
Instruction Manual

Part 11

Computer Edits for Mortality Data, Including Separate Section for Fetal Deaths Effective 2005

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 2005

Vital Statistics
Data Preparation

U.S. DEPARTMENT of HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics
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VITAL STATISTICS COMPUTER EDITS
FOR
MORTALITY DATA, EFFECTIVE **2005**

I. INTRODUCTION

A. Purpose of This Manual

This manual presents a comprehensive description of the mainframe computer edits used by the National Center for Health Statistics (NCHS) in processing mortality data beginning with data year **2005**. The edits include both medical edits for the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems, Corrected and Updated by NCHS (ICD-10) and demographic edits. Edits for three different applications are discussed in this manual:

- (1) the final mortality file which consists of death certificates filed for all deaths occurring in the United States in a calendar year. For this file, the data are tabulated and published annually.
- (2) the preliminary mortality file which is based on a continuous receipt of a large sample of death certificates that are processed and tabulated on a semi-annual basis for U.S. deaths occurring in the 12-month period January-December. The purpose of the preliminary mortality file is to produce data on an expedited basis compared with the final file.
- (3) the fetal death file which is based on reports of fetal death received by NCHS from State registration offices. All 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam participate in the fetal-death reporting system. The U.S. Standard Report of Fetal Death issued by the Public Health Service (last revision 2003) served as model to attain uniformity in the contents of documents used to collect fetal mortality information. The fetal death file is separate from the mortality files discussed above.

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

Edits used for mainframe processing of the final mortality file are likely to be of greatest relevance and interest to the States, while edits used for the

preliminary file are used by NCHS on a current flow to produce annual preliminary mortality statistics.

Both the final and the preliminary mortality files are generated through a series of processing steps including data collection, data entry, and computer processing. Editing of the coded data to assure code validity and consistency among variables is carried out at both the data entry and mainframe computer processing stages. The data entry edits, performed either manually or interactively on a data entry computer, enable detection and correction of major inconsistencies at the point of data entry. The mainframe edits utilize greater computer capability to provide a more comprehensive edit, yet generally require reject reconciliation for correction of errors. Thus, the data entry edits are composed of a small selective subset of the more comprehensive mainframe edits. This manual contains only the mainframe edits. Data entry edits are specified in Part 2d of this Vital Statistics Instruction Manual series.

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

B. Revisions from Previous Manual

Changes between this manual and the previous one (effective **2004**) are shown in **bold** print and following are the major changes:

1. **An edit on the variable “manner of death” has been implemented on the composite medical/demographic record section of this manual. “Suicide” is not an acceptable value of “manner of death” for decedents aged less than five years old. A new table (Table I) is now dedicated to documenting edits on this variable. This change implies that the table formerly known as Table I (“Infrequent and Rare Cause-of-Death Edits”) has been renamed Table J, and so forth for subsequent tables.**

2. 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):

- Added edits:

| | |
|--|------------------------|
| E64 (added to table G as age-absolute) | Effective 2005; |
| E68 (added to table G as age-absolute) | Effective 2005; |
| I69 (added to table G as age-absolute) | Effective 2005; |
| *U03 (added to table G as age-absolute) | Effective 2005; |

- Modified edits:

N91-N92, N94-O99, as shown on Table G, Effective 2003;
were modified to indicate that each code is edited differently depending on decedent's age: The edit on females < 10 years old is absolute, whereas if the female decedent was older than 54 years the edit would be conditional. This modification has been in place since data year 2003, but was not documented until now.

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

II. FINAL MORTALITY FILE COMPUTER EDITS

The final mortality file is used to produce annual detailed tabulations of demographic and geographic data and contains both underlying and multiple cause-of-death data. The demographic and medical data are entered and processed separately. The demographic data are first key entered and sample verified with interactive key entry editing. The resultant demographic record is then established as a master control record in checks of file completeness and subsequent edits of the geographic, demographic, and control variables. On a separate track, the medical data are key entered and sample verified. The mainframe edits are then applied to check code validity for each variable. Finally, the demographic and medical data are merged into one composite record at which point demographic/medical consistency edits are applied. In addition, this stage rechecks medical code validity and lists rare causes for review.

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

It should be noted that at many points during the processing of the file computer software will reject records for reasons other than failure to meet the edit criteria

in this manual. In particular, the MICAR¹, ACME², and TRANSAX³ automatic coding systems reject records for resolution of issues which cannot be handled automatically.

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

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

²Acronym 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.

³Acronym 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.

NCHS from States that have implemented the new (2003) standard certificate must be processed following the guidelines indicated on table B-2.

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

B. Medical Items

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

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

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

2. Codes Valid for Multiple Cause Only

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

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

3. Created Codes

Table F contains a list of special five-digit codes (plus R97) and their complementary valid ICD-10 codes. The created codes are used at the stage medical conditions are coded. They have been created to facilitate automated identification of causal and modification relationships between certain medical conditions when they are processed by the ACME and TRANSAX computer systems. After they have served this purpose, they are converted to their complementary valid ICD-10 codes and do not appear on the final master death tape or in NCHS tabulations of causes of death. Further explanation of the use of these codes may be found in Parts 2b and 2c of this Vital Statistics Instruction Manual series.

C. Composite Medical/Demographic Record

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

1. Age/Cause, Sex/Cause Consistency Edits

The purpose of this computer edit is to maintain consistency between a reported underlying or multiple cause of death and the age and/or sex of the decedent. Table G lists the consistency edits applicable to codes given earlier in Table C (codes valid for both underlying and multiple causes of death). Table H lists consistency edits applicable to codes given earlier in Tables D and E (codes valid for multiple cause coding only). The limitations embody the concept that certain combinations of cause of death with age or sex are either impossible (absolute limitation) or that the combinations are highly improbable (conditional limitation). The causes of death shown in these lists include age and/or sex absolute or conditional limitations explicit in ICD-10. Additional conditional limitation edits are applied to ICD-10 categories where occurrence of the category with particular age/sex combinations is considered to be highly improbable or where experience has shown that a particular cause is especially prone to coding error.

Detailed instructions for processing edit rejects are given in Part 2d of this Vital Statistics Instruction Manual series. In general, the source document is examined to determine if the medical and demographic data are accurately coded based on reporting. Where inaccurate, the codes are corrected. When coded data agree with reported information, no change is made if the edit is conditional in nature. If the edit is absolute, the age (or sex) is arbitrarily retained as coded, and the cause(s) are changed to the minimum necessary to pass the edit.

2. Edits on Manner of Death

Table I contains a list of edits performed on values of the variable "Manner of Death," as appears on item 29 of the U.S. Standard Certificate of Death (1989 revision) or on item 37 of the 2003 revision of the same document. The purpose of these edits is to maintain consistency between the reported manner of death (natural, accident, suicide, homicide, pending investigation, cannot be determined) and the age of the decedent and the reported underlying cause of death.

3. Infrequent and Rare Cause-of-Death Edits

Table J contains a list of infrequent and rare causes of death in the United States. These causes of death occur rarely and/or present threats to

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

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

Table K lists the place-of-occurrence edits for selected external causes of death (ICD-10 W00-Y34, except Y06._ and Y07._) that may be either an underlying or a multiple cause of death. The table includes valid place-of-occurrence codes that denote the place where the external cause of death occurred. For a listing of place-of-occurrence codes and their definitions see ICD-10, Vol. 1, in the beginning of Chapter XX. The place-of-occurrence codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item "30e. Place of injury".

III. PRELIMINARY MORTALITY FILE COMPUTER EDITS

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

The demographic and medical data are entered and processed separately. The demographic data are first key entered and sample verified with interactive key entry editing. The resultant demographic record is then established as a master control record in checks of file completeness and in subsequent edits of the geographic, demographic, and control variables. On a separate track, the medical data are key entered and sample verified. The mainframe edits are then applied to check code validity for each variable. Finally, the demographic and medical data are merged into one composite record at which point demographic/medical consistency edits are applied.

Since NCHS receives the death records on a flow basis, all of the above edits are performed on a continuous basis and records that fail the edits are adjudicated on a continuous basis. However, at the cut point, the point at which

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

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

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

A. Demographic Items

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

B. Medical items

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

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

Table C lists the codes valid for both underlying and multiple cause classification. At the cut point, if a cause-of-death code is invalid, the record is deleted from the preliminary mortality file.

2. Codes Valid for Multiple Cause Only

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

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

3. Created Codes

Table F contains a list of special five-digit codes (plus R97) and their complementary valid ICD-10 codes. The created codes are used at the stage medical conditions are coded. They have been created to facilitate automated identification of causal and modification relationships between certain medical conditions when they are processed by the ACME and TRANSAX computer systems. After they have served this purpose, they are converted to their complementary valid ICD-10 codes and do not appear on the final master death tape or in NCHS tabulations of causes of death. Further explanation of the use of these codes may be found in Parts 2b and 2c of this Vital Statistics Instruction Manual series.

C. Composite Medical/Demographic Record

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

1. Age/Cause, Sex/Cause Consistency Edits

The purpose of this computer edit is to maintain consistency between a reported underlying or multiple cause of death and the age and/or sex of the decedent. Table G lists the consistency edits applicable to codes given earlier in Table C (codes valid for both underlying and multiple causes of death). Table H lists consistency edits applicable to codes given earlier in Tables D and E (codes valid for multiple cause coding only). The limitations embody the concept that certain combinations of cause of death with age or sex are either impossible (absolute limitation)

or that the combinations are highly improbable (conditional limitation). The causes of death shown in these lists include age and/or sex absolute or conditional limitations explicit in ICD-10. Additional conditional limitation edits are applied to ICD-10 categories where occurrence of the category with particular age/sex combinations is considered to be highly improbable or where experience has shown that a particular cause is especially prone to coding error. At the cut point, the conditional limitation edits, shown in tables G and H, are not used for the preliminary mortality file.

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

2. Edits on Manner of Death

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

3. Infrequent and Rare Cause-of-Death Edits

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

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

Table K lists the place-of-occurrence edits for selected external causes of death (ICD-10 W00-Y34, except Y06._ and Y07._) that may be either an underlying or a multiple cause of death. The table includes valid place-of-occurrence codes that denote the place where the external cause of death occurred. For a listing of place-of-occurrence codes and their definitions see ICD-10, Vol. 1, in the beginning of Chapter XX. The place-of-occurrence codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item “30e. Place of injury”.

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

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

Table B-1. Edits for Demographic Items

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

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

*In the age recoding process, unknown number of months is allocated to 1 month; unknown number of weeks is allocated to 1 week; unknown number of days is allocated to 1 day; unknown number of hours is allocated to 1 hour; unknown number of minutes is allocated to under 1 hour.

Table B-1. Edits for Demographic Items

| <u>Variable</u> | <u>Edit Criterion</u> | <u>Fail Edit Corrected By</u> |
|---------------------------------|--|---|
| Date of Birth: Month | Code must be valid. | Imputation: Assign to "not classifiable" code. |
| Day | Code must be valid. | Imputation: Assign to "not classifiable" code. |
| Year | Code must be valid. 1870-2005 are valid for 2005 . For subsequent data years, add 1 to the lower and upper limits of the range (e.g. for 2006 , the range is 1871-2000). | 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. If age of decedent is less than 12 years, marital status must be "single." | Imputation: Convert invalid code to "not classifiable" code. Imputation: Convert to "single" code. |
| Occupation of Decedent | Code must be valid. Age under 14 years. | Imputation: Convert invalid code to "not classifiable" code. Imputation: Code to 917 (child). |

Table B-1. Edits for Demographic Items

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

Table B-1. Edits for Demographic Items

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

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

| <u>Variable</u> | <u>Edit Criterion</u> | <u>Fail Edit Corrected By</u> |
|-----------------|---|--|
| State of Death | Code must be valid FIPS value (section 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

| <u>Variable</u> | <u>Edit Criterion</u> | <u>Fail Edit Corrected By</u> |
|-------------------|--|--|
| 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

| <u>Variable</u> | <u>Edit Criterion</u> | <u>Fail Edit Corrected By</u> |
|----------------------|---|--|
| County of Residence | <p>Code must be valid FIPS value (Section IV, Part 8 manual).</p> <p>Code combination for Country, State, County, and City of residence must be valid.</p> <p>If Country of Residence (see further below) is not U.S. or Canada, County of Residence must be blank.</p> | <p>Imputation: Convert invalid / blank code to “not classifiable” code ('999').</p> |
| State of Residence | <p>Code must be valid FIPS value (Section III, Part 8 manual).</p> <p>Code combination for Country, State, County, and City of residence must be valid.</p> <p>If Country of Residence (see further below) is not U.S. or Canada, State of Residence must be blank.</p> | <p>For Final: Reject for correction</p> <p>For Preliminary: Impute to State of Death</p> |
| Country of Residence | <p>Code must be valid FIPS value (Section V, Part 8 manual) and not be blank.</p> <p>Code combination for Country, State, County, and City of residence must be valid.</p> | <p>Imputation: Convert invalid / blank code to “not classifiable” code ('ZZ').</p> |

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

| <u>Variable</u> | <u>Edit Criterion</u> | <u>Fail Edit Corrected By</u> |
|--|--|--|
| Marital Status | Code must be valid ('M', 'A', 'W', 'D', 'S') 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 ¹ ," 5= "Hospice facility," 6= "Nursing home/Long term care facility," 9= "Unknown" | Imputation: Convert place of death code to "Unknown" ('9'). |

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

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

| <u>Variable</u> | <u>Edit Criterion</u> | <u>Fail Edit Corrected By</u> |
|-----------------------|---|--|
| County of Death | Code must be valid FIPS value (Section IV, Part 8 manual). Code combination for State and County of death must be valid. | For Final: Reject for correction For Preliminary: Not used |
| Method of Disposition | Code must be valid ('B', 'C', 'D', 'E', 'R', 'O', 'U'). | Imputation: Code invalid / blank method of disposition to "Unknown" ('U'). |
| Time of Death | Code must be valid (0000-2400, 9999). | Imputation: Convert '2400' to '0000'. Convert invalid / blank Time of Death to '9999'. |

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

| <u>Variable</u> | <u>Edit Criterion</u> | <u>Fail Edit Corrected By</u> | | | | | | | | | | | | | | | | | | |
|--|--|--|-------------|-----------|------|---|---|---|----|---|----|---|----|---|----|---|----|---|----|---|
| Education of Decedent | Code must be valid (1-9). | Imputation: Code invalid / blank education to "Unknown" ('9'). | | | | | | | | | | | | | | | | | | |
| | Combination of education and age of decedent must be acceptable. | Imputation: If education differs for the given minimum age, then code education to "Unknown" (9). | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Minimum Age</th> <th>Education</th> </tr> </thead> <tbody> <tr><td>None</td><td>1</td></tr> <tr><td>9</td><td>2</td></tr> <tr><td>16</td><td>3</td></tr> <tr><td>17</td><td>4</td></tr> <tr><td>18</td><td>5</td></tr> <tr><td>20</td><td>6</td></tr> <tr><td>21</td><td>7</td></tr> <tr><td>23</td><td>8</td></tr> <tr><td>None</td><td>9</td></tr> </tbody> </table> | | Minimum Age | Education | None | 1 | 9 | 2 | 16 | 3 | 17 | 4 | 18 | 5 | 20 | 6 | 21 | 7 | 23 | 8 |
| Minimum Age | Education | | | | | | | | | | | | | | | | | | | |
| None | 1 | | | | | | | | | | | | | | | | | | | |
| 9 | 2 | | | | | | | | | | | | | | | | | | | |
| 16 | 3 | | | | | | | | | | | | | | | | | | | |
| 17 | 4 | | | | | | | | | | | | | | | | | | | |
| 18 | 5 | | | | | | | | | | | | | | | | | | | |
| 20 | 6 | | | | | | | | | | | | | | | | | | | |
| 21 | 7 | | | | | | | | | | | | | | | | | | | |
| 23 | 8 | | | | | | | | | | | | | | | | | | | |
| None | 9 | | | | | | | | | | | | | | | | | | | |
| 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'). | | | | | | | | | | | | | | | | | | |

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

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

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

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

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

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

Table with 15 columns of ICD-10 codes ranging from C941 to F539. Each row contains 15 distinct alphanumeric codes. The codes are organized in a grid-like pattern across the page.

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

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

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

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

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

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

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

| Created code | Valid ICD-10 code |
|--------------|-------------------|
| A1690 | A169 |
| E0390 | E039 |
| G1220 | G122 |
| G2000 | G20 |
| G3090 | G309 |
| G3500 | G35 |
| I4200 | I420 |
| I4210 | I421 |
| I4220 | I422 |
| I4250 | I425 |
| I4280 | I428 |
| I4290 | I429 |
| I5000 | I500 |
| I5140 | I514 |
| I5150 | I515 |
| I6000 | I600 |
| I6060 | I606 |
| I6070 | I607 |
| I6080 | I608 |
| I6090 | I609 |
| J1010 | J101 |
| J1110 | J111 |
| J8410 | J841 |
| J8490 | J849 |
| J9840 | J984 |
| K3190 | K319 |
| K5500 | K550 |
| K6310 | K631 |
| K7200 | K720 |
| K7210 | K721 |
| K7290 | K729 |
| M1990 | M199 |
| Q2780 | Q278 |
| Q2820 | Q282 |
| Q2830 | Q283 |
| R5800 | R58 |
| R97 | R99 |

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

| ICD-10 code | Age/sex limitation | 0 - Conditional 1 - Absolute 2 - Not Applicable | | | Edit code ¹ |
|----------------|--------------------------|---|-----|----|---------------------------|
| | | Age | Sex | | |
| A32 | 28 days and over | 1 | 2 | 03 | |
| A33 | Under 1 year | 1 | 2 | 02 | |
| A34 | Female, 10-54 years | 0 | 1 | 04 | |
| 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 | |
| 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 | |

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 | 0 - Conditional 1 - Absolute 2 - Not Applicable | | | Edit code ¹ |
|----------------|------------------------|---|----------|-----------|---------------------------|
| | | Age | Sex | | |
| 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 | |
| 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 | |
| E64 | 1 year and over | 1 | 2 | 04 | |
| E68 | 1 year and over | 1 | 2 | 04 | |
| 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 | |

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 | | | | Edit code ¹ |
|----------------|---------------------------|----------|----------|--|---|
| | | Age | Sex | | |
| | | | | | 0 - Conditional 1 - Absolute 2 - Not Applicable |
| 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 |
| 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 | | 04 |
| 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 |
| I69 | 1 year and over | 1 | 2 | | 04 |
| 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 |
| 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 |

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 | 0 - Conditional 1 - Absolute 2 - Not Applicable | | | Edit code ¹ |
|----------------|-------------------------|---|-----|----|---------------------------|
| | | Age | Sex | | |
| 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 | |
| K56.6 | 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 | |
| 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 | |
| M80.0 | Female | 2 | 1 | 11 | |
| M80.1 | Female | 2 | 1 | 11 | |
| M81.0 | Female | 2 | 1 | 11 | |
| M81.1 | Female | 2 | 1 | 11 | |
| M83.0 | Female, 10-54 years | 1 | 1 | 04 | |
| M83.1 | 10 years and over | 1 | 2 | 20 | |
| M83.2 | 10 years and over | 1 | 2 | 20 | |
| M83.3 | 10 years and over | 1 | 2 | 20 | |
| M83.4 | 10 years and over | 1 | 2 | 20 | |
| M83.5 | 10 years and over | 1 | 2 | 20 | |
| M83.8 | 10 years and over | 1 | 2 | 20 | |
| M83.9 | 10 years and over | 1 | 2 | 20 | |
| N39.0 | 28 days and over | 1 | 2 | 03 | |
| N40 | Male | 2 | 1 | 10 | |
| N41 | Male | 2 | 1 | 10 | |
| N42 | Male | 2 | 1 | 10 | |
| N43 | Male | 2 | 1 | 10 | |
| N44 | Male | 2 | 1 | 10 | |
| N45 | Male | 2 | 1 | 10 | |
| N46 | Male | 2 | 1 | 10 | |
| N47 | Male | 2 | 1 | 10 | |
| N48 | 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

| ICD-10 code | Age/sex limitation | 0 - Conditional 1 - Absolute 2 - Not Applicable | | | Edit code ¹ |
|----------------|--|---|-----|----|---------------------------|
| | | Age | Sex | | |
| N49 | Male | 2 | 1 | 10 | |
| N50 | Male | 2 | 1 | 10 | |
| N61 | 28 days and over | 1 | 2 | 03 | |
| N70 | Female | 2 | 1 | 11 | |
| N71 | Female | 2 | 1 | 11 | |
| N72 | Female | 2 | 1 | 11 | |
| N73 | Female | 2 | 1 | 11 | |
| 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 | 0 | 1 | 14 | |
| ' ' | (edit for N91 is absolute if age < 10) | 1 | 1 | 18 | |
| N92 | Female | 0 | 1 | 14 | |
| ' ' | (edit for N92 is absolute if age < 10) | 1 | 1 | 18 | |
| N93 | Female | 2 | 1 | 11 | |
| N94 | Female | 0 | 1 | 14 | |
| ' ' | (edit for N94 is absolute if age < 10) | 1 | 1 | 18 | |
| N95 | Female | 0 | 1 | 14 | |
| ' ' | (edit for N95 is absolute if age < 10) | 1 | 1 | 18 | |
| N96 | Female, 10-54 years | 0 | 1 | 14 | |
| ' ' | (edit for N96 is absolute if age < 10) | 1 | 1 | 18 | |
| N97 | Female, 10-54 years | 0 | 1 | 14 | |
| ' ' | (edit for N97 is absolute if age < 10) | 1 | 1 | 18 | |
| N98 | Female, 10-54 years | 0 | 1 | 14 | |
| ' ' | (edit for N98 is absolute if age < 10) | 1 | 1 | 18 | |
| O00 | Female, 10-54 years | 0 | 1 | 14 | |
| ' ' | (edit for O00 is absolute if age < 10) | 1 | 1 | 18 | |
| O01 | Female, 10-54 years | 0 | 1 | 14 | |
| ' ' | (edit for O01 is absolute if age < 10) | 1 | 1 | 18 | |
| O02 | Female, 10-54 years | 0 | 1 | 14 | |
| ' ' | (edit for O02 is absolute if age < 10) | 1 | 1 | 18 | |
| O03 | 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

| ICD-10 code | Age/sex limitation | | | | Edit code ¹ |
|----------------|--|----------|----------|--------------------|---------------------------|
| | | Age | Sex | | |
| | | | | 0 - Conditional | |
| | | | | 1 - Absolute | |
| | | | | 2 - Not Applicable | |
| ' ' | (edit for O03 is absolute if age < 10) | 1 | 1 | | 18 |
| O04 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O04 is absolute if age < 10) | 1 | 1 | | 18 |
| O05 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O05 is absolute if age < 10) | 1 | 1 | | 18 |
| O06 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O06 is absolute if age < 10) | 1 | 1 | | 18 |
| O07 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O07 is absolute if age < 10) | 1 | 1 | | 18 |
| O10 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O10 is absolute if age < 10) | 1 | 1 | | 18 |
| O11 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O11 is absolute if age < 10) | 1 | 1 | | 18 |
| O12 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O12 is absolute if age < 10) | 1 | 1 | | 18 |
| O13 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O13 is absolute if age < 10) | 1 | 1 | | 18 |
| O14 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O14 is absolute if age < 10) | 1 | 1 | | 18 |
| O15 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O15 is absolute if age < 10) | 1 | 1 | | 18 |
| O16 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O16 is absolute if age < 10) | 1 | 1 | | 18 |
| O20 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O20 is absolute if age < 10) | 1 | 1 | | 18 |
| O21 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O21 is absolute if age < 10) | 1 | 1 | | 18 |
| O22 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O22 is absolute if age < 10) | 1 | 1 | | 18 |
| O23 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O23 is absolute if age < 10) | 1 | 1 | | 18 |
| O24 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O24 is absolute if age < 10) | 1 | 1 | | 18 |
| O25 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O25 is absolute if age < 10) | 1 | 1 | | 18 |
| O26 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O26 is absolute if age < 10) | 1 | 1 | | 18 |
| O28 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O28 is absolute if age < 10) | 1 | 1 | | 18 |
| O29 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O29 is absolute if age < 10) | 1 | 1 | | 18 |
| O30 | 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

| ICD-10 code | Age/sex limitation | | | | Edit code ¹ |
|----------------|--|----------|----------|--------------------|---------------------------|
| | | Age | Sex | | |
| | | | | 0 - Conditional | |
| | | | | 1 - Absolute | |
| | | | | 2 - Not Applicable | |
| ' ' | (edit for O30 is absolute if age < 10) | 1 | 1 | | 18 |
| O31 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O31 is absolute if age < 10) | 1 | 1 | | 18 |
| O32 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O32 is absolute if age < 10) | 1 | 1 | | 18 |
| O33 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O33 is absolute if age < 10) | 1 | 1 | | 18 |
| O34 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O34 is absolute if age < 10) | 1 | 1 | | 18 |
| O35 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O35 is absolute if age < 10) | 1 | 1 | | 18 |
| O36 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O36 is absolute if age < 10) | 1 | 1 | | 18 |
| O40 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O40 is absolute if age < 10) | 1 | 1 | | 18 |
| O41 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O41 is absolute if age < 10) | 1 | 1 | | 18 |
| O42 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O42 is absolute if age < 10) | 1 | 1 | | 18 |
| O43 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O43 is absolute if age < 10) | 1 | 1 | | 18 |
| O44 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O44 is absolute if age < 10) | 1 | 1 | | 18 |
| O45 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O45 is absolute if age < 10) | 1 | 1 | | 18 |
| O46 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O46 is absolute if age < 10) | 1 | 1 | | 18 |
| O47 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O47 is absolute if age < 10) | 1 | 1 | | 18 |
| O48 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O48 is absolute if age < 10) | 1 | 1 | | 18 |
| O60 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O60 is absolute if age < 10) | 1 | 1 | | 18 |
| O61 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O61 is absolute if age < 10) | 1 | 1 | | 18 |
| O62 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O62 is absolute if age < 10) | 1 | 1 | | 18 |
| O63 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O63 is absolute if age < 10) | 1 | 1 | | 18 |
| O64 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O64 is absolute if age < 10) | 1 | 1 | | 18 |
| O65 | 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

| ICD-10 code | Age/sex limitation | | | | Edit code ¹ |
|----------------|--|----------|----------|--------------------|---------------------------|
| | | Age | Sex | | |
| | | | | 0 - Conditional | |
| | | | | 1 - Absolute | |
| | | | | 2 - Not Applicable | |
| ' ' | (edit for O65 is absolute if age < 10) | 1 | 1 | | 18 |
| O66 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O66 is absolute if age < 10) | 1 | 1 | | 18 |
| O67 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O67 is absolute if age < 10) | 1 | 1 | | 18 |
| O68 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O68 is absolute if age < 10) | 1 | 1 | | 18 |
| O69 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O69 is absolute if age < 10) | 1 | 1 | | 18 |
| O70 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O70 is absolute if age < 10) | 1 | 1 | | 18 |
| O71 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O71 is absolute if age < 10) | 1 | 1 | | 18 |
| O72 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O72 is absolute if age < 10) | 1 | 1 | | 18 |
| O73 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O73 is absolute if age < 10) | 1 | 1 | | 18 |
| O74 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O74 is absolute if age < 10) | 1 | 1 | | 18 |
| O75 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O75 is absolute if age < 10) | 1 | 1 | | 18 |
| O85 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O85 is absolute if age < 10) | 1 | 1 | | 18 |
| O86 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O86 is absolute if age < 10) | 1 | 1 | | 18 |
| O87 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O87 is absolute if age < 10) | 1 | 1 | | 18 |
| O88 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O88 is absolute if age < 10) | 1 | 1 | | 18 |
| O89 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O89 is absolute if age < 10) | 1 | 1 | | 18 |
| O90 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O90 is absolute if age < 10) | 1 | 1 | | 18 |
| O91 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O91 is absolute if age < 10) | 1 | 1 | | 18 |
| O92 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O92 is absolute if age < 10) | 1 | 1 | | 18 |
| O95 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O95 is absolute if age < 10) | 1 | 1 | | 18 |
| O96 | Female, 10-54 years | 1 | 1 | | 14 |
| ' ' | (edit for O96 is absolute if age < 10) | 1 | 1 | | 18 |
| O97 | 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

| ICD-10 code | Age/sex limitation | 0 - Conditional 1 - Absolute 2 - Not Applicable | | | Edit code ¹ |
|----------------|--|---|----------|--|---------------------------|
| | | Age | Sex | | |
| ' ' | (edit for O97 is absolute if age < 10) | 1 | 1 | | 18 |
| O98 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O98 is absolute if age < 10) | 1 | 1 | | 18 |
| O99 | Female, 10-54 years | 0 | 1 | | 14 |
| ' ' | (edit for O99 is absolute if age < 10) | 1 | 1 | | 18 |
| 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 |
| 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 |

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 | 0 - Conditional 1 - Absolute 2 - Not Applicable | | | Edit code ¹ |
|----------------|----------------------|---|-----|----|---------------------------|
| | | Age | Sex | | |
| 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 | |
| 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 | |

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 | | | | Edit code ¹ |
|----------------|--|-----|-----|--|---|
| | | Age | Sex | | |
| | | | | | 0 - Conditional 1 - Absolute 2 - Not Applicable |
| 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 |
| 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 |
| ' ' | (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 |

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 | | | Edit code ¹ |
|----------------|-------------------------|----------|----------|---|
| | | Age | Sex | |
| | | | | 0 - Conditional 1 - Absolute 2 - Not Applicable |
| *U0.3 | 5 years and over | 1 | 2 | 06 |
| 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 |
| 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 |

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 | 0 - Conditional 1 - Absolute 2 - Not Applicable | | |
|-------------|---------------------|---|-----|------------------------|
| | | Age | Sex | Edit code ¹ |
| 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:

| <u>Edit code</u> | <u>Limited to</u> | <u>Edit code</u> | <u>Limited to</u> |
|------------------|--------------------------|------------------|---------------------------|
| 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 | | |
|-------------|--------------------|---|-----|------------------------|
| | | Age | Sex | Edit code ¹ |
| E89.4 | Female | 2 | 1 | 11 |
| E89.5 | Male | 2 | 1 | 10 |
| N99.2 | Female | 2 | 1 | 11 |
| N99.3 | Female | 2 | 1 | 11 |
| O08 | Female, 10-54 | 1 | 1 | 14 |
| S31.2 | Male | 2 | 1 | 10 |
| S31.3 | Male | 2 | 1 | 10 |
| S31.4 | Female | 2 | 1 | 11 |
| S37.4 | Female | 2 | 1 | 11 |
| S37.5 | Female | 2 | 1 | 11 |
| S37.6 | Female | 2 | 1 | 11 |
| T38.4 | Female | 2 | 0 | 11 |
| T38.5 | Female | 2 | 0 | 11 |
| T70.3 | 12 years and over | 0 | 2 | 16 |
| T83.3 | Female | 2 | 1 | 11 |

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

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

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

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

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

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

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

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

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

| <u>ICD-10 code</u> | <u>Cause</u> |
|--------------------|---|
| A90 | Dengue fever [classical dengue] |
| A91 | Dengue hemorrhagic fever |
| A92 | Other mosquito-borne viral fevers |
| A93 | Other arthropod-borne viral fevers, not elsewhere classified (including Oropouche fever, sandfly fever, Colorado tick fever and other specified fevers) |
| A94 | Unspecified arthropod-borne viral fever |
| A95 | Yellow fever |
| A96 | Arenaviral hemorrhagic fever |
| A98-A99 | Other and unspecified viral hemorrhagic fevers (including Crimean-Congo, Omsk, Kyasanur Forest, Ebola virus, Hanta virus) |
| B01 | Varicella [chickenpox] |
| B03 | Smallpox |
| B04 | Monkeypox |
| B05 | Measles |
| B06 | Rubella [German measles] |
| B08.0 | Other orthopoxvirus infections (including cowpox and paravaccinia) |
| B15 | Acute hepatitis A (when occurring to children under 20 years old) |
| B16 | Acute hepatitis B (when occurring to children under 20 years old) |
| B26 | Mumps |
| B33.0 | Epidemic myalgia (epidemic pleurodynia) |
| B50-B54 | Malaria |
| B55 | Leishmaniasis |
| B56 | African trypanosomiasis |
| B57 | Chagas' disease (including American trypanosomiasis) |
| B65 | Schistosomiasis [bilharziasis] |
| B66 | Other fluke infections (including other trematode infections) |
| B67 | Echinococcosis |
| B68 | Teniasis |
| B69 | Cysticercosis |
| B70 | Diphyllobothriasis and sparganosis |
| B71 | Other cestode infections |
| B72 | Dracunculiasis (Dracontiasis) |
| B73 | Onchocerciasis |
| B74 | Filariasis (Filarial infection) |
| 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 K. Place-of-Occurrence Edits for Selected External Causes of Death, ICD-10 W00-Y34, except Y06._, Y07._

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

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

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

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

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

Section on Fetal Death File

V Fetal Death File Cause-of-Death Computer Edits

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

A. Medical Items

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

1. Codes Valid for Underlying Causes of Fetal Death

Table L lists the ICD-10 codes valid for coding underlying cause of fetal death. For records that fail the edit, NCHS will review, but then the cause of death will be recoded to P95- cause unknown.

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

2. Created Codes

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

3. Sex/Cause Consistency Edits

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

4. Plurality/Cause Consistency Edits

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

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

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

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

| | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|
| B80 | C052 | C171 | C33 | C463 | C574 | C719 | C850 | D012 | D105 |
| B810 | C058 | C172 | C340 | C467 | C577 | C720 | C851 | D013 | D106 |
| B811 | C059 | C173 | C341 | C468 | C578 | C721 | C857 | D014 | D107 |
| B812 | C060 | C178 | C342 | C469 | C579 | C722 | C859 | D015 | D109 |
| B813 | C061 | C179 | C343 | C470 | C600 | C723 | C880 | D017 | D110 |
| B814 | C062 | C180 | C348 | C471 | C601 | C724 | C881 | D019 | D117 |
| B818 | C068 | C181 | C349 | C472 | C602 | C725 | C882 | D020 | D119 |
| B820 | C069 | C182 | C37 | C473 | C608 | C728 | C883 | D021 | D120 |
| B829 | C07 | C183 | C380 | C474 | C609 | C729 | C887 | D022 | D121 |
| B830 | C080 | C184 | C381 | C475 | C61 | C73 | C889 | D023 | D122 |
| B831 | C081 | C185 | C382 | C476 | C620 | C740 | C900 | D024 | D123 |
| B832 | C088 | C186 | C383 | C478 | C621 | C741 | C901 | D030 | D124 |
| B833 | C089 | C187 | C384 | C479 | C629 | C749 | C902 | D031 | D125 |
| B834 | C090 | C188 | C388 | C480 | C630 | C750 | C910 | D032 | D126 |
| B838 | C091 | C189 | C390 | C481 | C631 | C751 | C911 | D033 | D127 |
| B839 | C098 | C19 | C398 | C482 | C632 | C752 | C912 | D034 | D128 |
| B870 | C099 | C20 | C399 | C488 | C637 | C753 | C913 | D035 | D129 |
| B871 | C100 | C210 | C400 | C490 | C638 | C754 | C914 | D036 | D130 |
| B872 | C101 | C211 | C401 | C491 | C639 | C755 | C915 | D037 | D131 |
| B873 | C102 | C212 | C402 | C492 | C64 | C758 | C917 | D038 | D132 |
| B874 | C103 | C218 | C403 | C493 | C65 | C759 | C919 | D039 | D133 |
| B878 | C104 | C220 | C408 | C494 | C66 | C760 | C920 | D040 | D134 |
| B879 | C108 | C221 | C409 | C495 | C670 | C761 | C921 | D041 | D135 |
| B880 | C109 | C222 | C410 | C496 | C671 | C762 | C922 | D042 | D136 |
| B881 | C110 | C223 | C411 | C498 | C672 | C763 | C923 | D043 | D137 |
| B882 | C111 | C224 | C412 | C499 | C673 | C764 | C924 | D044 | D139 |
| B883 | C112 | C227 | C413 | C500 | C674 | C765 | C925 | D045 | D140 |
| B888 | C113 | C229 | C414 | C501 | C675 | C767 | C927 | D046 | D141 |
| B889 | C118 | C23 | C419 | C502 | C676 | C768 | C929 | D047 | D142 |
| B89 | C119 | C240 | C430 | C503 | C677 | C80 | C930 | D048 | D143 |
| B99 | C12 | C241 | C431 | C504 | C678 | C810 | C931 | D049 | D144 |
| C000 | C130 | C248 | C432 | C505 | C679 | C811 | C932 | D050 | D150 |
| C001 | C131 | C249 | C433 | C506 | C680 | C812 | C937 | D051 | D151 |
| C002 | C132 | C250 | C434 | C508 | C681 | C813 | C939 | D057 | D152 |
| C003 | C138 | C251 | C435 | C509 | C688 | C817 | C940 | D059 | D157 |
| C004 | C139 | C252 | C436 | C510 | C689 | C819 | C941 | D060 | D160 |
| C005 | C140 | C253 | C437 | C511 | C690 | C820 | C942 | D061 | D161 |
| C006 | C142 | C254 | C438 | C512 | C691 | C821 | C943 | D067 | D162 |
| C008 | C148 | C257 | C439 | C518 | C692 | C822 | C944 | D069 | D163 |
| C009 | C150 | C259 | C440 | C519 | C693 | C827 | C945 | D070 | D164 |
| C01 | C151 | C260 | C441 | C52 | C694 | C829 | C947 | D071 | D165 |
| C020 | C152 | C261 | C442 | C530 | C695 | C830 | C950 | D072 | D166 |
| C021 | C153 | C268 | C443 | C531 | C696 | C831 | C951 | D073 | D167 |
| C022 | C154 | C269 | C444 | C538 | C698 | C832 | C952 | D074 | D168 |
| C023 | C155 | C300 | C445 | C539 | C699 | C833 | C957 | D075 | D169 |
| C024 | C158 | C301 | C446 | C540 | C700 | C834 | C959 | D076 | D170 |
| C028 | C159 | C310 | C447 | C541 | C701 | C835 | C960 | D090 | D171 |
| C029 | C160 | C311 | C448 | C542 | C709 | C836 | C961 | D091 | D172 |
| C030 | C161 | C312 | C449 | C543 | C710 | C837 | C962 | D092 | D173 |
| C031 | C162 | C313 | C450 | C548 | C711 | C838 | C963 | D093 | D174 |
| C039 | C163 | C318 | C451 | C549 | C712 | C839 | C967 | D097 | D175 |
| C040 | C164 | C319 | C452 | C55 | C713 | C840 | C969 | D099 | D176 |
| C041 | C165 | C321 | C457 | C56 | C714 | C841 | D000 | D100 | D177 |
| C048 | C166 | C322 | C459 | C570 | C715 | C842 | D001 | D101 | D179 |
| C049 | C168 | C323 | C460 | C571 | C716 | C843 | D002 | D102 | D180 |
| C050 | C169 | C328 | C461 | C572 | C717 | C844 | D010 | D103 | D181 |
| C051 | C170 | C329 | C462 | C573 | C718 | C845 | D011 | D104 | D190 |

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

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

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

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

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

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

Table L. ICD-10 Codes Valid for Underlying / **Initiating** Causes of Fetal Death

| | | | |
|------|-----|-----|------|
| 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 | |
| W20 | X27 | Y22 | |
| W21 | X28 | Y23 | |
| W22 | X29 | Y24 | |
| W23 | X30 | Y25 | |
| W24 | X31 | Y26 | |
| W25 | X32 | Y27 | |
| W26 | X33 | Y28 | |
| W27 | X34 | Y29 | |
| W28 | X35 | Y32 | |
| W29 | X36 | Y33 | |
| W30 | X37 | Y34 | |

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 | 0 - Conditional |
|-------------|--------------------------|-----|-----------|------------------------|
| | | | | 1 - Absolute |
| | | | | 2 - Not Applicable |
| | | | | _____ |
| | | | | 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 |
| C57.4 | Female | 1 | 2 | 11 |
| C57.7 | Female | 1 | 2 | 11 |
| C57.8 | Female | 1 | 2 | 11 |
| C57.9 | Female | 1 | 2 | 11 |
| C60.0 | Male | 1 | 2 | 10 |
| C60.1 | Male | 1 | 2 | 10 |
| C60.2 | Male | 1 | 2 | 10 |
| C60.8 | Male | 1 | 2 | 10 |
| C60.9 | Male | 1 | 2 | 10 |
| C61 | Male | 1 | 2 | 10 |
| C62.0 | Male | 1 | 2 | 10 |
| C62.1 | Male | 1 | 2 | 10 |
| C62.9 | Male | 1 | 2 | 10 |
| C63.0 | Male | 1 | 2 | 10 |
| C63.1 | Male | 1 | 2 | 10 |
| C63.2 | Male | 1 | 2 | 10 |
| C63.7 | Male | 1 | 2 | 10 |
| C63.8 | Male | 1 | 2 | 10 |
| C63.9 | Male | 1 | 2 | 10 |

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

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

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

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

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

| ICD-10 code | Sex/plurality limitation | Sex | Plurality | 0 - Conditional |
|-------------|--------------------------|-----|-----------|------------------------|
| | | | | 1 - Absolute |
| | | | | 2 - Not Applicable |
| | | | | _____ |
| | | | | Edit code ¹ |
| Q55.3 | Male | 1 | 2 | 10 |
| Q55.4 | Male | 1 | 2 | 10 |
| Q55.5 | Male | 1 | 2 | 10 |
| Q55.6 | Male | 1 | 2 | 10 |
| Q55.8 | Male | 1 | 2 | 10 |
| Q55.9 | Male | 1 | 2 | 10 |
| Q89.4 | Plural | 2 | 1 | 24 |
| Q96.0 | Female | 1 | 2 | 11 |
| Q96.1 | Female | 1 | 2 | 11 |
| Q96.2 | Female | 1 | 2 | 11 |
| Q96.3 | Female | 1 | 2 | 11 |
| Q96.4 | Female | 1 | 2 | 11 |
| Q96.8 | Female | 1 | 2 | 11 |
| Q96.9 | Female | 1 | 2 | 11 |
| Q97.0 | Female | 1 | 2 | 11 |
| Q97.1 | Female | 1 | 2 | 11 |
| Q97.2 | Female | 1 | 2 | 11 |
| Q97.3 | Female | 1 | 2 | 11 |
| Q97.8 | Female | 1 | 2 | 11 |
| Q97.9 | Female | 1 | 2 | 11 |
| Q98.0 | Male | 1 | 2 | 10 |
| Q98.1 | Male | 1 | 2 | 10 |
| Q98.2 | Male | 1 | 2 | 10 |
| Q98.4 | Male | 1 | 2 | 10 |
| Q98.5 | Male | 1 | 2 | 10 |
| Q98.6 | Male | 1 | 2 | 10 |
| Q98.7 | Male | 1 | 2 | 10 |
| Q98.8 | Male | 1 | 2 | 10 |
| Q98.9 | Male | 1 | 2 | 10 |

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

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

APPENDIX I

Bridging of Multiple Race Data into a Single Race Category

Background

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

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

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

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

Examples:

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

“Black” checkbox is checked and write-in is “Nigerian,” then code as Black, “02”.

Multiple American Indian tribes or Alaskan Natives are mentioned, then code as AIAN, “03”.

“Chinese” checkbox is checked and write-in is “Taiwanese,” then code as Chinese, “05”.

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

Example:

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

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

Example:

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

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

Residence (FIPS State and county),

Age (<1, single years 1 through 69 and 70+),

Sex,

Ethnicity (Non-Hispanic/Hispanic), and

Basic race combination

(White/Black, White/AIAN, White/API, Black/AIAN, Black/API, AIAN/API,

White/Black/AIAN, White/Black/API, Black/AIAN/API, White/Black/AIAN/API).

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

Examples:

Certificate number: 023001.

Assigned pseudo-probability: 0.100

White/Black matrix probability cut point: 0.200

Assigned bridged race: White, "21"

Certificate number: 023003.

Assigned pseudo-probability: 0.300

White/Black matrix probability cut point: 0.200

Assigned bridged race: Black, "22"

Certificate number: 023302.

Assigned pseudo-probability: 0.203

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

Assigned bridged race: Black, "22"