 days and over	1	2	03
B37.2	28 days and over	1	2	03
B37.3	Female, 28 days and over	1	1	13
B37.4	28 days and over	1	2	03
B37.5	28 days and over	1	2	03
B37.6	28 days and over	1	2	03
B37.7	28 days and over	1	2	03
B37.8	28 days and over	1	2	03
B37.9	28 days and over	1	2	03
B90	1 year and over	1	2	04
B91	1 year and over	1	2	04

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

ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
		0 - Conditional 1 - Absolute 2 - Not Applicable		
B92	1 year and over	1	2	04
B94	1 year and over	1	2	04
C51	Female	2	1	11
C52	Female	2	1	11
C53	Female	2	1	11
C54	Female	2	1	11
C55	Female	2	1	11
C56	Female	2	1	11
C57	Female	2	1	11
C58	Female, 10-54 years	0	1	14
C60	Male	2	1	10
C61	Male	2	1	10
C62	Male	2	1	10
C63	Male	2	1	10
C79.6	Female	2	1	11
D06	Female	2	1	11
D07.0	Female	2	1	11
D07.1	Female	2	1	11
D07.2	Female	2	1	11
D07.3	Female	2	1	11
D07.4	Male	2	1	10
D07.5	Male	2	1	10
D07.6	Male	2	1	10
D17.6	Male	2	1	10
D25	Female	2	1	11
D26	Female	2	1	11
D27	Female	2	1	11
D28	Female	2	1	11
D29	Male	2	1	10

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

ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
		0 - Conditional 1 - Absolute 2 - Not Applicable		
D39.0	Female	2	1	11
D39.1	Female	2	1	11
D39.2	Female, 10-54 years	0	1	14
D39.7	Female	2	1	11
D39.9	Female	2	1	11
D40	Male	2	1	10
D65	28 days and over	1	2	03
D75.1	28 days and over	1	2	03
E05	28 days and over	1	2	03
E10	28 days and over	1	2	03
E11	28 days and over	1	2	03
E12	28 days and over	1	2	03
E13	28 days and over	1	2	03
E14	28 days and over	1	2	03
E16.2	28 days and over	1	2	03
E28	Female	2	1	11
E29	Male	2	1	10
E56.1	28 days and over	1	2	03
E63	28 days and over	1	2	03
E83.4	28 days and over	1	2	03
E83.5	28 days and over	1	2	03
E86	28 days and over	**0**	2	03
F01	20 years and over	0	2	07
F03	55 years and over	0	2	23
F10	28 days and over	1	2	03
F11	28 days and over	1	2	03
F12	28 days and over	1	2	03
F13	28 days and over	1	2	03
F14	28 days and over	1	2	03

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

		0 - Conditional 1 - Absolute 2 - Not Applicable		
ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
F15	28 days and over	1	2	03
F16	28 days and over	1	2	03
F17	28 days and over	1	2	03
F18	28 days and over	1	2	03
F19	28 days and over	1	2	03
F52.4	Male, 10 years and over	1	1	19
F52.5	Female, 10 years and over	1	1	18
F53	Female, 10-54 years	1	1	14
G09	1 year and over	0	2	04
G30.0	30 years and over	0	2	24
G30.1	65 years and over	0	2	09
G30.8	30 years and over	0	2	24
G30.9	30 years and over	0	2	24
G47.3	28 days and over	1	2	03
G70.0	28 days and over	1	2	03
I48	**28 days and over**	**1**	**2**	**03**
I49	**28 days and over**	**1**	**2**	**03**
I50	**28 days and over**	**1**	**2**	**03**
I61	28 days and over	1	2	03
I62	28 days and over	1	2	03
I86.1	Male	2	1	10
I86.3	Female	2	1	11
J12	**28 days and over**	**1**	**2**	**03**
J13	**28 days and over**	**1**	**2**	**03**
J14	**28 days and over**	**1**	**2**	**03**
J15	**28 days and over**	**1**	**2**	**03**
J16	**28 days and over**	**1**	**2**	**03**
J18	**28 days and over**	**1**	**2**	**03**
J43	28 days and over	1	2	03

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

0 - Conditional
1 - Absolute
2 - Not Applicable

ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
J80	28 days and over	1	2	03
J84.9	**28 days and over**	**1**	**2**	**03**
J96	28 days and over	1	2	03
J98.1	28 days and over	1	2	03
J98.2	28 days and over	1	2	03
J98.4	**28 days and over**	**1**	**2**	**03**
J98.8	**28 days and over**	**1**	**2**	**03**
K27	28 days and over	1	2	03
K31.1	1 year and over	1	2	04
K31.3	1 year and over	1	2	04
~~K56~~	~~28 days and over~~	~~1~~	~~2~~	~~03~~
K56.6	**28 days and over**	**0**	**2**	**03**
K63.1	28 days and over	1	2	03
K65	28 days and over	1	2	03
K92	28 days and over	1	2	03
L01	28 days and over	1	2	03
L10	28 days and over	1	2	03
~~L26~~	~~28 days and over~~	~~0~~	~~2~~	~~03~~
L29.1	Male	2	1	10
L29.2	Female	2	1	11
L50	28 days and over	1	2	03
L53.0	28 days and over	1	2	03
L70.0	1 year and over	1	2	04
L70.1	1 year and over	1	2	04
L70.2	1 year and over	1	2	04
L70.3	1 year and over	1	2	04
L70.5	Female, 1 year and over	1	1	21
L70.9	1 year and over	1	2	04
M34	28 days and over	1	2	03

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

<table>
<tr><td></td><td></td><td colspan="3">0 - Conditional
1 - Absolute
<u>2 - Not Applicable</u></td></tr>
<tr><td>ICD-10 code</td><td>Age/sex limitation</td><td>Age</td><td>Sex</td><td>Edit code[1]</td></tr>
<tr><td>M80.0</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
<tr><td>M80.1</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
<tr><td>M81.0</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
<tr><td>M81.1</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
<tr><td>M83.0</td><td>Female, 10-54 years</td><td>1</td><td>1</td><td>14</td></tr>
<tr><td>M83.1</td><td>10 years and over</td><td>1</td><td>2</td><td>20</td></tr>
<tr><td>M83.2</td><td>10 years and over</td><td>1</td><td>2</td><td>20</td></tr>
<tr><td>M83.3</td><td>10 years and over</td><td>1</td><td>2</td><td>20</td></tr>
<tr><td>M83.4</td><td>10 years and over</td><td>1</td><td>2</td><td>20</td></tr>
<tr><td>M83.5</td><td>10 years and over</td><td>1</td><td>2</td><td>20</td></tr>
<tr><td>M83.8</td><td>10 years and over</td><td>1</td><td>2</td><td>20</td></tr>
<tr><td>M83.9</td><td>10 years and over</td><td>1</td><td>2</td><td>20</td></tr>
<tr><td>N39.0</td><td>28 days and over</td><td>1</td><td>2</td><td>03</td></tr>
<tr><td>N40</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N41</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N42</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N43</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N44</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N45</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N46</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N47</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N48</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N49</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N50</td><td>Male</td><td>2</td><td>1</td><td>10</td></tr>
<tr><td>N61</td><td>28 days and over</td><td>1</td><td>2</td><td>03</td></tr>
<tr><td>N70</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
<tr><td>N71</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
<tr><td>N72</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
<tr><td>N73</td><td>Female</td><td>2</td><td>1</td><td>11</td></tr>
</table>

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

		0 - Conditional 1 - Absolute 2 - Not Applicable		
ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
N75	Female	2	1	11
N76	Female	2	1	11
N80	Female	2	1	11
N81	Female	2	1	11
N82	Female	2	1	11
N83	Female	2	1	11
N84	Female	2	1	11
N85	Female	2	1	11
N86	Female.	2	1	11
N87	Female	2	1	11
N88	Female	2	1	11
N89	Female	2	1	11
N90	Female	2	1	11
N91	Female	2	1	11
N92	Female	2	1	11
N93	Female	2	1	11
N94	Female	2	1	11
N95	Female	2	1	11
N96	Female, 10-54 years	0	1	14
N97	Female, 10-54 years	0	1	14
N98	Female, 10-54 years	0	1	14
O00	Female, 10-54 years	0	1	14
O01	Female, 10-54 years	0	1	14
O02	Female, 10-54 years	0	1	14
O03	Female, 10-54 years	0	1	14
O04	Female, 10-54 years	0	1	14
O05	Female, 10-54 years	0	1	14
O06	Female, 10-54 years	0	1	14
O07	Female, 10-54 years	0	1	14

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

ICD-10 code	Age/sex limitation	0 - Conditional 1 - Absolute 2 - Not Applicable		
		Age	Sex	Edit code[1]
O10	Female, 10-54 years	0	1	14
O11	Female, 10-54 years	0	1	14
O12	Female, 10-54 years	0	1	14
O13	Female, 10-54 years	0	1	14
O14	Female, 10-54 years	0	1	14
O15	Female, 10-54 years	0	1	14
O16	Female, 10-54 years	0	1	14
O20	Female, 10-54 years	0	1	14
O21	Female, 10-54 years	0	1	14
O22	Female, 10-54 years	0	1	14
O23	Female, 10-54 years	0	1	14
O24	Female, 10-54 years	0	1	14
O25	Female, 10-54 years	0	1	14
O26	Female, 10-54 years	0	1	14
O28	Female, 10-54 years	0	1	14
O29	Female, 10-54 years	0	1	14
O30	Female, 10-54 years	0	1	14
O31	Female, 10-54 years	0	1	14
O32	Female, 10-54 years	0	1	14
O33	Female, 10-54 years	0	1	14
O34	Female, 10-54 years	0	1	14
O35	Female, 10-54 years	0	1	14
O36	Female, 10-54 years	0	1	14
O40	Female, 10-54 years	0	1	14
O41	Female, 10-54 years	0	1	14
O42	Female, 10-54 years	0	1	14
O43	Female, 10-54 years	0	1	14
O44	Female, 10-54 years	0	1	14
O45	Female, 10-54 years	0	1	14

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

		0 - Conditional 1 - Absolute 2 - Not Applicable		
ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
O46	Female, 10-54 years	0	1	14
O47	Female, 10-54 years	0	1	14
O48	Female, 10-54 years	0	1	14
O60	Female, 10-54 years	0	1	14
O61	Female, 10-54 years	0	1	14
O62	Female, 10-54 years	0	1	14
O63	Female, 10-54 years	0	1	14
O64	Female, 10-54 years	0	1	14
O65	Female, 10-54 years	0	1	14
O66	Female, 10-54 years	0	1	14
O67	Female, 10-54 years	0	1	14
O68	Female, 10-54 years	0	1	14
O69	Female, 10-54 years	0	1	14
O70	Female, 10-54 years	0	1	14
O71	Female, 10-54 years	0	1	14
O72	Female, 10-54 years	0	1	14
O73	Female, 10-54 years	0	1	14
O74	Female, 10-54 years	0	1	14
O75	Female, 10-54 years	0	1	14
O85	Female, 10-54 years	0	1	14
O86	Female, 10-54 years	0	1	14
O87	Female, 10-54 years	0	1	14
O88	Female, 10-54 years	0	1	14
O89	Female, 10-54 years	0	1	14
O90	Female, 10-54 years	0	1	14
O91	Female, 10-54 years	0	1	14
O92	Female, 10-54 years	0	1	14
O95	Female, 10-54 years	0	1	14
O96	Female, 10-54 years	1	1	14

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

| ICD-10 code | Age/sex limitation | 0 - Conditional
1 - Absolute
2 - Not Applicable | | |
		Age	Sex	Edit code[1]
O97	Female, 10-54 years	1	1	14
O98	Female, 10-54 years	0	1	14
O99	Female, 10-54 years	0	1	14
P00	Under 1 year	0	2	02
P01	Under 1 year	0	2	02
P02	Under 1 year	0	2	02
P03	Under 1 year	0	2	02
P04	Under 1 year	0	2	02
P05	Under 1 year	0	2	02
P07	Under 1 year	0	2	02
P08	Under 1 year	0	2	02
P10	Under 1 year	0	2	02
P11	Under 1 year	0	2	02
P12	Under 1 year	0	2	02
P13	Under 1 year	0	2	02
P14	Under 1 year	0	2	02
P15	Under 1 year	0	2	02
P20	Under 1 year	0	2	02
P21	Under 1 year	0	2	02
P22	Under 1 year	0	2	02
P23	Under 1 year	0	2	02
P24	Under 1 year	0	2	02
P25	Under 1 year	0	2	02
P26	Under 1 year	0	2	02
P27	Under 1 year	0	2	02
P28	Under 1 year	0	2	02
P29	Under 1 year	0	2	02
P35	Under 1 year	0	2	02
P36	Under 1 year	0	2	02

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

| | | 0 - Conditional
1 - Absolute
2 - Not Applicable | | |
ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
P37	Under 1 year	0	2	02
P38	Under 1 year	0	2	02
P39	Under 1 year	0	2	02
P50	Under 1 year	0	2	02
P51	Under 1 year	0	2	02
P52	Under 1 year	0	2	02
P53	Under 1 year	0	2	02
P54.0	Under 1 year	0	2	02
P54.1	Under 1 year	0	2	02
P54.2	Under 1 year	0	2	02
P54.3	Under 1 year	0	2	02
P54.4	Under 1 year	0	2	02
P54.5	Under 1 year	0	2	02
P54.6	Female, under 1 year	0	1	22
P54.8	Under 1 year	0	2	02
P54.9	Under 1 year	0	2	02
P55	Under 1 year	0	2	02
P56	Under 1 year	0	2	02
P57	Under 1 year	0	2	02
P58	Under 1 year	0	2	02
P59	Under 1 year	0	2	02
P60	Under 1 year	0	2	02
P61	Under 1 year	0	2	02
P70	Under 1 year	0	2	02
P71	Under 1 year	0	2	02
P72	Under 1 year	0	2	02
P74	Under 1 year	0	2	02
P76	Under 1 year	0	2	02
P77	Under 1 year	0	2	02

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

ICD-10 code	Age/sex limitation	0 - Conditional 1 - Absolute 2 - Not Applicable		
		Age	Sex	Edit code[1]
P78	Under 1 year	0	2	02
P80	Under 1 year	0	2	02
P81	Under 1 year	0	2	02
P83	Under 1 year	0	2	02
P90	Under 1 year	0	2	02
P91	Under 1 year	0	2	02
P92	Under 1 year	0	2	02
P93	Under 1 year	0	2	02
P94	Under 1 year	0	2	02
P96	Under 1 year	0	2	02
Q50	Female	2	1	11
Q51	Female	2	1	11
Q52	Female	2	1	11
Q53	Male	2	1	10
Q54	Male	2	1	10
Q55	Male	2	1	10
Q96	Female	2	1	11
Q97	Female	2	1	11
Q98	Male	2	1	10
R00	28 days and over	1	2	03
R01	28 days and over	1	2	03
R04.8	28 days and over	1	2	03
R06.8	28 days and over	0	2	03
R09.0	28 days and over	1	2	03
R09.2	28 days and over	1	2	03
R11	28 days and over	1	2	03
R17	28 days and over	1	2	03
R23.0	28 days and over	1	2	03
R23.3	28 days and over	1	2	03

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

ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
R29.0	28 days and over	1	2	03
R40	28 days and over	1	2	03
R50	28 days and over	1	2	03
R53	28 days and over	1	2	03
R54	65 years and over	0	2	09
NN	**(edit for R54 is absolute if age < 30)**	**1**	**2**	**24**
R56	28 days and over	1	2	03
R58	28 days and over	1	2	03
R60	28 days and over	1	2	03
R63.3	28 days and over	1	2	03
R68.0	28 days and over	1	2	03
R68.1	28 days and over	1	2	03
R73	28 days and over	0	2	03
R86	Male	2	1	10
R87	Female	2	1	11
R95	Under 1 year	1	2	02
R96.0	1 year and over	1	2	04
R96.1	1 year and over	0	2	04
X60	5 years and over	1	2	06
X61	5 years and over	1	2	06
X62	5 years and over	1	2	06
X63	5 years and over	1	2	06
X64	5 years and over	1	2	06
X65	5 years and over	1	2	06
X66	5 years and over	1	2	06
X67	5 years and over	1	2	06
X68	5 years and over	1	2	06
X69	5 years and over	1	2	06
X70	5 years and over	1	2	06

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

		0 - Conditional 1 - Absolute 2 - Not Applicable		
ICD-10 code	Age/sex limitation	Age	Sex	Edit code[1]
X71	5 years and over	1	2	06
X72	5 years and over	1	2	06
X73	5 years and over	1	2	06
X74	5 years and over	1	2	06
X75	5 years and over	1	2	06
X76	5 years and over	1	2	06
X77	5 years and over	1	2	06
X78	5 years and over	1	2	06
X79	5 years and over	1	2	06
X80	5 years and over	1	2	06
X81	5 years and over	1	2	06
X82	5 years and over	1	2	06
X83	5 years and over	1	2	06
X84	5 years and over	1	2	06
Y06.1	Under 18 years	0	2	17
Y07.1	Under 18 years	0	2	17
Y42.4	Female, 10-54 years	1	1	14
Y42.5	Female	2	1	11
Y59.0	Under 20 years	0	2	25
Y76	Female	2	1	11
Y85	1 year and over	1	2	04
Y86	1 year and over	1	2	04
Y87.0	5 years and over	1	2	06
Y87.1	1 year and over	1	2	04
Y87.2	1 year and over	1	2	04
Y88	1 year and over	1	2	04
Y89	1 year and over	1	2	04

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

Edit code	Limited to	Edit code	Limited to
02	Under 1 year	14	Female, 10-54 years
03	28 days and over	17	Under 18 years
04	1 year and over	18	Female, 10 years and over
05	2 years and over	19	Male, 10 years and over
06	5 years and over	20	10 years and over
07	20 years and over	21	Female, 1 year and over
09	65 years and over	22	Female, under 1 year
10	Male	23	55 years and over
11	Female	24	30 years and over
13	Female, 28 days and over	25	Under 20 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 | | Edit code[1] |
		Age	Sex	
E89.4	Female	2	1	11
E89.5	Male	2	1	10
N99.2	Female	2	1	11
N99.3	Female	2	1	11
O08	Female, 10-54	1	1	14
S31.2	Male	2	1	10
S31.3	Male	2	1	10
S31.4	Female	2	1	11
S37.4	Female	2	1	11
S37.5	Female	2	1	11
S37.6	Female	2	1	11
T38.4	Female	2	0	11
T38.5	Female	2	0	11
T70.3	12 years and over	0	2	16
T83.3	**Female**	**2**	**1**	**11**

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

Edit code	Limited to
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.

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 I.

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

ICD-10
code   Cause

A00   Cholera
A01   Typhoid and paratyphoid fevers
A05.1   Botulism (including infant and wound botulism)
A07.0-.2,.8-.9 Other protozoal intestinal diseases (excluding coccidiosis)
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 *Streptococcus pneumoniae* infection occurring to children under 5 years old)
A65   Nonvenereal syphyllis
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 Rickettsia prowazekii
A75.1-.9   Other typhus fever
A77.1   Spotted fever due to Rickettsia conorii (Boutonneuse fever)
A77.2   Spotted fever due to Rickettsia siberica (North Asian tick fever)
A77.3   Spotted fever due to Rickettsia australis (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)
A90   Dengue fever [classical dengue]
A91   Dengue hemmorrhagic fever
A92   Other mosquito-borne viral fevers

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

ICD-10
code	Cause
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 hemmorrhagic fever
A98-A99	Other and unspecified viral hemmorrhagic 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)
~~E16.4~~	~~Abnormal production of gastrin~~
P35.0	Congenital rubella syndrome
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 J. 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 <u>Fetal Death File Cause-of-Death Computer Edits</u>

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

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

1. <u>Codes Valid for Underlying Causes of Fetal Death</u>

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.

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. <u>Created Codes</u>

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

3. <u>Sex/Cause Consistency Edits</u>

The purpose of this computer edit is to maintain consistency between a reported underlying 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. <u>Plurality/Cause Consistency Edits</u>

The purpose of this computer edit is to maintain consistency between a reported underlying 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.

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

B768	C029	C160	C311	C448	C542	C709	C836	C961	D091
B769	C030	C161	C312	C449	C543	C710	C837	C962	D092
B770	C031	C162	C313	C450	C548	C711	C838	C963	D093
B778	C039	C163	C318	C451	C549	C712	C839	C967	D097
B779	C040	C164	C319	C452	C55	C713	C840	C969	D099
B780	C041	C165	C321	C457	C56	C714	C841	D000	D100
B781	C048	C166	C322	C459	C570	C715	C842	D001	D101
B787	C049	C168	C323	C460	C571	C716	C843	D002	D102
B789	C050	C169	C328	C461	C572	C717	C844	D010	D103
B79	C051	C170	C329	C462	C573	C718	C845	D011	D104
B80	C052	C171	C33	C463	C574	C719	C850	D012	D105
B810	C058	C172	C340	C467	C577	C720	C851	D013	D106
B811	C059	C173	C341	C468	C578	C721	C857	D014	D107
B812	C060	C178	C342	C469	C579	C722	C859	D015	D109
B813	C061	C179	C343	C470	C600	C723	C880	D017	D110
B814	C062	C180	C348	C471	C601	C724	C881	D019	D117
B818	C068	C181	C349	C472	C602	C725	C882	D020	D119
B820	C069	C182	C37	C473	C608	C728	C883	D021	D120
B829	C07	C183	C380	C474	C609	C729	C887	D022	D121
B830	C080	C184	C381	C475	C61	C73	C889	D023	D122
B831	C081	C185	C382	C476	C620	C740	C900	D024	D123
B832	C088	C186	C383	C478	C621	C741	C901	D030	D124
B833	C089	C187	C384	C479	C629	C749	C902	D031	D125
B834	C090	C188	C388	C480	C630	C750	C910	D032	D126
B838	C091	C189	C390	C481	C631	C751	C911	D033	D127
B839	C098	C19	C398	C482	C632	C752	C912	D034	D128
B870	C099	C20	C399	C488	C637	C753	C913	D035	D129
B871	C100	C210	C400	C490	C638	C754	C914	D036	D130
B872	C101	C211	C401	C491	C639	C755	C915	D037	D131
B873	C102	C212	C402	C492	C64	C758	C917	D038	D132
B874	C103	C218	C403	C493	C65	C759	C919	D039	D133
B878	C104	C220	C408	C494	C66	C760	C920	D040	D134
B879	C108	C221	C409	C495	C670	C761	C921	D041	D135
B880	C109	C222	C410	C496	C671	C762	C922	D042	D136
B881	C110	C223	C411	C498	C672	C763	C923	D043	D137
B882	C111	C224	C412	C499	C673	C764	C924	D044	D139
B883	C112	C227	C413	C500	C674	C765	C925	D045	D140
B888	C113	C229	C414	C501	C675	C767	C927	D046	D141
B889	C118	C23	C419	C502	C676	C768	C929	D047	D142
B89	C119	C240	C430	C503	C677	C80	C930	D048	D143
B99	C12	C241	C431	C504	C678	C810	C931	D049	D144
C000	C130	C248	C432	C505	C679	C811	C932	D050	D150
C001	C131	C249	C433	C506	C680	C812	C937	D051	D151
C002	C132	C250	C434	C508	C681	C813	C939	D057	D152
C003	C138	C251	C435	C509	C688	C817	C940	D059	D157
C004	C139	C252	C436	C510	C689	C819	C941	D060	D160
C005	C140	C253	C437	C511	C690	C820	C942	D061	D161
C006	C142	C254	C438	C512	C691	C821	C943	D067	D162
C008	C148	C257	C439	C518	C692	C822	C944	D069	D163
C009	C150	C259	C440	C519	C693	C827	C945	D070	D164
C01	C151	C260	C441	C52	C694	C829	C947	D071	D165
C020	C152	C261	C442	C530	C695	C830	C950	D072	D166
C021	C153	C268	C443	C531	C696	C831	C951	D073	D167
C022	C154	C269	C444	C538	C698	C832	C952	D074	D168
C023	C155	C300	C445	C539	C699	C833	C957	D075	D169
C024	C158	C301	C446	C540	C700	C834	C959	D076	D170
C028	C159	C310	C447	C541	C701	C835	C960	D090	D171

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

D172	D291	D382	D483	D601	D762	E15	E709	E830	G608
D173	D292	D383	D484	D608	D763	E160	E710	E831	G609
D174	D293	D384	D485	D609	D800	E161	E711	E832	G710
D175	D294	D385	D486	D610	D801	E163	E712	E833	G711
D176	D297	D386	D487	D611	D802	E164	E713	E838	G712
D177	D299	D390	D489	D612	D803	E168	E720	E839	G719
D179	D300	D391	D501	D613	D804	E169	E721	E840	G723
D180	D301	D397	D508	D618	D805	E200	E722	E841	G800
D181	D302	D399	D509	D619	D806	E201	E723	E848	G801
D190	D303	D400	D510	D640	D807	E208	E724	E849	G802
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

I460	K742	P012	P113	P253	P519	P722	Q040	Q142	Q232
I461	K743	P013	P114	P258	P520	P728	Q041	Q143	Q233
I469	K745	P014	P115	P260	P521	P729	Q042	Q148	Q234
I600	K768	P015	P119	P261	P522	P741	Q043	Q150	Q238
I601	K828	P016	P120	P268	P523	P742	Q045	Q158	Q239
I602	K838	P017	P121	P269	P524	P743	Q046	Q159	Q240
I603	M000	P018	P122	P270	P525	P744	Q048	Q160	Q241
I604	M001	P019	P123	P271	P526	P745	Q049	Q161	Q242
I605	M002	P020	P124	P278	P528	P748	Q050	Q162	Q243
I606	M008	P021	P128	P279	P529	P749	Q051	Q163	Q244
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

Q318	Q402	Q521	Q628	Q711	Q784	Q870	Q964	R854	V814
Q319	Q403	Q522	Q630	Q712	Q785	Q871	Q968	R855	V815
Q320	Q408	Q523	Q631	Q713	Q786	Q872	Q969	R856	V816
Q321	Q409	Q524	Q632	Q714	Q788	Q873	Q970	R857	V817
Q322	Q410	Q525	Q633	Q715	Q789	Q874	Q971	R858	V818
Q323	Q411	Q526	Q638	Q718	Q790	Q875	Q972	R859	V819
Q324	Q412	Q527	Q639	Q719	Q791	Q878	Q973	R99	V820
Q330	Q418	Q528	Q640	Q720	Q792	Q890	Q978	*U010	V821
Q331	Q419	Q529	Q641	Q721	Q793	Q891	Q979	*U011	V822
Q332	Q420	Q530	Q642	Q722	Q794	Q892	Q980	*U012	V823
Q333	Q421	Q531	Q643	Q723	Q795	Q893	Q981	*U013	V824
Q334	Q422	Q532	Q644	Q724	Q796	Q894	Q982	*U014	V825
Q335	Q423	Q539	Q645	Q725	Q798	Q897	Q984	*U015	V826
Q336	Q428	Q540	Q646	Q726	Q799	Q898	Q985	*U016	V827
Q338	Q429	Q541	Q647	Q727	Q800	Q899	Q987	*U017	V828
Q339	Q430	Q542	Q648	Q728	Q801	Q900	Q988	*U018	V829
Q340	Q431	Q543	Q649	Q729	Q802	Q901	Q989	*U019	V839
Q341	Q432	Q544	Q652	Q730	Q803	Q902	Q990	V060	V849
Q348	Q433	Q548	Q658	Q731	Q804	Q909	Q991	V061	V859
Q349	Q434	Q549	Q659	Q738	Q808	Q910	Q992	V069	V869
Q351	Q435	Q550	Q660	Q740	Q809	Q911	Q998	V090	V870
Q353	Q436	Q551	Q661	Q741	Q810	Q912	Q999	V091	V871
Q355	Q437	Q552	Q662	Q742	Q811	Q913	R75	V092	V872
Q356	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

V913	W20	X27	Y22
V914	W21	X28	Y23
V915	W22	X29	Y24
V916	W23	X30	Y25
V917	W24	X31	Y26
V918	W25	X32	Y27
V919	W26	X33	Y28
V920	W27	X34	Y29
V921	W28	X35	Y32
V922	W29	X36	Y33
V923	W30	X37	Y34
V924	W31	X38	Y350
V925	W32	X39	Y351
V926	W33	X40	Y353
V927	W34	X41	Y354
V928	W35	X42	Y356
V929	W36	X43	Y357
V930	W37	X44	Y360
V931	W38	X45	Y361
V932	W39	X46	Y362
V933	W40	X47	Y364
V934	W41	X48	Y365
V935	W42	X49	Y366
V936	W43	X53	Y367
V937	W44	X54	Y368
V938	W45	X57	Y369
V939	W49	X58	
V940	W50	X59	
V941	W51	X85	
V942	W52	X88	
V943	W53	X89	
V944	W58	X90	
V945	W59	X99	
V946	W60	X93	
V947	W64	X94	
V948	W74	X95	
V949	W83	X96	
V950	W84	X97	
V951	W85	X98	
V952	W86	Y00	
V953	W87	Y01	
V954	W88	Y02	
V958	W89	Y03	
V959	W90	Y04	
V960	W91	Y05	
V961	W92	Y08	
V962	W93	Y09	
V968	W99	Y10	
V969	X09	Y11	
V970	X19	Y12	
V971	X20	Y13	
V972	X21	Y14	
V973	X22	Y15	
V978	X23	Y16	
V98	X24	Y17	
V99	X25	Y18	
W19	X26	Y19	

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

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code[1]
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

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

0-Conditional
1-Absolute
2-Not Applicable

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code[1]
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
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

0-Conditional
1-Absolute
2-Not Applicable

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code[1]
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

0-Conditional
1-Absolute
2-Not Applicable

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code[1]
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
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

0-Conditional
1-Absolute
2-Not Applicable

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code[1]
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

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

0-Conditional
1-Absolute
2-Not Applicable

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code[1]
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
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

ICD-10 code	Sex/plurality limitation	Sex	Plurality	Edit code[1]
Q97.3	Female	1	2	11
Q97.8	Female	1	2	11
Q97.9	Female	1	2	11
Q98.0	Male	1	2	10
Q98.1	Male	1	2	10
Q98.2	Male	1	2	10
Q98.4	Male	1	2	10
Q98.5	Male	1	2	10
Q98.6	Male	1	2	10
Q98.7	Male	1	2	10
Q98.8	Male	1	2	10
Q98.9	Male	1	2	10

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

Edit code	Limited to
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" [1]. These single race codes are also used when more than one checkbox / literal entry is reported and they all equate to the same delineated race group.

Examples:

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

"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"